

多摩川水系の大型底生無脊椎動物相

— 1959~1981年間の採集記録ならびに主要種の採集地点図 —

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1) ま え が き

1950年代後半に公害問題がクローズアップされ、ついで、水質汚濁に関しても生物学分野からの貢献が期待されるようになった。このために、多摩川の底生生物についても多くの調査がなされ、報告も少なからず公表されている。しかしながら、今日、これらの業績が、実際にどれだけ利用され、問題の解決に役立ったかとの疑問が残る。これは、第一に、水質基準に生物面の基準が採用されていないこと。つぎに多くの報告が、現状の羅列にとどまり、他の分野の専門家の理解を得がたかったこと。また、調査結果の評価についても多くの方法が提案されているが、未だ決定的な手段がないことなどがあげられる。

とくに、大型底生動物を用いる生物学的水質判定法は、合理的で便利ないくつかの長所があるが、河川勾配が著しく大きく、かつ、ダムが多いわが国の河川では、その適用に際して、十分に慎重でなければならない。さらに、多摩川のように、大都市圏にあり人為的ストレスがきわめて大きな河川ではかなりの考慮が必要であろう。すなわち、生物学的水質判定によれば、理化学的方法にくらべ、長期間の水質の様相を知ることができるといわれるが、多摩川などでは、水質は短期にかなり変化し、生物相の変化のはげしい水域もある。したがって、一度の調査のみでは必ずしも河川の恒常的状态を把握できるとはいいがたい。

また、河川の生物相は単に水質汚濁の程度だけではなく、底質、水深、流速、水温、日照、流量変化、周辺の陸上環境などの多くの環境要因により影響される。また、生物自体にも、羽化、産卵、孵化などの生活史、遡上、流下などの移動、すみ分けなどの問題があり、調査時季、調査地点、採集部位の選定も重要となる。採集方法も人により多少の相違がある。さらに、大型底生動物の主体である水生昆虫類の幼虫類や若虫類には、同定が困難、または、不可能な種やグループがあり、とくに、幼若齢の個体では属種までの分類は不可能なものが多い。したがって、前記の多くの報告中の生物相は、発表者により、また、発表年度により、かなりの相違がみられる。これらの相違は、必ずしも、水質汚濁の消長によるのみではなく、上記の理由によることがあると考えられる。さらに、水生昆虫類の幼若虫の分類や生活史の研究が不十分なための同定ミスが含まれることも止むを得ぬ事実である。近年、水生昆虫類に関する基礎的研究への関心もたかまり、研究も活発に行なわれ、従来の属種名の変更、新種の記載などが増加する傾向にある。したがって、既往の報告中には将来訂正さるべき記録も多いと考えられる。

生物学的水質判定の汚濁評価方法として、大型無脊椎底生動物の種類数・個体数に基づき、1つの数値として表現する方式がいろいろ提案されている。しかし、現在では種類数・個体数ともに完全に把握することは難かしく、とくに幼若個体については困難である。したがって、これらの数値を過信することは疑

問である。むしろ、大型底生動物による水質判定としては、少数の適当な指標生物による水域区分による表現がより実際的であろう。また、このためには、対象河川の生物相を把握し、その推移を明らかにしておくことが望ましい。

さらに、公害の一面としての水質汚濁問題に引き続き、1970年代より、環境保全問題がクローズアップされてきた。そして、環境に対するより広汎でかつ深い認識が必要となり、市民と環境との関係が深刻に考慮されるようになった。また、生活が都市化した反面、自然環境への憧憬郷愁がたかまり、郷土の自然を知り、保全して親しもうとの気運が高まりつつある。このような理由で、各地方においては、それぞれの植生、水中生物を含めた動物相、自然景観などの調査がさかに行なわれ、多数の報告が発表されている。

しかしながら、多摩川については、全水域の生物相についてまとめた報告はない。かつて、世界的魚類学者 Jordan をして、“玲瓏、珠の如き水”と驚嘆させた頃が多摩川の生物についての記録は、魚類を除いてはほとんど見当たらない。大都市圏という巨大な怪物により食い尽され滅ぼされた多摩川は、多量の取水により、数多くのダムにより、砂利採取により、諸種の排水の汚濁負荷により、また、川床工事、河川敷の工事などにより、過去50年の間に全く変貌してしまった。これには、それだけの理由があったのであろうが、再びかえらぬ貴重な自然のメンバーも少なからず消滅して行ったことであろう。これらについての記録はなく、現在では想像にたよるほかない。

1960年以降に行なわれた多くの調査は、水質汚濁調査を主目的としたため、調査水域が、中・下流に限定され、多摩川全域の自然環境の水中生物相をまとめたものはなかった。水質汚濁に関してのみならず広く環境保全のためにも、多摩川全域の生物相を記録することは有意義であろう。

筆者は1959年以降しばしば多摩川の生物調査を行なってきたが、以上のようなことから、1976年より3年にわたり、“とうきゅう環境浄化財団”より研究助成をうけ、多摩川全域の生物相のまとめを行なった。本報告は1959～1981年の間に行なった筆者の調査結果を基とし、井出その他の研究者の調査報告も出来得る限り補足として引用し、より充実することを期した。このため、個々の報告では、分布が不連続であり、流下などによる所謂“偶在種”と考えられた種の分布が、多くの報告をつみ重ねると連続すること、上流分布種と考えられたものが、意外に下流まで分布することなどが判明した。また、1976年以降の3年間は主として上流部の未調査の小支流、沢、崖水などを調査した結果、トワダカワゲラ、ムカシトンボ、マキシマトビケラなどの分布を確認し、多摩川の底生動物相が上流部ではきわめて多様で豊富なことなどがわかった。ただし、わが国においては、水生昆虫の幼虫や若虫を主体とする河川の底生動物の分類や生活史に関する知識は不十分であり、これらの中には今後の基礎的研究の進展により、新種として記載さるべき種類、他種に合一さるべき種類も少なくないであろう。また、標本の破損や幼若のため、また、資料の不足のため、目・科・または属の段階までしか分類してないものも多い。また、同定結果に疑問のある種も少なくなかったが、筆者自身の膨大な数の標本のすべて、また、他の研究者の標本につき一々再検討することは不可能であった。このため、本報告においては、以上のことを前提として、筆者の

記録に、収集し得た資料を加えて、1959～1981年までの間に調査報告された多摩川水系の底生生物の目録と主要種の分布図を作成した。

なお、昆虫綱-双翅目-ユスリカ科のものは、広く水源から河口域にわたってほとんどあらゆる地点に出現し、個体数も多く、属数、種数ともにきわめて多い。多摩川水域のみでもおそらく100種以上が分布すると思われるが、この種の本邦における研究は最近始まったばかりでいまだ不十分で、本科の専門研究者以外には分類同定はほとんど不可能である。したがって、ほとんどの多摩川の底生生物の調査報告には、ユスリカ科として、科名の記録にとどまっている。多摩川のこのグループに関しては、現在、佐々学博士を中心とする研究者により活発に研究が行なわれ、その成果も逐次報告されつつあるため、本報告では割愛した。

また、河川の流程変遷の結末を示す河口汽水域の生物につき調査された報告はほとんど見当たらない。このため、畏友・北森良之介博士が1968年に行なった調査の未発表の資料を補足として引用させて戴いた。

本報告は、1959年より1981年にわたる筆者の多摩川の大型底生無脊椎動物の調査結果のまとめであり、さらに充足を期するため、故井出嘉雄博士はじめ多くの同学の人々の報告を引用させて戴いた。ここに、これらの諸氏ならびに、1976年より3年にわたり研究助成金を供与された“とうきゅう環境浄化財団”に対し厚く感謝の意を表します。さらに、20年の間にいろいろの面で調査に援助協力を戴いた、東京都公害研究所の古井戸良雄参事、東京都立衛生研究所の松本昌雄博士、松本淳彦、森田洋子、大野正彦の諸氏、東京都水道局の乙幡恵、田口幸夫の両氏、東京都水産試験場の飯村利男、斉藤実の両氏、川崎市水道局の橋本徳蔵氏その他、五日市保健所の諸氏、自由学園卒業の渡辺恭子、戸上陽子、竹村光代の諸氏、その他多くの人々に心より感謝します。また、文献調査に際し、多大の援助を賜った科学博物館目黒自然教育園の久居宣夫氏、日本工学院研究生の小林紀雄氏、貴重な休日の時間を割き、資料整理に助力された新日本気象海洋株式会社の渡辺晋氏にも負うところがきわめて大であったことを加えて感謝します。

最後に、多忙な社務の間にありながら、本報告作成のため、多大の時間を恵与された、新日本気象海洋株式会社社長高橋正吾氏、常務取締役田畑日出男氏、第二技術研究所副所長北森良之介博士の御好意がなければ、本報告の執筆は不可能であったことを付記し、上記の上司に対し心より感謝の意を表します。

2) 調査時季および調査地点

筆者の調査期間は、1959年から1981年までの23年間で、この間に、1961、62、66～68年の5年間を除き、毎年調査を行なった。ただし、年度により調査水域は異なり、地点により調査回数はまちまちである。上流の支流については調査回数が一度のみの地点が多いが、本流の氷川より下流、平井川の末端、秋川と浅川の中・下流については、比較的調査回数が多い。調査時季は、年1回春季から夏季に行なった調査、年3～4回などの場合が多いが、小仏川のように1年間毎月調査を行なった水系もある。また、1970年以前には、筆者の調査以外には、ほとんど、調査報告はみられないが、1974年以降には、

他の人々による調査報告も増加している。その中、1974年から1979年にかけて毎年行なわれた井出その他による調査は大規模なもので、とくに、中・下流についてくわしい調査を行なっている。飯村等東京都水産試験場が1975～77年にかけて行なった上・中流の調査は、同一地点の調査回数が多く、この時季の貴重な資料である。

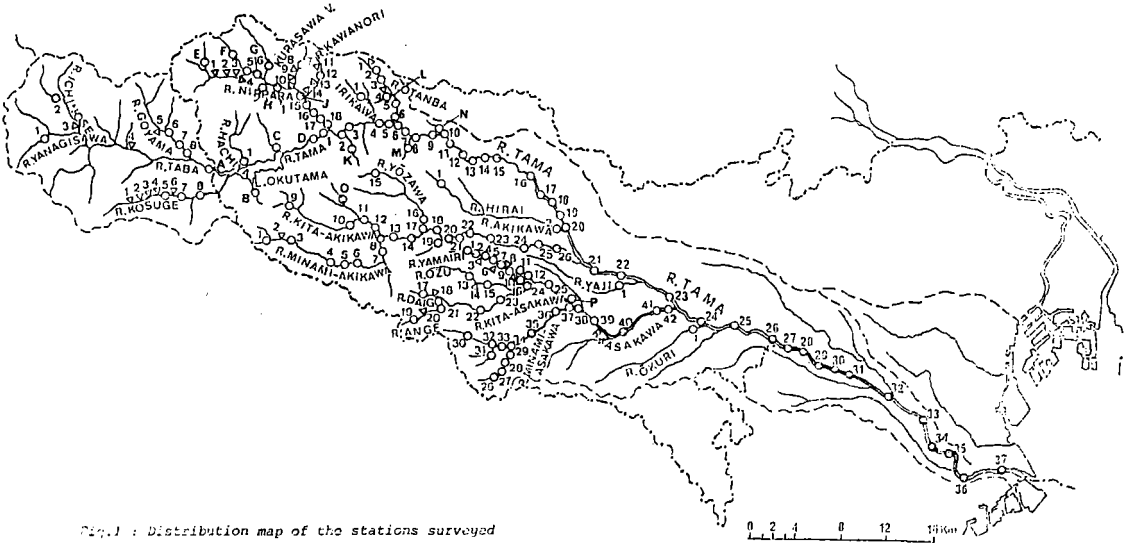


Fig.1 : Distribution map of the stations surveyed during the period of 1959 - 1980.

- main stream of each river system.
- △ small streams, hydropetric media on road side.

筆者による調査地点は List A および Fig. 1 に示す。約 150 地点であるが、この他に筆者以外の研究者または機関により調査された地点が合計 16 地点 (St. A ~ St. P) あり、総計約 166 地点としてまとめた。Fig. 1 中○印で示した地点は筆者による調査のうち河川の主流を調査した地点を示す。△印で示した地点は、小さな沢流、または崖にしたたる湿潤石面の調査地点を示す。○印にアルファベットを付した地点は筆者以外により行なわれた調査の特定の調査地点を示す。なお、List A 中に地点名について調査年月日を付したが、調査回数の多い地点についてはこれを省略した。また、筆者以外による特定の調査地点には、略字を付して、調査者または調査機関を示した。

以上、多摩川水系では、本流の氷川より下流、とくに、羽村堰より下流と、平井川末端、秋川および浅川の下流部については、調査地点、調査回数ともに多く、調査密度は高いが、上流部については調査密度は低く、この水域の生物相についての知見はきわめて乏しい。今後、環境保全の面からもこの水域の密度の高い調査が期待される。

3) 多摩川水系の底生大型無脊椎動物相の概要

1959 年から 1981 年までの 23 年間に多摩川水系から採集され記録された、肉眼で認められる大きさの所謂、底生大型無脊椎動物は、昆虫類のユスリカ科を除いて、ほぼ 270 taxa が記録されている。以上の中には、ミズダニ類、貧毛類、ヒル類など多くの種を含みながら現在では属または種までの同定が困難または不可能なグループも少なくない。これらは、目、科、属などの 1 つの taxon (分類群、分類単位) として記録されている。このためユスリカ科をはじめ、これらのグループの研究が進めば多摩川の底生大型無脊椎動物は 400 種以上に達すると考えられる。これらの底生動物の主体をなすのは水生昆虫の幼虫または若虫類であり、その内容は以下のとおりである。

蜉蝣目	Ephemeroptera	: 10 科 19 属 7 亜属 54 種以上
蜻蛉目	Odonata	: 9 科 22 属 24 種 以上
楛翅目	Plecoptera	: 8 科 24 属 30 種 以上
広翅目	Megaloptera	: 2 科 3 属 3 種
半翅目	Hemiptera	: 4 科 4 属 5 種
脉翅目	Neuroptera	: 1 科 1 属 1 種
毛翅目	Trichoptera	: 16 科 40 属 64 種 以上
鞘翅目	Coleoptera	: 9 科 14 属 16 種 以上
双翅目	Diptera	: 10 科 19 属 2 亜属 29 種以上
膜翅目	Hymenoptera	: 1 科 1 属 1 種

以上のほか、ミズダニ類 Hydrachnellae とミズムシ、アメリカザリガニ、サワガニ、エビ、ヨコエビ、ミジンコ類など 21 taxa の甲殻類 Crustacea、ミズミズズ、イトミズズなど 8 taxa の貧毛類 Oligochaeta、シマイシビル、グロソホニなど 6 taxa 以上のヒル類 Hirudinea、カワニナ、モノアラガイ、ヒラマキガ

イ、サカマキガイ、カワコザラなど 12 taxa 以上の巻貝類 Gastropoda, ナミウズムシなど 2 種の渦虫類 Turbellaria などが多く見られる。マシジミ、ドブシジミ、マメシジミなどの二枚貝 Pelecypoda は比較的少なく、クマムシ Tardigrada, 線虫類 Nematoda, ヒドラ Hydra などは微小のため目立たず記録は少ない。ヤハズハネコケムシなどの苔虫類 Bryozoa, タンスイカイメンなど海綿類 Polifera は比較的限られた水域に見られた。なお、大師橋以下の下流ならびに河口域の水域からは 35 種に達する多毛類 Polychaeta とその他が北森博士により記録されている (List C)。

以上の詳細は、分類群目録として、List B に分類別一覧表として示し、その各々の採集地点、採集年月日は List D に示した。なお、これらの生物中主要なものの採集記録地点を Fig 2 ~ 119 に示した。List B には参考文献を出るだけ付したが、これらの中、水生昆虫類に関しては種としての原記載ではなく、若虫 Nymphs または幼虫 Larvae についての記載文献である。原記載は入手困難なものが多いため手近にあり利用し易いものを多く列記した。学名に Gen. et sp. indet, sp. などとあるのは、属種名とも不明のもの、種名不明のもので、科名または属名のみ同定し得たものを示す。List D 中の Localities は水系別に地点名と地名を記し、採集年月日を付した。Supplement には、筆者以外による調査報告の中筆者の調査地点と重複せぬ個有地点のみを、報告者または発表機関名、水系名、地点番号、採集年月日の順に列記した。なお、これらの地点中の、正確には筆者の調査地点から距る地点もあるが、わずかな距離の場合は筆者の調査地点とみなして記録した。また、Supplement 中、採集年月日の不明なもの、採集回数がきわめて多いものについては年月日の記録を省略してある。

4) 多摩川の底生動物相の経年変化

前記 166 の調査地点の中、調査密度が高く、底生動物相の経年変化を 1960 年代から比較考察出来る地点はかなり限定される。これは、1975 年以前に行なわれた調査がきわめて少ないこと、調査ごとに対象水域や時季がまちまちであることなどによる。比較的調査密度が高く、1960 年からの変遷を見ることが出来るのは次の地点である。

多摩川本流 : 昭和橋, 鎧橋, 多摩川橋, 調布橋, 羽村堰上下流, 永田橋, 多摩橋, 拝島橋, 多摩大橋,

日野橋, 関戸橋, 是政橋, 多摩河原橋, 多摩水道橋, 二子橋

秋川水系 : 秋川橋, 秋留橋, 東秋川橋

浅川水系 : 敷島橋, 水無瀬橋, 浅川橋, 平山橋, 新井橋

日原川 : 昭和橋

平井川 : 多西橋

これらの諸地点の生物にもとづく汚濁の生物指数 (Biotic index) の経年変化については、前報、松本 (1972) Urban Kubota, および、松本 (1978) 多摩川流域環境調査報告書 — 第 3 次調査にのべた。

5) ま と め

1959年以降1981年までに筆者が行なった多摩川の底生動物の調査の結果と、この間に行われた他の研究者や機関の報告をまとめ、多摩川の底生動物のリストと分布図を作成した。その結果、以下のことが分かった。

- (a) 底生動物相の主体として、ユスリカ科を除き、10目70科147属に属する230 taxa (taxon 分類群の複数)以上の水生昆虫類の幼虫と若虫が多摩川水系から報告されている。この他に、多数のミズダニ類、21 taxaの甲殻類、8 taxaの貧毛類、6 taxaのヒル類、12 taxaの巻貝類、2 taxaの渦虫類、その他、二枚貝類、クマムシ、線虫、コケムシ、タンスイカイメン、ヒドラなどの報告がある。なお、河口水域からは35種の多毛類の記録がある。
- (b) 底生動物の分類はかなり困難であり、とくに水生昆虫類には、現在、同定が困難または不可能なグループがある。このため、本報告の中には、将来訂正されるべき部分、また、現在、疑問のある部分もかなり含まれている。しかし、一々これを確認することは不可能なため、以上のことを前提として、現在までの記録をまとめた。
- (c) 本報告は多くの調査のまとめであり、各調査における、調査時期、調査地点における採集部位、採集方法などが異なるため、各調査結果にはかなりの差異がみられた。これは、同定結果の異同以外に、調査時点における多くの自然的、人為的要因、生物自体の生活史、生態、行動などの要因によると考えられる。したがって、今後、生物学的水質判定に当っては、生物の分類に関する研究とともに、以上の要因についても基礎的研究を進めることが必要である。
- (d) 多くの報告をまとめて生物の分布図を作成した結果、従来、上流の種と考えられた種が意外に下流まで連続して得られていることが分かった。これらの中下流における不連続分布は簡単に偶在種をみなせない。
- (e) 従来、多摩川水系からほとんど報告がなかった、トワダカワゲラ、ムカシトンボ、キタガミトビケラ、マキンマトビケラなどの分布が上流部で確認された。これらは、高地冷水性または、北方型の種であり、多摩川上流部における分布は興味あることで、今後保護されるべき種である。とくに、キタガミトビケラは高尾山周辺の限られた水域にしかみられなかった。
- (f) 鬼怒川などで大発生することで知られた、フミメカゲロウは1970年以前には、ほとんど得られなかったが、1970年以後は秋川下流部で増加しているようである。
- (g) モンカゲロウ属は、フタスジモンカゲロウ、トウヨウモンカゲロウ、モンカゲロウの3種があり、上流から、フタスジモンカゲロウ、モンカゲロウ、トウヨウモンカゲロウの順に“すみ分け”現象がみられることで知られている。多摩川では、フタスジモンカゲロウが最上流に分布しているが、中流域では3種が混在し、3種の分布の下限は明確には区別できない。このことは、多摩川は人為的要因により、下流部のトウヨウモンカゲロウの分布域が消滅しているためと考えられる。このことは、カワゲラ類やヒゲナガカワトビケラの分布下限がほぼ、拝島橋、日野橋周辺に限定していることと一致する。なお、

多摩川のモンカゲロウの幼虫の腹部脊面の模様は原記載と一致せず今後の研究を要する。

- (h) コカゲロウ科は、多摩川全域に分布し、個体数も多く、従来、シロハラコカゲロウ *Baetis thermicus* UENO, および、フタバコカゲロウ *Baetiella japonica* (IMANISHI) として報告されていたが、多摩川には明らかに数種以上が分布している。御勢(1980)の分類によると、多摩川のコカゲロウ科は、サホコカゲロウ、ヨシノコカゲロウ、ヤマトコカゲロウ、フタバコカゲロウ *Pseudocloeon japonica* と一応同定されたがいずれも大類の記載が原記載と一致せず、成虫の観察などなお研究を要する。さらに、この科には現在、同定不能の種が数種ある。
- (i) ヒラタカゲロウ科のほとんどは拝島橋、日野橋周辺を分布下限とするが、エルモンヒラタカゲロウ、シロタニガワカゲロウはかなり下流の二子橋付近まで分布する。
- (j) カワゲラ類の分布下限は、拝島橋、日野橋周辺である。
- (k) ナベブタムシ類はかつては日野橋周辺にも多くみられたが、現在では、秋川および浅川の限られた水域にみられるのみである。
- (l) ヘビトンボ、ナガレトビケラ類、ヒゲナガカワトビケラ類などの分布下限は多摩大橋付近であるが、イノブサヤマトビケラは、中央高速橋付近まで分布する。
- (m) 多摩川のシマトビケラ科は数種以上がみられるが、従来、ウルマーシマトビケラに一括して報告されてきた感がある。実物標本との対比の結果、オオシマトビケラの多摩川における分布は疑問である。コガタシマトビケラ、ウルマーシマトビケラは最も普通で分布も広く、丸子堰上まで分布するが、他の種についてはさらに研究が必要である。
- (n) ガガンボ科では *Antocha* 属の分布は上中流にわたり広くみられるが、*Eriocera*, *Tipula*, *Holorusia*, *Pedicia* 等の諸属の分布下限は日野橋付近である。
- (o) 汚水性の双翅目である、ホシチ ヌウバエ科のホシチ ヌウバエ、オオケチ ヌウバエ、などは、中下流全域にわたってみられるが、優占的に出現することはほとんどなく、調査地点における部分的な汚水流入の存在を示すことが多い。シマハナアブ類についても同様である。
- (p) ミズムシ *Asellus hilgendorffii* は明らかに中下流に分布がかたよっており、水質汚濁との関係が考えられる。このことは、外来種である、アメリカザリガニについても同様である。
- (q) イトミミズ科は本流の全域にわたってみられるが、この類の分類は困難であり、エラミミズのみが容易に同定できる。本種は、中下流および小菅川の st.7 など明らかに汚濁した水域に分布する。
- (r) サカマキガイとシマイシビルの分布はほぼ一致し、ともに、下流域まで分布し、汚濁に耐性のあることがみられる。
- (s) ナミウズムシは上流部に分布し、下限は日野橋であり、概して、汚濁に非耐性であるとみられていることに一致する。
- (t) 生物学的水質判定はそれなりに十分有意義であるが、肉眼的大型底生物については、上述したとおり、同定知識の不十分、採集法の問題、生活史の知識の不十分、水質汚濁以外の環境因子との問題など、な

お解決しなければならぬ問題が多い。このため、種類数、個体数などを基とする、数値による表現にとられることは、現状ではかならずしも望ましいことではない。むしろ、确实容易に同定できて、普通に見られ、かつ、生態や生活史が判明しているいくつかの指標種または分類群(taxa)の優占的出現により水域を区分する本来の方法が最も实际的であろう。

(u) 以上のことから、分布図をもとに、多摩川の水質汚濁の指標生物として適当と考えられるものをあげてみると以下のようなになる。

清水性生物：カゲロウ類の大部分、カワゲラ類のすべて、ヘビトンボ、ナガレトビケラ類、ヒゲナガカワトビケラ、ニンギョウトビケラ、ガガンボ類、ナミウズムシ、など

微汚水性：キイロカワカゲロウ、クシゲマダラカゲロウ、コカゲロウ類、エルモンヒラタカゲロウ、シロタニガワカゲロウ、イノブスヤマトビケラ、コガタシマトビケラ、ウルマーシマトビケラ、シギアブ、など

中汚水性：ミズムシ、アメリカザリガニ、シマイシビル、グロソホニ、サカマキガイ、など

強汚水性：ホシチョウバエ、オオケチョウバエ、エラミミズ、など。

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資 料 編

LIST OF THE LOCALITIES OF THE BENTHIC MACRO-INVERTEBRATES
COLLECTED FROM THE RIVER TAMA SYSTEM
DURING THE PERIOD OF 1959-1980 ^{A)}

1. R. TABA SYSTEM :

- St.1 : The main stream of the R.Yanagisawa at Ochiai, Apr.26,1977.
St.2 : The main stream of the R.Ichinose at Ichinose, Apr.26,1977.
St.3 : A trickle on the right bank of the R.Ichinose, Apr.26,1977.
St.4 : Kumakurazawa, a small stream on the left bank of the R.Taba, Apr.
26,1977.
St.5 : A trickle from a horseradish-bed (*Wasabida*) on the right bank of the
R.Goyama, Apr.25,1977.
St.6 : The main stream of the R.Goyama below the Kamanosawa Bridge, Apr.25,
1977.
St.7 : The main stream of the R.Goyama at Takahata, Apr.25,1977.
St.8 : The main stream of the R.Goyama at Suginakubo, Apr.25,1977.
St.A : The main stream of the R.Taba near Omatsuri. (KRIEP)

2. R. KOSUGE SYSTEM : Aug.18,1979.

- St.1 : A small stream on the left bank of the R.Kosuge near the Falls of
Shiraito.
St.2 : A small stream on the left bank of the R.Kosuge.
St.3 : A small stream on the left bank of the R.Kosuge.
St.4 : A small stream on the left bank of the R.Kosuge.
St.5 : The main stream of the R.Kosuge below the campground.
St.6 : A horseradish-bed on the left bank of the R.Kosuge.
St.7 : The main stream of the R.Kosuge at Kawakubo.
St.8 : The main stream of the R.Kosuge below Yozawa.

3. R. MINEYA : (*incorrectly named as R.Hachiya in the localities maps*)

- St.1 : The main stream of the R.Mineya at Amefuri, Apr.25,1977.

4. KUKIZAWA VALLEY :

- St.B : The main stream of the R.Kukizawa. (METOC)

5. MIZUNEZAWA VALLEY :

- St.C : The main stream of the R.Mizunozawa. (METOC)

6. R. NIPPARA SYSTEM :

- St. 1 : A rivulet on the left bank of the R.Nippara, Kajigoyakubo, May9, 1979.
- St. 2 : A rivulet on the left bank of the R.Nippara, Nagurizawa, May 9,1979.
- St. 3 : A hygropetric medium on the roadside rock on the left bank of the R.Nippara, May 9,1979.
- St. 4 : A trickle on the right bank of the R.Nippara beside the Haccho Bridge, May 9,1979.
- St. 5 : The main stream of the R.Nippara above the Haccho Bridge, May 9,1979.
- St. 6 : The main stream of the Ogawa Valley above the Nippara Limestone Cave, May 9,1979.
- St. 7 : The main stream of the Kurasawa Valley above the Kurasawa Limestone Cave, May 10,1979.
- St. 8 : A hygropetric medium on the roadside rock on the right bank of the Kurasawa Valley, May 10,1979.
- St. 9 : A hygropetric medium on the roadside rock on the right bank of the Kurasawa Valley, May 10,1979.
- St.10 : A hygropetric medium on the roadside rock on the right bank of the Kurasawa Valley, May 10,1979.
- St.11 : A hygropetric medium on the roadside rock on the right bank of the Kawanori Valley above the Hosokura Bridge, Oct.23,1979.
- St.12 : The main stream of the R.Kawanori under the Hosokura Bridge, Oct.23, 1979.
- St.13 : A hygropetric medium on the roadside rock on the right bank of the R.Kawanori, Oct.23,1979.
- St.14 : A hygropetric medium on the roadside rock on the right bank of the R.Kawanori, Oct.23,1979.
- St.15 : The main stream of the R.Nippara above the Hiraishi Bridge, Aug.11, 1969.
- St.16 : The main stream of the R.Nippara above the Meoto Bridge.
- St.17 : The main stream of the R.Nippara below the Meoto Bridge.
- St.18 : The main stream of the R.Nippara above the Shōwa Bridge (Hikawa-Ōhashi Bridge).
- St. E : The main stream of the Nagasawadani Valley. Oct.22 & Nov.17,1976. (TMG-BEP-T).

- St.F : Araragidani and Iwashitadani rilllets of the Magosodani Valley, Oct. 22 & Nov.17,1976. (TMG-BEP-T).
- St.G : The main stream of the R.Nippara between the Magosodani Valley and the Ogawadani Valley. Oct.22 & Nov.17,1976. (TMG-BEP-T).
The main stream of the R.Nippara below the Ise Bridge, June 4,1977. (IDE)
- St.H : The main stream of the Ôtakizawa. June 4,1977. (IDE).
- St.I : The main stream of the R.Nippara in front of the Nippara Post Office. June 4,1977. (IDE).
- St.J : The main stream of the R.Nippara above the Kawanori Bridge, June 5, 1977. (IDE).
7. UNAZAWA VALLEY :
- St.K : The raceway to the Unazawa Experimental Fish Pond of the Tokyo Metropolitan Fisheries Experimental Station,Dec.6-7,1972. (IIMURA)
8. IRIKAWA VALLEY (R. MINEIRI) :
- St.1 : A small stream above the debris barrier, May 10,1979.
9. R. ÔTANBA SYSTEM :
- St.1 : A hydropetric medium on the roadside rock on the left bank of the R.Ôtanba, May 10,1979.
- St.2 : The main stream of the R.Ôtanba below the Makinoo Bridge, May 10, 1979.
- St.3 : The main stream of the R.Ôtanba below the Hônoki Bridge, May 10,1979.
- St.4 : A trickle on the right bank of the R.Ôtanba below the Hônoki Bridge, May 10,1979.
- St.5 : The main stream of the R.Ôtanba below the Kitagawa Bridge,
- St.6 : The main stream of the R.Ôtanba above the Taishô Bridge.
- St.L : A small tributary on the right bank of the R.Ôtanba, Sept.28, Oct. 26, Nov.25,1976 & Jan26,1977. (METOC)
10. R. ÔSAWA SYSTEM :
- St.M : The main stream of the R.Ôsawa at Nakano, Sept.28, Oct.26, Nov.25, 1976 & Jan.26,1977. (METOC).
11. R. HIRAMIZO SYSTEM :
- St.N : The main stream of the R.Hiramizo at Hiramizo, Sept.28, Oct.26, Nov. 25, 1976 & Jan.26,1977.

12. R. TAMA SYSTEM (The main stream) :

St. D : The main stream of the R.Tama below the Minami-Hikawa Bridge.
(METOC); (KRIEP), (IDE).

St. 1 : The main stream of the R.Tama above the Shōwa Bridge (Hikawa-
Ôhashi).

St. 2 : The main stream of the R.Tama at Unazawa.

St. 3 : The main stream at Shiromaru.

St.3-4: The main stream at Hatonosu.

St. 4 : The main stream below the Mansei Bridge, Kori.

St. 5 : The main stream above the junction of R.Tama and R.Ôtanba.

St. 6 : The main stream below the junction of R.Tama and R.Ôtanba.

St. 7 : The main stream at Nakano.

St. 8 : The main stream above the Mitake Bridge.

St. 9 : The main stream at Sawai.

St.10 : The main stream below the Yoroi Bridge, Ikusabata.

St.11 : The main stream below the Okutama Bridge, Futamatao.

St.12 : The main stream below the Jindai Bridge, Hinatawada.

St.13 : The main stream above the Wada Bridge, Hikagewada.

St.14 : The main stream below the Mannen Bridge, Hatanaka.

St.15 : The main stream above the Chōfu Bridge, Ôme.

St.16 : The main stream above the Tamagawa Bridge, Ozaku.

St.17 : The main stream above the Hamura Dam.

St.18 : The main stream below the Hamura Dam.

St.19 : The main stream above the Nagata Bridge.

St.20 : The main stream above the Tama Bridge.

St.21 : The main stream below the Haijima Bridge.

St.22 : The main stream below the Tama-Ôhashi Bridge (Fukushima Bridge).

St.23 : The main stream below the Hino Bridge.

St.24 : The main stream below the Sekido Bridge.

St.25 : The main stream below the Koremasa Bridge.

St.26 : The main stream below the Tamagawara Bridge.

St.27 : The main stream above the Kamigawara Dam.

St.28 : The main stream below the Kamigawara Dam.

St.29 : The main stream above the Tama-Suido Bridge.

St.30 : The main stream below the Shukugawara Dam.

St.31 : The main stream below the Chûô-Kôsoku Highway Bridge.

St.32 : The main stream above the Futago Bridge.

- St.33 : The main stream below the Maruko Dam.
- St.34 : The main stream above the Hirama Bridge (Gas Bridge).
- St.35 : The main stream above the Tamagawa-Ôhashi Bridge.
- St.36 : The main stream below the Rokugô Bridge.
- St.37 : The main stream below the Taiishi Bridge.
13. R. HIRAI SYSTEM :
- St. 1 : A small stream at Mittsuzawa, May 29, 1978.
- St. 2 : The main stream of the R.Hirai above the Tasai Bridge, Ninomiya.
14. R. AKIKAWA SYSTEM :
- St. 1 : The main stream of the Hachinosuzawa, May 30, 1978.
- St. 2 : A small stream on the left bank of the R.Minami-Akikawa at Kazuma,
May 30, 1978.
- St. 3 : The main stream of the R.Minami-Akikawa at Kazuma.
- St. 4 : The main stream of the R. Minami-Akikawa at Henbori.
- St. 5 : The main stream of the R. Minami-Akikawa above the Minami-Akikawa
Bridge.
- St. 6 : The main stream of the R.Minami-Akikawa above the Kasuga Bridge.
- St. 7 : The main stream of the R.Minami-Akikawa at Sasano.
- St. 8 : The main stream of the R.Akikawa below the Tachibana Bridge.
- St. 9 : The main stream of the Shiroiwazawa above the Shiroiwa Bridge,
Kurakake.
- St.10 : The main stream of the R.Kita-Akikawa at Ozawa.
- St. 0 : The main stream of the R.Akai below the Kanotoiwa, May 21, Aug.23,
Oct.22, 1974 & Feb.4, 1975. (IIMURA).
- St.11 : The main stream of the R.Kita-Akikawa at Shirokura (the Ôsawa
Bridge).
- St.12 : The main stream of the R.Kita-Asakawa at Senzoku (the Kita-Akikawa
Bridge).
- St.13 : The main stream of the R.Akikawa below the Wada Bridge, Shimo-Motogô.
- St.14 : The main stream of the R.Akikawa above the Ozu Bridge, Nitago.
- St.15 : The main stream of the Hanakizawa.
- St.16 : The main stream of the R.Yôzawa at Gundô.
- St.17 : The main stream of the R.Yôzawa at Teraoka.
- St.17-18 : The main stream of the R.Akikawa at Ochiai (the Ochiai Bridge).
- St.18 : The main stream of the R.Akikawa below the Hoshitake Bridge.
- St.19 : The main stream of the R. Bonbori below the Niitaka Bridge.

- St.20 : The main stream of the R.Akikawa above the Sawado Bridge.
- St.21 : The main stream of the R.Akikawa below the Kowada Bridge.
- St.22 : The main stream of the R.Akikawa above the Akikawa Bridge.
- St.23 : The main stream of the R.Akikawa above the Ajiro Bridge.
- St.24 : The main stream of the R.Akikawa below the Akiru Bridge.
- St.25 : The main stream of the R.Akikawa below the Higashi-Akiru Bridge.
- St.26 : The main stream of the R.Akikawa above the Takatsuki Bridge
(Higashi-Akikawa Bridge).

15. R. YAJI :

- St. 1 : The main stream of the R.Yaji at Awasu.

16. R. ASAKAWA SYSTEM :

- St. 1 : The Kayakukodani of the R.Yamairi, Mar.12,1979.
- St. 2 : The Entrance to the Kayakukodani , Mar.12,1979.
- St. 3 : A trickle on the right bank of the R.Yamairi, Mar.12,1979.
- St. 4 : The main stream of the R.Yamairi below the Ryokô Stone Quarry
First Work, Mar.12,1979.
- St. 5 : The main stream of the R.Yamairi in front of the Ryokô Stone
Quarry Work Office, Mar.12,1979.
- St. 6 : A small stream on the right bank of the R.Yamairi, Mar.12,1979.
- St. 7 : The main stream of the R.Yamairi above the Nakai Bridge, Mar.12,
1979.
- St. 8 : A small stream on the left bank of the R.Yamairi in front of the
Koashi Bus Stop, Mar.12,1979.
- St. 9 ; The main stream of the R.Yamairi in front of the Koashi Bus Stop,
Mar.12,1979.
- St.10 : A small stream on the right bank of the R.Yamairi at Oyashiki,
Mar.13,1979.
- St.11 : The main stream of the R.Yamairi at Oyashiki, Mar.13,1979.
- St.12 : The main stream of the R.Yamairi below the Mikami Bridge, Mar.13,
1979.

R. OZU -- Nov.20,1979.

- St.13 : The main stream of the R.Ozu at Iriyama.
- St.14 : A small stream on the right bank of the R.Ozu.
- St.15 : The main stream of the R.Ozu between Iriyama and Hara.
- St.16 : The main stream of the R.Ozu at Nawakiri.

R. DAIGO -- Nov.21,1978.

St.17 : The main stream of the R.Daigo at Daigo.

St.18 : A small stream on the left bank of the R.Daigo, Ninikuzawa.

R. ANGE -- Nov.21,1979.

St.19 : The main stream of the R.Ange at Kami-Ange.

St.20 : A trickle on the left bank of the R.Ange.

St.21 : The main stream of the R.Ange at Kawaino.

R. KITA-ASAKAWA --

St.22 : The main stream of the R.Kita-Asakawa at Kitsunezuka, Nov.21,1978.

St.23 : The main stream of the R.Kita-Asakawa at Kawarajuku. May & Sept.
1964.

St.24 : The main stream of the R.Kita-Asakawa above the Motoki Bridge,
Mar.13,1979.

St.25 : The main stream of the R.Kita-Asakawa below the Kakuei Bridge,
Mar.13,1979.

St. P. : The main stream of the R.Kita-Asakawa below the Kita-Asakawa
Bridge, (IDE).

R. MINAMI-ASAKAWA --

St.26 : The main stream of the R.Anai below the Higashi-Yamashita Bridge.

St.27 : The main stream of the R.Anai below the Umenoki Bridge.

St.28 : The main stream of the R.Anai below Kiyotaki.

St.29 : The main stream of the R.Anai above the Kami-Kunugida Bridge.

St.30 : A small stream of Kogezawa in front of the Kobotoke Lodge.

St.31 : The main stream of the R.Kobotoke above the Hikage Bridge.

St.32 : The junction of the R.Kobotoke and the R.Kogezawa.

St.33 : The main stream of the R.Kobotoke at Surisashi.

St.34 : The main stream of the R.Kobotoke above the Kami-Kunugida Bridge.

St.35 : The main stream of the R.Minami-Asakawa below the Shikishima
Bridge.

St.36 : The main stream of the R.Minami-Asakawa above the Minase Bridge.

R. ASAKAWA --

St.37 : The main stream of the R.Asakawa above the Hagiwara Bridge.

St.38 : The main stream of the R.Asakawa below the Asakawa Bridge.

St.39 : The main stream of the R.Asakawa above the Ôwada Bridge.

St.40 : The main stream of the R.Asakawa below the Hirayama Bridge.

St.41 : The main stream of the R.Asakawa below the Takahata Bridge.

St.42 : The main stream of the R.Asakawa below the Arai Bridge.

17. R. ÔKURI :

St. 1 : The R.Ôkuri above the junction with the R.Tama.

Abbreviations :

KRIEP ----- Kawasaki Municipal Research Institute for Environmental
Pollution (Kawasaki-Shi Kogai Kenkyujyo).

METOC ----- METOCEAN (Shin-Nihon Meteorological and Oceanographical
Research Co.,Ltd.).

TMG-BEP-T ----- Bureau of Environmental Protection, Tokyo Metropolitan
Government (Tokyo-To Kogai Kyoku).

IDE ----- The late Dr. Takao IDE of the Rissho Women's College.

IIMURA ----- Mr. Toshio IIMURA of the Tokyo Metropolitan Fisheries
Experimental Station.

LIST OF THE BENTHIC MACRO-INVERTEBRATES COLLECTED FROM
THE RIVER TAMA DURING THE PERIOD OF 1959-1980^{B)}

PHYLUM ARTHROPODA

CLASS INSECTA

ORDER EPHEMEROPTERA

FAMILY EPHORONIDAE

1. *Ephoron shigae* (TAKAHASHI) アミメカゲロウ (Pl.I - fig.1)
Nymph : UENO (1931)^b p.189, GOSE (1962) p.12, --- (1980) p.457.

FAMILY EPHEMERIDAE

1. *Ephemera japonica* McLACHLAN フタスシモンカゲロウ (Pl.I - fig.2)
Nymph : UENO (1928) p.21, --- (1959) p.45, GOSE (1962) p.12, ---
(1980) p.455.
2. *Ephemera orientalis* McLACHLAN トウヨウモンカゲロウ (Pl.I - fig.3)
Nymph : IMANISHI (1940) p.176, UENO (1959) p.45, GOSE (1962) p.12,
--- (1980) p.455.
3. *Ephemera strigata* EATON モンカゲロウ (Pl.I - fig.4)
Nymph : IMANISHI (1940) p.175, GOSE (1962) p.12, --- (1980) p.455.

FAMILY POTAMANTHIDAE

1. *Potamanthus kamoni* IMANISHI キイロカワカゲロウ (Pl.II - fig.5)
Nymph : UENO (1928) p.23, --- (1959) p.46, IMANISHI (1940) p.178,
GOSE (1962) p.11, --- (1980) p.454.

FAMILY LEPTOPHLEBIIDAE

1. *Paraleptophlebia chocorata* IMANISHI ナミトヒイロカゲロウ
Nymph : IMANISHI (1937) p.332, --- (1940) p.184, UENO (1959) p.46,
GOSE (1962) p.13, --- (1980) p.214.
2. *Paraleptophlebia spinosa* UENO トケトヒイロカゲロウ (Pl.II - fig.6)
Nymph : IMANISHI (1940) p.185, GOSE (1962) p.13, --- (1980) p.214.
3. *Paraleptophlebia* sp. トヒイロカゲロウ sp.
4. *Choroterpes trifurcata* UENO ヒメトヒイロカゲロウ (Pl.II - fig.7)
Nymph : UENO (1928) p.40, IMANISHI (1940) p.189, GOSE (1962) p.13,
--- (1980) p.215.

FAMILY EPHEMERELLIDAE

1. *Ephemerella* (*Torleya*) *japonica* GOSE イラウ"タマタ"ラカケ"ロウ (Pl.II -fig.8)
 = *Ephemerella* sp. ED
 Nymph : GOSE (1962) p.15, --- (1980) p.286.
2. *Ephemerella* (*Drunella*) *cryptomeria* IMANISHI ヨシノマタ"ラカケ"ロウ (Pl.III-fig.9)
 = *Ephemerella* sp. nG, *Ephemerella yoshinoensis* GOSE
 Nymph : IMANISHI (1940) p.195, GOSE (1962) p.15, --- (1980) p.286.
3. *Ephemerella* (*Drunella*) *basalis* IMANISHI 八木タマ"ラカケ"ロウ (Pl.III-fig.10)
 Nymph : IMANISHI (1937) p.321, --- (1940) p.196, UENO (1959) p.47,
 GOSE (1962) p.15, --- (1980) p.286.
4. *Ephemerella* (*Drunella*) *trispina* UENO ミツトケ"マタ"ラカケ"ロウ (Pl.III-fig.11)
 Nymph : UENO (1928) p.45, --- (1959) p.47, GOSE (1962) p.15, --- (1980)
 p.287.
5. *Ephemerella* (*Cincticostella*) *okumai* GOSE 八木クマタ"ラカケ"ロウ
 = *Ephemerella* sp. EC
 Nymph : GOSE (1962) p. 15, --- (1980) p.288.
6. *Ephemerella* (*Cincticostella*) *tschernovae* BAJKOVA チイルノハ"マタ"ラカケ"ロウ
 (Pl.III-fig.12)
 = *Ephemerella* sp. nax
 Nymph : IMANISHI (1940) p.205, GOSE (1962) p.15, --- (1980) p.288.
7. *Ephemerella* (*Cincticostella*) *nigra* UENO クロマタ"ラカケ"ロウ
 Nymph : UENO (1928) p.44, --- (1959) p.48, GOSE (1962) p.15, ---
 (1980) p.288.
8. *Ephemerella* (*Cincticostella*) *orientalis* TSCHERNOVA トウヨウマタ"ラカケ"ロウ
 (Pl.IV-fig.13)
 = *Ephemerella* sp. nay, *Ephemerella delicata*
 Nymph : IMANISHI (1940) p.206, GOSE (1962) p.15, --- (1980) p.288
9. *Ephemerella* (*Acerella*) *longicaudata* UENO シリナカ"マタ"ラカケ"ロウ
 Nymph : UENO (1928) p.42, GOSE (1962) p.15, --- (1980) p.367.
10. *Ephemerella* (*Ephemerella*) *imanishii* GOSE イマニシマタ"ラカケ"ロウ
 = *Ephemerella* sp. nF
 Nymph : IMANISHI (1940) p.202, GOSE (1962) p.15, --- (1980) p.366.
11. *Ephemerella* (*Ephemerella*) *cornutus* GOSE ツノマタ"ラカケ"ロウ
 = *Ephemerella* sp. EA
 Nymph : GOSE (1962) p.15, --- (1980) p.366.

12. *Ephemerella (Serratella) setigera* BOJKOVA フシケマダラカケ〇ウ (Pl.IV-fig.15)
 = *Ephemerella* sp. EB
 Nymph : GOSE (1962) p.15, --- (1980) p.366.
13. *Ephemerella (Serratella) rufa* IMANISHI フカマダラカケ〇ウ (Pl.IV-fig.14)
 Nymph : IMANISHI (1940) p.208, UENO (1959) p.48, GOSE (1962) p.15, ---
 (1980) p.366.

FAMILY CAENIDAE

1. *Caenis* sp. ヒメカケ〇ウ sp. (Pl.IV-fig.16)
 Nymph : UENO (1928) p.47, IMANISHI (1940) p.211, GOSE (1962) p.17, ---
 (1980) p.454.

FAMILY BAETIDAE

1. *Cloëon dipterum* LINNE フタハカケ〇ウ
 Nymph : UENO (1928) p.49, --- (1959) p.50, IMANISHI (1940) p.215,
 GOSE (1962) p.18, --- (1980) p.77.
2. *Baëtis sahoensis* GOSE サホコカケ〇ウ (Pl.V-fig.18)
 Nymph : GOSE (1980) p.79.
3. *Baëtis yoshinensis* GOSE ヨシノコカケ〇ウ
 Nymph : GOSE (1980) p.79.
4. *Baëtis yamatoensis* GOSE ヤマトコカケ〇ウ (Pl.V-fig.17)
 Nymph : GOSE (1980) p.79.
- ? 5. *Baëtis thermicus* UENO シロハラコカケ〇ウ
 Nymph : UENO (1935) p.64, --- (1959) p.49, IMANISHI (1940) p.219,
 GOSE (1962) p.18.
6. *Baëtis* spp. コカケ〇ウ spp.
7. *Pseudocloëon japonica* (IMANISHI) フタハコカケ〇ウ
 = *Baëtiella japonica* IMANISHI
 Nymph : UENO (1928) p.51, --- (1931)b p.220, --- (1935) p.65, ---
 (1959) p.49, IMANISHI (1940) p.226, GOSE (1962) p.18, --- (1980) p.211.
8. *Pseudocloëon* sp. フタハコカケ〇ウ sp.

FAMILY ISONYCHIIDAE

1. *Isonychia japonica* ULMER チラカケ〇ウ (Pl.VI-fig.21)
 = *Chironetes japonicus* ULMER
 Nymph : UENO (1928) p.52, --- (1935) p.63, --- (1959) p.57, IMANISHI
 (1940) p.234, GOSE (1962) p.19, --- (1979) p.60.

FAMILY SIPHLONURIDAE

1. *Siphonurus binotatus* EATON アサヲタカケ〆〇ウ (Pl.VI-fig.22)
Nymph : UENO (1928) p.54, --- (1931)b p.207, --- (1935) p.61, IMANISHI (1940) p.p.232, GOSE (1962) p.19, --- (1979) p.60.
2. *Siphonurus sanukensis* TAKAHASHI ナミヲタカケ〆〇ウ
Nymph : IMANISHI (1940) p.234, UENO (1959) p.58, GOSE (1962) p.19, --- (1979) p.60.
3. *Siphonurus* sp. ヲタカケ〆〇ウ sp.
4. *Ameletus montanus* IMANISHI ヒメヲタカケ〆〇ウ
Nymph : UENO (1931)b p.209, --- (1935) p.62, --- (1959) p.57, IMANISHI (1940) p.236, GOSE (1962) p.19, --- (1979) p.45.
5. *Ameletus costalis* MATSUMURA マイク〆〇ヒメヲタカケ〆〇ウ (Pl.VI-fig.23)
Nymph : IMANISHI (1933) p.65, --- (1940) p.237, GOSE (1962) p.19, --- (1979) p.45.
6. *Ameletus kyotoensis* IMANISHI キヨウトヒメヲタカケ〆〇ウ
Nymph : IMANISHI (1933) p.65, GOSE (1962) p.19, --- (1979) p.45.
7. *Ameletus* sp. ヒメヲタカケ〆〇ウ sp.

FAMILY HEPTAGENIIDAE

1. *Bleptus fasciatus* EATON アヒカケ〆〇ウ (Pl.VI-fig.24)
Nymph : UENO (1931)b p.194, --- (1935) p.59, --- (1959) p.56, GOSE (1962) p.22, --- (1979) p.44.
2. *Epeorus hiemalis* IMANISHI オナカヒラタカケ〆〇ウ
Nymph : IMANISHI (1934) p.380, UENO (1959) p.55, GOSE (1962) p.20, --- (1979) p.44.
3. *Epeorus uenoi* MATSUMURA ウノヒラタカケ〆〇ウ (Pl.VII-fig.25)
Nymph : UENO (1928) p.28, GOSE (1962) p.20, --- (1979) p.44.
4. *Epeorus aesculus* IMANISHI キイロヒラタカケ〆〇ウ
Nymph : IMANISHI (1934) p.385, --- (1940) p.250, UENO (1959) p.53, GOSE (1962) p.20, --- (1979) p.44.
5. *Epeorus latifolium* UENO イルモンヒラタカケ〆〇ウ (Pl.VII-fig.26)
Nymph : UENO (1928) p.34, --- (1959) p.55, IMANISHI (1934) p.391, --- (1940) p.248, GOSE (1962) p.20, --- (1979) p.45.
6. *Epeorus napaeus* IMANISHI タニヒラタカケ〆〇ウ
Nymph : IMANISHI (1934) p.391, GOSE (1962) p.20, --- (1979) p.45.
7. *Epeorus ikanonis* TAKAHASHI ナミヒラタカケ〆〇ウ
Nymph : UENO (1959) p.54, GOSE (1962) p.22, --- (1979) p.46.

8. *Epeorus curvatus* MATSUMURA トリモツヒラタカケ"〇ウ (Pl.VII-fig.27)
Nymph : UENO (1928) p.34, --- (1959) p.54, IMANISHI (1934) p.393,
GOSE (1962) p.21, --- (1979) p.45.
9. *Epeorus* sp. ヒラタカケ"〇ウ sp.
10. *Ecdyonurus tigris* IMANISHI トラタニカ"ワカケ"〇ウ
Nymph : IMANISHI (1936) p.538, GOSE (1962) p.22, --- (1979) p.42.
11. *Ecdyonurus tobiironis* TAKAHASHI ヲタニカ"ワカケ"〇ウ (Pl.VIII-fig.30)
Nymph : UENO (1931)b p.202, --- (1959) p.51, GOSE (1962) p.22, ---
(1979) p.47.
12. *Ecdyonurus yoshidae* TAKAHASHI シ〇タニカ"ワカケ"〇ウ (Pl.VIII-fig.31)
Nymph : UENO (1928) p.30, --- (1935) p.60, --- (1959) p.51, IMANISHI
(1940) p.252, GOSE (1962) p.22, --- (1979) p.47.
13. *Ecdyonurus kibunensis* IMANISHI キワ"ネタニカ"ワカケ"〇ウ (Pl.VIII-fig.32)
Nymph : IMANISHI (1936) p.541, --- (1940) p.253, UENO (1959) p.50,
GOSE (1962) p.22, --- (1979) p.47.
14. *Ecdyonurus* sp. EA タニカ"ワカケ"〇ウ sp. EA
Nymph : GOSE (1962) p.22, --- (1979) p.47.
15. *Heptagenia* sp. キハタ"ヒラタカケ"〇ウ sp.
Nymph : IMANISHI (1940) p.256, UENO (1959) p.52, GOSE (1962) p.23,
--- (1979) p.51.
16. *Cinygma hirasana* IMANISHI ミヤマタニカ"ワカケ"〇ウ
Nymph : IMANISHI (1935) p.214, --- (1940) p.240, UENO (1959) p.52,
GOSE (1962) p.23, --- (1979) p.52.
17. *Cinygma* sp. ミヤマタニカ"ワカケ"〇ウ sp. (Pl.IX-fig.33)
18. *Rhithrogena japonica* UENO ヒメヒラタカケ"〇ウ
Nymph : UENO (1928) p.26, --- (1935) p.60, --- (1959) p.53, IMANISHI
(1940) p.243, GOSE (1962) p.23, --- (1979) p.52.
19. *Rhithrogena* sp. ヒメヒラタカケ"〇ウ sp. (Pl.IX-fig.34)
Nymph : GOSE (1962) p.23, --- (1979) p.52.

ORDER ODONATA

FAMILY CALOPTERYGIDAE

1. *Mnais strigata* SELYS カワトンボ^ハ (Pl.IX-fig.35)
Nymph : ASAHINA (1959) p.63, HIROSE (1962) p.37.
2. *Calopteryx cornelia* SELYS ミヤマカワトンボ^ハ
Nymph : ASAHINA (1959) p.63, HIROSE (1962) p.37.

FAMILY AGRIONIDAE

1. *Enallagma deserti circulatum* SELYS ルリイトトンボ^ハ
Nymph : ASAHINA (1959) p.68, HIROSE (1962) p.40.
2. *Agrionidae* sp. イトトンボ^ハ sp.

FAMILY PLATYCNEMIDIDAE

1. *Copera tokyoensis* ASAHINA オオモノサシトンボ^ハ
Nymph : ASAHINA (1959) p.69, HIROSE (1962) p.42.

FAMILY LESTIDAE

1. *Sympecna paedisca* BRAUER オツネイトトンボ^ハ
Nymph : HIROSE (1962) p.42.

FAMILY EPIOPHLEBIIDAE

1. *Epiophlebia superstes* SELYS ムカシトンボ^ハ (Pl.IX-fig.36)
Nymph : ASAHINA (1959) p.71, HIROSE (1962) p.44.

FAMILY GOMPHIDAE

1. *Sieboldius albardae* SELYS コオニヤンマ (Pl.X-fig.37)
Nymph : ASAHINA (1959) p.78, HIROSE (1962) p.46.
2. *Onychogomphus viridicostus* OGUMA オナカ^ハササ^ハI (Pl.X-fig.39)
Nymph : ASAHINA (1959) p.77, HIROSE (1962) p.46.
3. *Sinogomphus flavolimbatus* OGUMA ヒメササ^ハI
Nymph : ASAHINA (1959) p.76, HIROSE (1962) p.46.
4. *Anisogomphus maacki* SELYS ミヤマササ^ハI
Nymph : HIROSE (1962) p.48.
5. *Nihonogomphus viridis* OGUMA フササ^ハI
Nymph : ASAHINA (1959) p.77, HIROSE (1962) p.46.
6. *Gomphus postocularis* SELYS ササ^ハIモト^ハキ
Nymph : ASAHINA (1959) p.73, HIROSE (1962) p.49.

7. *Stylogomphus suzukii* OGUMA オシロサナ (Pl.XI-fig.41)
Nymph : ASAHINA (1959) p.76, HIROSE (1962) p.49.
8. *Lanthus fujiacus* FRASER ヒメクロサナ (Pl.X-fig.38)
Nymph : ASAHINA (1959) p.75, HIROSE (1962) p.49.
9. *Davidius fujiama* FRASER クロサナ
Nymph : ASAHINA (1959) p.75, HIROSE (1962) p.49.
10. *Davidius nanus* SELYS タビトサナ (Pl.X-fig.40)
Nymph : ASAHINA (1959) p.75, HIROSE (1962) p.51.
11. Gomphidae spp. サナイトンボ spp.

FAMILY CORDULEGASTERIDAE

1. *Anotogaster sieboldii* SELYS オニヤンマ
Nymph : ASAHINA (1959) p.79, HIROSE (1962) p.53.
2. *Chlorogomphus brunneus costalis* ASAHINA ミナミヤンマ
Nymph : HIROSE (1962) p.53.

FAMILY AESCHNIDAE

1. *Planaeshna milnei* SELYS ミルンヤンマ (Pl.XI-fig.44)
Nymph : ASAHINA (1959) p.79, HIROSE (1962) p.54.

FAMILY LIBELLULIDAE

1. *Macromia amphigena* SELYS コヤマトンボ (Pl.XI-fig.43)
Nymph : ASAHINA (1959) p.85, HIROSE (1962) p.60.
2. *Epitheca marginata* SELYS トラフトンボ
Nymph : ASAHINA (1959) p.83, HIROSE (1962) p.60.
3. *Orthetrum albistylum speciosum* UHLER シオカラトンボ
Nymph : ASAHINA (1959) p.86, HIROSE (1962) p.63.
4. *Sympetrum frequens* SELYS フキアカネ
Nymph : ASAHINA (1959) p.89, HIROSE (1962) p.68.
5. *Sympetrum pedemontanum elatum* SELYS ミヤマアカネ
Nymph : HIROSE (1962) p.69.
6. Libellulinae sp. トンボ sp.

ORDER PLECOPTERA

FAMILY SCOPURIDAE

1. *Scopura longa* UENO トワタカワケラ (Pl.XII-fig:45)
Nymph : UENO (1929) p.97, --- (1931)a p.91, --- (1935) p.41, ---
(1959) p.29, KAWAI (1962) p.78.

FAMILY PELTOPERLIDAE

1. *Nogiperla japonica* OKAMOTO ノキカワケラ (Pl.XII-fig.46)
Nymph : UENO (1929) p.97, --- (1931)a p.91, --- (1935) p.40, ---
(1959) p.29, KAWAI (1962) p.78.
2. *Peltoperla* sp. ヒロムネカワケラ sp.

FAMILY NEMOURIDAE

1. *Nemoura* sp. スジシカワケラ sp. (Pl.XII-fig.48)
Nymph : UENO (1935) p.43, --- (1959) p.30, KAWAI (1962) p.81.
2. *Protonemura* sp. スジシカワケラ sp.
Nymph : UENO (1935) p.44, --- (1959) p.30, KAWAI (1962) p.81.
3. *Amphinemura* sp. スジシカワケラ sp. (Pl.XII-fig.47)
Nymph : UENO (1935) p.44, --- (1959) p.30, KAWAI (1962) p.81.

FAMILY TAENIOPTERYGIDAE

1. *Taeniopterygidae* sp. ミシカスカワケラ sp.
Nymph : UENO (1935) p.46, KAWAI (1962) p.83.

FAMILY CAPNIIDAE

1. *Capniidae* sp. クロカワケラ sp.
Nymph : UENO (1935) p.47, --- (1959) p.30, KAWAI (1962) p.83.

FAMILY PERLODIDAE

1. *Pseudomegarcys japonica* KOHNO ヤマトヒロハアミメカワケラ
Nymph : UENO (1959) p.32, KAWAI (1962) p.84.
2. *Pseudomegarcys* sp. ヒロハアミメカワケラ sp.
3. *Megarcys ochracea* KLAPALEK アミメカワケラ
Nymph : UENO (1959) p.31, KAWAI (1962) p.84.
4. *Stavsolus japonicus* (OKAMOTO) ヤマトアミメカワケラモトキ
Nymph : UENO (1959) p.32, KAWAI (1962) p.85.

5. *Perlodes frisonana* KOHNO フライソフアミメカワケラ
Nymph : KOHNO (1943) p. , UENO (1959) p.33, KAWAI (1962) p.85.
6. *Isoperla towadensis* OKAMOTO セスシ"ミト"リカワケ"ラモト"キ (Pl.XIII-fig.49)
Nymph : UENO (1959) p.35, KAWAI (1962) p.86.
7. *Isoperla nipponica* OKAMOTO フタスシ"ミト"リカワケ"ラモト"キ
Nymph : UENO (1959) p.34, KAWAI (1962) p.86.
8. *Isoperla okamotonis* KOHNO オカモトミト"リカワケ"ラモト"キ
Nymph : KAWAI (1962) p.88.
9. *Isoperla asakawae* KOHNO アサカワミト"リカワケ"ラモト"キ
Nymph : KAWAI (1962) p.88.
10. *Isoperla* sp. ミト"リカワケ"ラモト"キ spp.
11. *Perlodidae* sp. アミメカワケラ spp.

FAMILY PERLIDAE

1. *Paragnetina tinctipennis* McLACHLAN オオクラカクカワケラ (Pl.XIV-fig.53)
Nymph : UENO (1935) p.36, --- (1959) p.38, KAWAI (1962) p.88.
2. *Kamimuria quadrata* (KLAPALEK) クロヒケ"カワケ"ラ (Pl.XIV-fig.55)
Nymph : UENO (1959) p.37, KAWAI (1962) p.91.
3. *Kamimuria tibialis* (PICTET) カワケ"ラ
Nymph : UENO (1959) p.38, KAWAI (1962) p.91.
4. *Acroneuria jouklyi* KLAPALEK シ"ヨウクリモンカワケ"ラ
Nymph : UENO (1959) p.35, KAWAI (1962) p.90.
5. *Acroneuria stigmatica* KLAPALEK モンカワケ"ラ
Nymph : UENO (1959) p.36, KAWAI (1962) p.91.
6. *Gibosia* sp. コカ"タツツメカワケ"ラ sp. (Pl.XIII-fig.51)
Nymph : UENO (1959) p.40, KAWAI (1962) p.88.
7. *Neoperla nipponensis* (McLACHLAN) ヤマトツツメカワケ"ラ (Pl.XIII-fig.50)
Nymph : UENO (1959) p.39, KAWAI (1962) p.88.
8. *Oyamia gibba* KLAPALEK オオヤマカワケ"ラ (Pl.XIV-fig.54)
Nymph : UENO (1959) p.39, KAWAI (1962) p.89.
9. *Togoperla limbata* PICTET キ"ヘ"リトウコ"ウカワケ"ラ
Nymph : KAWAI (1962) p.89.
10. *Togoperla* sp. トウコ"ウカワケ"ラ sp.
Nymph : KAWAI (1962) p.89.
11. *Caroperla pacifica* KOHNO キ"ヘ"リスイダ"カワケ"ラ (Pl.XIII-fig.52)
Nymph : UENO (1959) p.37, KAWAI (1962) p.89.

12. *Niponiella limbatella* KLAPALEK ヤマトカワケカラ
Nymph : UENO (1959) p.36, KAWAI (1962) p.90.
13. *Niponiella* sp. ヤマトカワケカラ sp.
Nymph : KAWAI (1962) p.90.
14. *Kiotina* sp. フタツメカワケカラモトキ sp.
Nymph : UENO (1959) p.40, KAWAI (1962) p.88.
15. Perlidae Gen. et sp. indet. カワケカラ ルイ spp.

FAMILY CHLOROPERLIDAE

1. *Haploperla japonica* KOHNO ヤマトチヒミトリカワケカラ
Nymph : UENO (1959) p.42, KAWAI (1962) p.93.
2. *Alloperla* sp. ミトリカワケカラ sp.
Nymph : UENO (1959) p.41, KAWAI (1962) p.93.
3. Chloroperlidae Gen. et sp. indet. ミトリカワケカラ spp. (Pl.XIV-fig.56)

ORDER HEMIPTERA

FAMILY CORIXIDAE

1. Corixidae Gen. et sp. indet. ミスム Gen. et sp.
Adult : TSUDA et HIROSE (1962) p.102.

FAMILY NOTONECTIDAE

1. Notonectidae Gen. et sp. indet. マツモム Gen. et sp.
Adult : ESAKI (1959) IILJ p.108, TSUDA et HIROSE (1962) p.99.

FAMILY APHELOCHIRIDAE

1. *Aphelochirus vittatus* MATSUMURA ナハフタム (Pl.XV-fig.59)
Adult : MIYAMOTO (1959) IILJ p.107, TSUDA et HIROSE (1962) p.99.
2. *Aphelochirus* sp. ナハフタム sp.

FAMILY GERRIDAE

1. *Gerris (Aquarius) paludum* FABRICIUS アメンホ
Adult : ESAKI (1959) IILJ p.104, MIYAMOTO (1973) FBJ p.570.

ORDER MEGALOPTERA

FAMILY CORYDALIDAE

1. *Protohermes grandis* THUNBERG \wedge ヒ \wedge トンホ \wedge (Pl.XV-fig.57)
Larva : KAWAMURA et UENO (1959) p.121, TSUDA (1962) p.100.
2. *Parachauliodes japonicus* McLACHLAN \wedge マ \wedge ク \wedge ロス \wedge ヒ \wedge トンホ \wedge (Pl.XV-fig.58)
Larva : KAWAMURA et UENO (1959) p.121, TSUDA (1962) p.109.

FAMILY SIALIDAE

1. *Sialis* sp. \wedge フ \wedge リ sp.
Larva : KAWAMURA et UENO (1959) p.121, TSUDA (1962) p.109.

ORDER NEUROPTERA

FAMILY OSMYLIDAE

1. *Osmylus* sp. \wedge ロ \wedge カ \wedge ウ sp.
Larva : KAWAMURA et UENO (1959) p.122, TSUDA (1962) p.110.

ORDER TRICHOPTERA

FAMILY RHYACOPHILIDAE

1. *Rhyacophila yamanakensis* IWATA \wedge マ \wedge ナ \wedge カ \wedge レ \wedge ト \wedge ヒ \wedge ケ \wedge ラ (Pl.XVI-fig.61)
Larva : IWATA (1927) p.217, TSUDA (1959) p.131, TSUDA et AKAGI (1962) p.124.
2. *Rhyacophila articulata* MORTON \wedge フ \wedge タ \wedge ナ \wedge カ \wedge レ \wedge ト \wedge ヒ \wedge ケ \wedge ラ (Pl.XV-fig.60)
Larva : IWATA (1927) p.215, TSUDA (1942) p.42, --- (1959) p.130, TSUDA et AKAGI (1962) p.124.
3. *Rhyacophila nigrocephala* IWATA \wedge ナ \wedge ク \wedge ロ \wedge ナ \wedge カ \wedge レ \wedge ト \wedge ヒ \wedge ケ \wedge ラ (Pl.XVI-fig.62)
Larva : IWATA (1927) p.216, TSUDA (1959) p.131, TSUDA et AKAGI (1962) p.128.
4. *Rhyacophila clemens* TSUDA \wedge レ \wedge メ \wedge ス \wedge ナ \wedge カ \wedge レ \wedge ト \wedge ヒ \wedge ケ \wedge ラ (Pl.XVI-fig.63)
Larva : TSUDA (1948) p. , --- (1959) p.131, TSUDA et AKAGI (1962) p.128.
5. *Rhyacophila kawamurai* TSUDA \wedge カ \wedge ワ \wedge ム \wedge ナ \wedge カ \wedge レ \wedge ト \wedge ヒ \wedge ケ \wedge ラ
Larva : TSUDA (1948) p. , TSUDA et AKAGI (1962) p.128.
6. *Rhyacophila transquilla* TSUDA \wedge ト \wedge ラ \wedge ンス \wedge ク \wedge イ \wedge ラ \wedge ナ \wedge カ \wedge レ \wedge ト \wedge ヒ \wedge ケ \wedge ラ (Pl.XVII-fig.65)
Larva : TSUDA (1948) p. , --- (1959) p.132, TSUDA et AKAGI (1962) p.128.

7. *Rhyacophila tacita* TSUDA タシタナカレトヒケラ
Larva : TSUDA (1948) p. TSUDA et AKAGI (1962) p.128.
8. *Rhyacophila kisoensis* TSUDA キソナカレトヒケラ
Larva : TSUDA (1948) p. TSUDA et AKAGI (1962) p.128.
9. *Rhyacophila brevicephala* IWATA ヒロフタマナカレトヒケラ (Pl.XVII-fig.66)
Larva : IWATA (1927) p.217, TSUDA (1959) p.133, TSUDA et AKAGI
(1962) p.128.
10. *Rhyacophila niwae* IWATA ニワナカレトヒケラ
Larva : IWATA (1927) p.389, TSUDA (1959) p.133, TSUDA et AKAGI
(1962) p.128.
11. *Rhyacophila* sp. RA ナカレトヒケラ RA
Larva : TSUDA (1959) p.134, TSUDA et AKAGI (1962) p.124.
12. *Rhyacophila* sp. RB ナカレトヒケラ RB
Larva : TSUDA (1959) p.134, TSUDA et AKAGI (1962) p.124.
13. *Rhyacophila* sp. RC ナカレトヒケラ RC
Larva : TSUDA (1959) p.134, TSUDA et AKAGI (1962) p.124.
14. *Rhyacophila* sp. RD ナカレトヒケラ RD
Larva : TSUDA (1959) p.134, TSUDA et AKAGI (1962) p.128.
15. *Rhyacophila* sp. RE ナカレトヒケラ RE (Pl.XVI-fig.64)
Larva : TSUDA (1959) p.134, TSUDA et AKAGI (1962) p.128.
16. *Rhyacophila* sp. RH ナカレトヒケラ RH
Larva : TSUDA (1959) p.134, TSUDA et AKAGI (1962) p.128.
17. *Rhyacophila* spp. ナカレトヒケラ spp.
18. *Himalopsyche japonica* MORTON オナナカレトヒケラ
Larva : TSUDA (1959) p.130, TSUDA et AKAGI (1962) p.124.
19. *Mystrophora inops* TSUDA イノフスマトヒケラ (Pl.XVII-fig.67)
Larva : TSUDA (1959) p.136, TSUDA et AKAGI (1962) p.129.

FAMILY HYDROPTILIDAE

1. *Hydroptila* sp. OA ヒメトヒケラ OA (Pl.XVIII-fig.68)
= *Orthotrichia* sp. OA
Larva : IWATA (1927) p.220, TSUDA et AKAGI (1962) p.121.

FAMILY PHILOPOTAMIDAE

1. *Chimarra* sp. コシニカワトヒケラ sp.
Larva : TSUDA et AKAGI (1962) p.129.
2. *Dolophilodes* sp. シニカワトヒケラ sp.
Larva : TSUDA et AKAGI (1962) p.129.

FAMILY STENOPSYCHIDAE

1. *Stenopsyche griseipennis* McLACHLAN ヒケナカカワトヒケラ (Pl.XVIII-fig.69)
Larva : IWATA (1927) p.230, TSUDA (1942) p.43, --- (1959) p.137,
TSUDA et AKAGI (1962) p.129.
2. *Parastenopsyche sauteri* ULMER チヤハネヒケナカカワトヒケラ
Larva : TSUDA (1959) p.137, TSUDA et AKAGI (1962) p.129.

FAMILY POLYCENTROPIDAE

1. *Polycentropus* sp. PB イワトヒケラ PB
Larva : TSUDA et AKAGI (1962) p.130.
2. *Polycentropus* sp. PC イワトヒケラ PC
Larva : TSUDA et AKAGI (1962) p.130.
3. *Polycentropus* sp. イワトヒケラ sp.
4. *Dipseudopsis stellata* ULMER シンテイトヒケラ
Larva : IWATA (1927) p.236, TSUDA (1942) p.44, --- (1959) p.138,
TSUDA et AKAGI (1962) p.123.

FAMILY PSYCHOMYIIDAE

1. *Psychomyia* sp. クタトヒケラ sp. (Pl.XVIII-fig.70)
Larva : TSUDA et AKAGI (1962) p.131.
2. *Ecnomus* sp. ムネカワトヒケラ sp.
Larva : TSUDA (1959) p.138, TSUDA et AKAGI (1962) p.131.

FAMILY ARCTOPSYCHIDAE

1. *Arctopsyche* sp. シロフツトヒケラ sp.
Larva : TSUDA (1937) p.301, --- (1959) p.139, TSUDA et AKAGI (1962)
p.131.

FAMILY HYDROPSYCHIDAE

1. *Macronema radiatum* McLACHLAN ススシマトヒケラ
Larva : IWATA (1927) p.223, TSUDA (1942) p.43, --- (1959) p.139, TSUDA
et AKAGI (1962) p.132.
2. *Macronema* sp. ススシマトヒケラ sp.
3. *Hydropsychodes brevilineata* IWATA コカタシマトヒケラ (Pl.XIX-fig.71)
Larva : IWATA (1927) p.226, TSUDA (1959) p.141, TSUDA et AKAGI (1962)
p.132.
4. *Hydropsyche echigoensis* TSUDA イチコシマトヒケラ
Larva : TSUDA (1942) p. , TSUDA et AKAGI (1962) p.133.

5. *Hydropsyche nakaharai* TSUDA ナカハラシマトヒケウラ
Larva : TSUDA (1942) p. --- (1959) p.140, TSUDA et AKAGI (1962)
p.133.
6. *Hydropsyche gifuana* ULMER キフシマトヒケウラ
Larva : TSUDA et AKAGI (1962) p.133.
7. *Hydropsyche ulmeri* TSUDA ウルマ-シマトヒケウラ (Pl.XIX-fig.72)
Larva : TSUDA (1942) p. , --- (1959) p.140, TSUDA et AKAGI (1962)
p.133.
8. *Hydropsyche* sp. HA シマトヒケウラ HA
Larva : TSUDA et AKAGI (1962) p.133.
9. *Diplectrona* sp. DB ミヤマシマトヒケウラ DB
Larva : TSUDA et AKAGI (1962) p.134.
10. *Diplectrona* sp. DC ミヤマシマトヒケウラ DC
Larva : TSUDA et AKAGI (1962) p.134.

FAMILY CALAMOCERATIDAE

1. *Rhabdoceras japonicus* ULMER フシイタトヒケウラ
Larva : TSUDA (1959) p.141, TSUDA et AKAGI (1962) p.134.

FAMILY ODONTOCERIDAE

1. *Perissoneura paradoxa* McLACHLAN ヨツメトヒケウラ (Pl.XIX-fig.73)
Larva : IWATA (1928) p.116, TSUDA (1942) p.47, --- (1959) p.142,
TSUDA et AKAGI (1962) p.134.
2. *Psilotreta kisoensis* IWATA フタスシキソトヒケウラ
Larva : IWATA (1928) p.117, TSUDA (1959) p.143, TSUDA et AKAGI (1962)
p.134.

FAMILY MOLANNIDAE

1. *Molanna falcata* ULMER カスリホリハトヒケウラ
Larva : IWATA (1927) p.241, TSUDA (1942) p.44, --- (1959) p.144,
TSUDA et AKAGI (1962) p.123,134.

FAMILY LEPTOCERIDAE

1. *Leptocerus tsudai* AKAGI ツタヒケウラナカトヒケウラ
Larva : AKAGI (1957) p. , TSUDA et AKAGI (1962) p.136.
2. *Leptocerus* sp. ヒケウラナカトヒケウラ sp.
Larva : TSUDA et AKAGI (1962) p.134.
3. *Mystacides* sp. MA フロヒケウラナカトヒケウラ MA
Larva : TSUDA et AKAGI (1962) p.135.

4. *Athripsodes* sp. LC ヒケナカトヒケラ LC

Larva : TSUDA et AKAGI (1962) p.135.

5. *Leptoceridae* sp. ヒケナカトヒケラ sp.

Larva : TSUDA et AKAGI (1962) p.134.

FAMILY KITAGAMIIDAE

1. *Limnocentropus insolitus* ULMER キタカミトヒケラ (Pl.XX-fig.75,76)

Larva : IWATA (1927) p.260, TSUDA (1942) p.45, --- (1959) p.145,
TSUDA et AKAGI (1962) p.123.

FAMILY PHRYGANEIDAE

1. *Neuronia (Phryganopsis) latipennis* BANKS マルハネトヒケラ

Larva : TSUDA (1959) p.147, TSUDA et AKAGI (1962) p.136.

2. *Neuronia maxima* IWATA マキシマトヒケラ (Pl.XX-fig.77,78)

Larva : IWATA (1927) p.238, TSUDA (1959) p.146, TSUDA et AKAGI
(1962) p.138.

3. *Neuronia (Oligostomis) fluvipes* MATSUMURA フミメトヒケラ

Larva : TSUDA (1959) p.146, TSUDA et AKAGI (1962) p.138.

FAMILY LIMNOPHILIDAE

1. *Apatania* sp. AA コイワリトヒケラ AA

Larva : TSUDA (1959) p.149, TSUDA et AKAGI (1962) p.138.

2. *Stenophylax ondakensis* IWATA オンダケトヒケラ

Larva : IWATA (1928) p.120, TSUDA (1959) p.148, TSUDA et AKAGI
(1962) p.138.

3. *Platyphylax yokouchii* IWATA ヨコウチトヒケラ

Larva : IWATA (1928) p.119, TSUDA et AKAGI (1962) p.139.

4. *Glyphotaelius admorsus* McLACHLAN イクワリトヒケラ

Larva : IWATA (1927) p.248, TSUDA (1942) p.45, --- (1959) p.147,
TSUDA et AKAGI (1962) p.138.

5. *Astenophylax grammicus* McLACHLAN トヒモンイクワリトヒケラ

Larva : TSUDA (1959) p.149, TSUDA et AKAGI (1962) p.138.

6. *Limnophilinae* sp. イクワリトヒケラ sp.

Larva : TSUDA et AKAGI (1962) p.138.

FAMILY SERICOSTOMATIDAE

1. *Goera japonica* BANKS ニンキヨウトヒケラ (Pl.XXI-fig.79)
Larva : IWATA (1927) p.255, TSUDA (1942) p.45, --- (1959) p.150,
TSUDA et AKAGI (1962) p.140.
2. *Goera* sp. ニンキヨウトヒケラ sp.
Larva : TSUDA et AKAGI (1962) p.140.
3. *Brachycentrus* sp. カクスイトヒケラ sp.
Larva : TSUDA et AKAGI (1962) p.140.
4. *Micrasema quadriloba* MARTYNOV マルツツトヒケラ
Larva : TSUDA (1959) p.151, TSUDA et AKAGI (1962) p.141.
5. *Micrasema* sp. MA マルツツトヒケラ MA
Larva : TSUDA et AKAGI (1962) p.141.
6. *Micrasema* sp. MB マルツツトヒケラ MB
Larva : TSUDA et AKAGI (1962) p.141.
7. *Micrasema* sp. マルツツトヒケラ sp.
Larva : TSUDA et AKAGI (1962) p.141.
8. *Neoseverinia crassicornis* ULMER オオカクツツトヒケラ
Larva : IWATA (1927) p.261, TSUDA (1936) p.403, --- (1942) p.46,
--- (1959) p.151, TSUDA et AKAGI (1962) p.142.
9. *Dinarthrodes japonica* TSUDA コカクツツトヒケラ
Larva : IWATA (1927) p.261, TSUDA (1942) p.46, --- (1959) p.152,
TSUDA et AKAGI (1962) p.142.
10. *Gumaga okinawaensis* TSUDA クマカトヒケラ
Larva : TSUDA (19) p. , --- (1959) p.152, TSUDA et AKAGI (1962)
pp.124,142.
11. *Gumaga* sp. クマカトヒケラ sp.
Larva : TSUDA et AKAGI (1962) p.142.
12. *Uenoa tokunagai* IWATA クツツトヒケラ
Larva : IWATA (1927) p.257, TSUDA (1959) p.153, TSUDA et AKAGI (1962)
pp.124,142.

ORDER COLEOPTERA

FAMILY HALIPLIDAE

1. *Halipplus* sp. コカ`シラミス`ムシ sp.

Larva : SHIRAKI (1954) p.438, TSUDA et al.(1962) p.157..

FAMILY DYTISCIDAE

1. *Platambus* sp. モンキマメケ`ンコ`ワ sp.

Larva : TSUDA et al. (1962) p.161.

2. *Colymbetinae* sp. ヒメケ`ンコ`ワ sp.

Larva : TSUDA et al. (1962) p.160.

3. *Dytiscidae* sp. ケ`ンコ`ワ sp.

Larva : TSUDA et al. (1962) p.158.

FAMILY GYRINIDAE

1. *Orectochilus* sp. オナカ`ミス`スマシ sp. (Pl.XXII-fig.82)

Larva : TSUDA et al.(1962) p.164.

FAMILY HYDROPHILIDAE

1. *Hydrocycclus* sp. マルカ`ムシ sp.

Larva : TSUDA et al. (1962) p.166.

2. *Hydrophilidae* sp. カ`ムシ sp. (Pl.XXII-fig.83)

Larva : TSUDA et al. (1962) p.165.

FAMILY PSEPHENIDAE

1. *Psephenoides japonicus* MASUDA マスタ`ト`ムシ

Larva : TSUDA et al. (1962) p.168.

2. *Psephenoides* sp. ヒラタ`ト`ムシ sp.

Larva : TSUDA et al. (1962) p.168.

3. *Mataeopsephenus japonicus* MATSUMURA ヒラタ`ト`ムシ (Pl.XXI-fig.80)

Larva : FUKUDA (1959) IILJ p.457, TSUDA et al.(1962) p.168.

4. *Eubrianax granicolis* LEWIS クシヒケ`マルヒラタ`ト`ムシ (Pl.XXI-fig.81)

Larva : KUROSA (1959) IILJ p.458, TSUDA et al.(1962) p.168.

5. *Eubrianax pellucidus* LEWIS マルヒラタ`ト`ムシ

Larva : TSUDA et al. (1962) p.168.

6. *Eubrianax* sp. マルヒラタ`ト`ムシ sp.

7. *Psephenidae* Gen. et sp. indet. ヒラタ`ト`ムシ Gen.sp.

FAMILY DRYOPIDAE

1. *Helichus* sp. HA ㊦㊧㊨㊩ HA
 Larva : TSUDA et al. (1962) p.168.
2. *Helichus* sp. HB ㊦㊧㊨㊩ HB
 Larva : TSUDA et al. (1962) p.168.
3. *Helichus* sp. HC ㊦㊧㊨㊩ HC
 Larva : TSUDA et al. (1962) p.168.
4. *Helichus* sp. ㊦㊧㊨㊩ sp.

FAMILY ELMIDAE

1. *Elmis* sp. ㊦㊧㊨㊩ sp.
 Larva : TSUDA et al. (1962) p.168.
2. *Stenelmis* sp. ㊦㊧㊨㊩ sp.
 Larva : TSUDA et al. (1962) p.168.
3. *Elmidae* Gen. et sp. indet. ㊦㊧㊨㊩ Gen.sp. (Pl.XXII-fig.85)

FAMILY HELODIDAE

1. *Helodidae* Gen. et sp. indet. マルハナノミ Gen. sp.
 Larva : TSUDA et al. (1962) p.171.

FAMILY LAMPYRIDAE

1. *Luciola cruciata* MOTSCHULSKY ケンシホタル (Pl.XXII-fig.84)
 Larva : UENO et al. (1973) p.630, TSUDA et al. (1962) p.172,
 HAYASHI (1959) p.432.

ORDER DIPTERA

FAMILY BLEPHAROCERIDAE

1. *Bibliocephala bilobatoides* KITAKAMI トクサカヤマトアミカ
 Larva : TSUDA et al. (1962) p.182.
2. *Bibliocephala japonica* ALEXANDER ヤマトアミカ
 Larva : TOKUNAGA (1959) IILJ p.615, TSUDA et al. (1962) p.182.
3. *Philorus kuyaensis* KITAKAMI オオハヒメアミカ
 Larva : TSUDA et al. (1962) p.185.
4. *Philorus* sp. ヒメアミカ sp.
5. *Amika infuscata infuscata* MATSUMURA コロハアミカ (cf.Pl.XXIII-fig.86)
 Larva : TSUDA et al. (1962) p.181.
6. *Blepharoceridae* Gen et sp. indet. ㊦㊧㊨ Gen. sp.

FAMILY TIPULIDAE

1. *Antocha* sp. ウスハ[°]ヒメカ[°]カ[°]ンホ[°] sp. (Pl.XXIII-fig.89)
Larva : TSUDA, GOSE et FURUYA (1962) p.192.
2. *Eriocera* sp. EA クロヒメカ[°]カ[°]ンホ[°] EA
Larva : TSUDA et al. (1962) p.193.
3. *Eriocera* sp. EB クロヒメカ[°]カ[°]ンホ[°] EB (Pl.XXIII-fig.87)
Larva : TSUDA et al. (1962) p.193.
4. *Eriocera* sp. EC クロヒメカ[°]カ[°]ンホ[°] EC
Larva : TSUDA et al. (1962) p.193.
5. *Eriocera* sp. ED クロヒメカ[°]カ[°]ンホ[°] ED
Larva : TSUDA et al. (1962) p.193.
6. *Eriocera* sp. クロヒメカ[°]カ[°]ンホ[°] sp.
7. *Erioptera* sp. ヒメカ[°]カ[°]ンホ[°] sp.
Larva : TSUDA et al. (1962) p.193.
8. *Tipula* sp. TA カ[°]カ[°]ンホ[°] TA
Larva : TSUDA et al. (1962) p.192.
9. *Tipula* sp. TB カ[°]カ[°]ンホ[°] TB
Larva : TSUDA et al. (1962) p.192.
10. *Tipula* sp. TC カ[°]カ[°]ンホ[°] TC
Larva : TSUDA et al. (1962) p.192.
11. *Tipula* spp. カ[°]カ[°]ンホ[°] sp.
12. *Holorusia* sp. HA カ[°]カ[°]ンホ[°] HA (Pl.XXIII-fig.88)
Larva : TSUDA et al. (1962) p.192.
13. *Pedicia* sp. PA タイミヨウカ[°]カ[°]ンホ[°] PA
Larva : TSUDA et al. (1962) p.192.
14. *Tipulidae* spp. Gen. et sp. indet. カ[°]カ[°]ンホ[°] Gen.spp.

FAMILY PTYCHOPTERIDAE

1. *Ptychoptera* sp. コシホ[°]ソカ[°]カ[°]センホ[°] sp.
Larva : TSUDA et al. (1962) p.195.

FAMILY PSYCHODIDAE

1. *Psychoda alternata* SAY ホシチヨウハ[°] I
Larva : TOKUNAGA (1959) IILJ p.624, --- (1973) p.597, TSUDA et al.
(1962) p.196.

2. *Pericoma* sp. ナカ"シチヨウハ" I sp.
 Larva : TOKUNAGA (1959) IILJ p.622, --- (1973) FBJ p.597, TSUDA et
 al. (1962) p.196.
3. *Telmatoscopus albipunctatus* WILLISTONE オオナチヨウハ" I
 Larva : TOKUNAGA (1959) IILJ p.623, --- (1973) FBJ p.597.
4. *Psychodidae* Gen et sp. indet. チヨウハ" I Gen.sp.

FAMILY DIXIDAE

1. *Dixa* sp. ホリカ sp.
 Larva : TOKUNAGA (1959) IILJ p.624, --- (1973) FBJ p.599, TSUDA et
 al. (1962) p.196.
2. *Dixidae* Gen. et sp. indet. ホリカ Gen.sp.

FAMILY SIMULIIDAE

1. *Simuliidae* Gen. et sp. indet. フ" I Gen.sp. (Pl.XXIV-fig.91)
 Larva : TSUDA et al. (1962) p.196, TAKAHASHI (1959) IILJ p.633-637,
 TOKUNAGA (1973) FBJ p.604.

FAMILY CERATOPOGONIDAE

1. *Culicoides* sp. ヌカカ sp.
 Larva : TOKUNAGA (1959) IILJ p.647, --- (1973) FBJ p.602, TSUDA et
 al. (1962) p.209.

FAMILY STRATIOMYIIDAE

1. *Stratiomyia* sp. ミス"アフ" sp.
 Larva : TSUDA et al. (1962) p.210.

FAMILY RHAGIONIDAE

1. *Atherix* (*Heterosuragina*) *morimotoi* NAGATOMI モリモトシキ"アフ"
 Larva : TSUDA et al. (1962) p.212.
2. *Atherix* (*Atherix*) *ibis japonica* NAGATOMI マタ"ラシキ"アフ"
 Larva : TSUDA et al. (1962) p.212, TOKUNAGA (1973) FBJ p.605.
3. *Atherix* (*Suragina*) *satsumana* MATSUMURA サツマモンシキ"アフ"
 Larva : TSUDA et al. (1962) p.212, TOKUNAGA (1973) FBJ p.605.
4. *Atherix* (*Suragina*) *kodamai* NAGATOMI コタ"マモンシキ"アフ" (Pl.XXIV-fig.90)
 Larva : TSUDA et al. (1962) p.212, TOKUNAGA (1973) FBJ p.606.
5. *Atherix* sp. シキ"アフ" sp.
6. *Rhagionidae* Gen. et sp. indet. シキ"アフ" Gen.sp.

FAMILY SYRPHIDAE

1. *Eristalis* sp. シマハジツフ sp.
Larva : TSUDA et al. (1962) p.212, KAWAMURA (1932) p.

ORDER HYMENOPTERA

FAMILY AGRIOTYPIDAE

1. *Agriotypus gracilis* WATERSTON ミス"ハ"チ
Larva : TSUDA (1962) p.215, --- (1973) p.636.

PHYLUM ARTHROPODA

CLASS ARACHNIDA

ORDER ACARINA

HYDRACHNELLAE

1. *Hydrachnellae* spp. ミス"タ"ニ ルイ (Pl.XXVI-fig.97,98)
IMAMURA (1965) p.216-251, --- (1973) p.368-395.

CLASS CRUSTACEA

ORDER CLADOCERA

FAMILY SIDIDAE

1. *Sididae* Gen. et sp. indet. シタ"ミシ"ンコ Gen.sp.
UENO (1973) FBJ p.413.

FAMILY DAPHNIIDAE

1. *Daphniidae* Gen. et sp. indet. ミシ"ンコ Gen.sp.
UENO (1973) FBJ p.415.

FAMILY MOINIDAE

1. *Moinidae* Gen. et sp. indet. タマミシ"ンコ Gen.sp.
UENO (1973) FBJ p.420.

SUBCLASS OSTRACODA

ORDER PODOCOPA

1. *Podocopa* Fam., Gen. et sp. indet. カイミシ"ンコ ルイ
UENO (1973) p.431.

SUBCLASS COPEPODA

ORDER CALANOIDA

FAMILY DIAPTOMIDAE

1. *Diaptomidae* Gen. et sp. indet. ティアプトムス Gen.sp.
ITO (1973) FBJ p.437.

ORDER CYCLOPOIDA

FAMILY CYCLOPIDAE

1. *Cyclopidae* Gen. et sp. indet. キクロプス Gen.sp.
ITO (1973) FBJ p.439.

ORDER HARPACTICOIDA

1. *Harpacticoida* Fam., Gen. et sp. indet. ハルパクトクス ルイ
MIURA (1973) FBJ p.446.

SUBCLASS BRANCHIURA

ORDER BRANCHIURA

FAMILY ARGULIDAE

1. *Argulus japonicus* THIELE チヨウ
UENO (1973) FBJ p.455.

SUBCLASS CIRRIPIEDIA

ORDER THORACICA

SUBORDER BALANOMORPHA

FAMILY BALANIDAE

1. *Balanus* sp. フシツホ sp.
UCHINOMI (1965) NIEFJ-II p.513-516.

SUBCLASS MALACOSTRACA

ORDER CUMACEA

1. *Diastylidae* Gen. et sp. indet. ティアスティリス Gen.sp.
GAMÔ (1965) NIEFJ-II p.536.

ORDER ISOPODA
SUBORDER ASELLOTA
FAMILY ASELLIDAE

1. *Asellus hilgendorffii* BOVALLIUS ミス"ムシ (Pl.XXV-fig.95)
SHIINO (1965) NIEFJ-II p.550, MATSUMOTO (1973) FBJ p.482.

FAMILY PARASELLIDAE

1. *Mackimia japonica* MATSUMOTO ニホンメクラミス"ムシモト"キ
MATSUMOTO (1956) p.1219, --- (1973) FBJ p.486.

ORDER AMPHIPODA
SUBORDER GAMMARIDEA
FAMILY GAMMARIDAE

1. *Gammarus (Rivulogammarus) nipponensis* UENO ニツホ"ンヨコヒ"
UENO (1965) NIEFJ p.564, --- (1973) FBJ p.469.
2. *Gammarus* sp. ヨコヒ" sp.
3. *Pseudocrangonyx* sp. メクラヨコヒ" sp.
UENO (1973) FBJ p.469.

FAMILY COROPHIIDAE

1. *Corophium* sp. ト"コタ"ムシ sp.
IWASA et NAGATA (1965) NIEFJ-II p.570, UENO (1973) FBJ p.471.

ORDER DECAPODA
SUBORDER NATANTIA
FAMILY ATYIDAE

1. *Paratya* sp. スミ" sp.
KUBO (1965) NIEFJ-II p.606, KUBO et MIYAKE (1973) FBJ p.493.

FAMILY PALAEMONIDAE

1. *Palaemon (Palaemon) paucidens* De HAAN スミ"イ"
KUBO (1965) NIEFJ-II p.619, KUBO et MIYAKE (1973) FBJ p.489.

SUBORDER REPTANTIA
FAMILY ASTACIDAE

1. *Procambarus clarkii* (GIRARD) アメリカサ"リカ"ニ (Pl.XXV-fig.94)
KUBO (1965) NIEFJ-II p.628, MIYAKE (1973) FBJ p.499.

FAMILY POTAMIDAE

1. *Potamon (Geothelphusa) dehaanii* (WHITE) サワカニ (Pl.XXV-fig.96)
SAKAI (1965) NIEFJ-II p.707, MIYAKE (1973) FBJ p.502.

FAMILY GRAPSIDAE

1. *Sisarma (Holometopus) haematocheir* (De HAAN) フカチカニ
SAKAI (1965) NIEFJ-II p.718.

FAMILY OCYPODIDAE

1. *Ilyoplax pusillus* (De HAAN) チコカニ
SAKAI (1965) NIEFJ-II p.714.

PHYLUM TARDIGRADA

ORDER EUTARDIGRADA

FAMILY MACROBIOTIDAE

1. *Macrobiotidae* Gen. et sp. indet. チヨウメイムシ Gen. sp.
MORIKAWA (1965) NIEFJ-II p.330, --- (1967) p.329.

PHYLUM ANNELIDA

CLASS POLYCHAETA

ORDER ERRANTIA

FAMILY NEREIDAE

1. *Neanthes diversicolor* (MULLER) コカイ
Synonym : *Neanthes japonica*, *Nereis japonica*.
IZUKA et IMAJIMA (1965) NIEFJ-I p.506.
2. *Neanthes succinea* (FREY et LEUCKART) フシナカコカイ
IMAJIMA (1972) p.108.
3. *Neanthes* sp. コカイ sp.

ORDER SEDENTARIA

FAMILY SPIONIDAE

1. *Prionospio japonicus* OKUDA ヤマトスピオ
OKUDA et YAMADA (1965) NIEFJ-I p.517.
2. *Spionidae* Gen. et sp. indet. スピオ Gen.sp.
6. *Polychaeta* Fam., Gen. et sp. indet. タモウカイ Fam., Gen. et sp.

CLASS OLIGOCHAETA
ORDER PLESIOFORA
FAMILY NAIDIDAE

1. *Nais* sp. ニス"ニニス" sp.
YAMAGUCHI (1965) NIEFJ-I p.539, --- (1973) FBJ p.349.
2. *Stylaria lacustris* LINNE テノク"ニス"ニニス"
YAMAGUCHI (1965) NIEFJ-I p.539, --- (1973) FBJ p.350.
3. *Pristina longiseta* EHERENBERG トカ"リニス"ニニス"
YAMAGUCHI (1965) NIEFJ-I p.538, --- (1973) FBJ p.350.
4. *Naididae* Gen. et sp. indet. ニス"ニニス" Gen.sp.

FAMILY TUBIFICIDAE

1. *Tubifex* sp. イトニス" sp.
YAMAGUCHI (1965) NIEFJ-I p.541, --- (1973) FBJ p.350.
2. *Limnodrilus* sp. コリニス" sp.
YAMAGUCHI (1965) NIEFJ-I p.541, --- (1973) FBJ p.351.
3. *Branchiura sowerbyi* BEDDARD イラニス" (Pl.XXVIII-fig.104)
YAMAGUCHI (1965) NIEFJ-I p.541, --- (1973) FBJ p.351.
4. *Tubificidae* Gen. et sp. indet. イトニス" Gen.sp. (Pl.XXVIII-fig.106)

ORDER OPISTHOPORA
FAMILY LUMBRICIDAE

1. *Eisenia foetida* (SAVIGNY) シマニス"
OHFUCHI (1965) NIEFJ-I p.546, YAMAGUCHI (1973) FBJ p.355.
10. *Oligochaeta* Fam., Gen. et sp. indet. ニス" Fam., Gen. et sp.
(Pl.XXVIII-fig.105)

CLASS HIRUDINEA
ORDER RHYNCHOBDELLIDA
FAMILY GLOSSIPHONIIDAE

1. *Glossiphonia weberi lata* OKA ハハ"ヒロヒ"ル
OKA et NAGAO (1965) NIEFJ-I p.567, NAGAO (1973) FBJ p.360.
2. *Glossiphonia complanata* (LINNAEUS) ヒラタヒ"ル
OKA et NAGAO (1965) NIEFJ-I p.567, NAGAO (1973) FBJ p.360.
3. *Glossiphonia* sp. ク"ロシラニ" sp.

ORDER PHARYNGOBDELLIDA

FAMILY ERPOBDELLIDAE

1. *Erpobdella lineata* (O.F.MULLER) シマイシヒル (Pl.XXVII-fig.103)
OKA et NAGAO (1965) NIEFJ-I p.573, NAGAO (1973) FBJ p.360;
2. *Erpobdella octoculata* (LINNAEUS) ナミイシヒル
NAGAO (1965) NIEFJ-I p.573; --- (1973) FBJ p.360.
3. *Erpobdella* sp. イシヒル sp.
7. *Hirudinea* Fam., Gen. et spp. indet. ヒル ルイ Fam., Gen., spp.

PHYLUM NEMATHELMINTHES

CLASS NEMATODA

1. *Nematoda* Fam., Gen. et spp. indet. センチル ルイ

CLASS GORDIOIDEA

1. *Gordioidea* sp. ハリカネムシ sp.

PHYLUM MOLLUSCA

CLASS GASTROPODA

ORDER CAENOGASTROPODA

FAMILY VIVIPARIDAE

1. *Viviparidae* Gen. et sp. indet. タニシ Gen.sp.
HABE (1973) FBJ p.311.

FAMILY HYDROBIIDAE

1. *Hydrobiidae* Gen. et sp. indet. スマツホ Gen.sp.
HABE (1973) FBJ p.315.

FAMILY ASSIMINEIDAE

1. *Assiminea lutea japonica* v.MARTENS カワサニシヨウカイ
HABE (1973) FBJ p.320, KURODA et HABE (1965) NIEFJ-II p.54.

FAMILY FAIRBANKIIDAE

1. *Fluviocingula nipponica* KURODA et HABE カワクチツホ
KURODA (1973) FBJ p.319.

FAMILY PLEUROCERIDAE

1. *Semisulcospira libertina* (GOULD) カワニナ
 Synonym : *Semisulcospira bensoni* (PHILIPPI), *Melania bensoni*
 PHILIPPI ?
 KURODA et HABE (1965) NIEFJ-II p.57, HABE (1973) FBJ p.322.
2. *Semisulcospira* sp. カワニナ sp.

ORDER PLUMONATA

FAMILY LYMNAEIDAE

1. *Radix auricularia japonica* JAY モノアラカ"イ (Pl.XXVI-fig.100)
 KURODA et HABE (1965) NIEFJ-II p.191, HABE (1973) FBJ p.325.
2. *Radix* sp. モノアラカ"イ sp.
3. *Austropeplea ollula* (GOULD) ヒメモノアラカ"イ
 KURODA et HABE (1965) NIEFJ-II p.191, HABE (1973) FBJ p.325.
4. *Fossaria truncatula* (MULLER) コシタカモノアラカ"イ
 HABE (1965) NIEFJ-II p.191, --- (1973) FBJ p.325.
5. *Lymnaeidae* Gen. et sp. indet. モノアラカ"イ Gen.sp.

FAMILY PHYSIDAE

1. *Physa acuta* DRAPARNAUD サカマキカ"イ (Pl.XXVI-fig.99)
 HABE (1965) NIEFJ-II p.190, --- (1973) FBJ p.327.

FAMILY PLANORBIIDAE

1. *Gyraulus convexiusculus spirillus* (GOULD) ヒラマキミス"マイマイ
 HABE (1973) FBJ p.329.
2. *GYRAULUS* sp. ヒラマキカ"イ sp.
3. *Polypylis hemisphaerula* (BENSON) ヒラマキカ"イモト"キ
 KURODA et HABE (1965) NIEFJ-II p.189, HABE (1973) FBJ p.329.
4. *Planorbiidae* Gen.et sp. indet. ヒラマキカ"イ Gen.sp.

FAMILY FERRISSIDAE

1. *Pettancyclus nipponicus* (KURODA) カワコサ"ラカ"イ
 KURODA et HABE (1965) NIEFJ-II p.189, HABE (1973) FBJ p.331.
18. *GASTROPODA* Fam.,Gen.et sp. indet. マキカ"イ ルイ Fam.Gen.sp.

CLASS PELECYPODA
ORDER HETERODONTA
FAMILY CORBICULIDAE

1. *Corbicula (Corbicula) leana* PRIME マシシ^ニ
KURODA et HABE (1965) NIEFJ-II p.251, HABE (1973) FBJ p.337.
2. *Corbicula* sp. シシ^ニカ^イ sp.

FAMILY SPHAERIIDAE

1. *Sphaerium (Musculium) lucustre japonicum* (WESTERLUND) ト^フシシ^ニ
HABE (1965) NIEFJ-II p.252, --- (1973) FBJ p.338.
2. *Sphaerium* sp. ト^フシシ^ニ sp.
3. *Pisidium japonicum* PILSBRY et HIRASE マメシシ^ニ
HABE (1965) NIEFJ-II p.251, --- (1973) FBJ p.338.
6. *Pelecypoda* Fam., Gen. et sp. indet. ニマイカ^イ ル^イ sp. (Pl.XXVII-fig.101)

PHYLUM TENTACULATA
CLASS BRYOZOA
ORDER PHYLACTOLAEMATA
FAMILY PLUMATELLIDAE

1. *Plumatella emarginata* ALLMAN ヲハス^ハネコケムシ (Pl.XXVIII-fig.108)
TORIUMI (1965) NIEFJ-I p.625, --- (1973) FBJ p.277.
2. *Plumatella* sp. ハネコケムシ sp.

PHYLUM PLATYHELMINTHES
CLASS TURBELLARIA
ORDER TRICLADIDA
FAMILY PLANARIIDAE

1. *Dugesia japonica* ICHIKAWA et KAWAKATSU ナミウス^ムシ (Pl.XXVIII-fig.107)
Synonym : *Dugesia gonocephala* (DUGES), *Euplanaria gonocephala* (DUGES)
OKUGAWA (1965) NIEFJ-I p.319, --- (1973) FBJ p.226.
2. *Dugesia* sp. ナミウス^ムシ sp.
3. *Phagocata* sp. ミヤマウス^ムシ sp.

PHYLUM COELENTERATA

CLASS HYDROZOA

ORDER HYDROIDA

FAMILY HYDRIDAE

1. *Hydra* sp. ヒトウラ sp

ITO (1965) NIEFJ-I p.172, UCHIDA et ITO (1973) FBJ p.200.

PHYLUM PORIFERA

CLASS DEMOSPONGIAE

ORDER HAPLOSCLERINA

FAMILY SPONGILLIDAE

1. *Ephydatia* sp. タンスイカイメン sp.

HÔZAWA et TANITA (1965) NIEFJ-I p.164, SASAKI (1973) FBJ p.193.

SUPPLEMENTAL LIST OF THE BENTHIC MACRO-INVERTEBRATES
COLLECTED BY DR. KITAMORI FROM THE ESTUARINE WATER OF
THE RIVER TAMA IN JANUARY AND NOVEMBER OF 1968 .C)

PHYLUM ANNELIDA

CLASS POLYCHAETA

FAMILY POLYNOIDAE

1. *Harmothoë imbricata* (LINNE) マダラウロコムシ
IMAJIMA et HARTMAN (1964) p.34, IMAJIMA (1965) NIEFJ-I p.493.

FAMILY PHYLLODOCIDAE

1. *Eumida sanguinea* (OERSTED) マダラサシハ
IMAJIMA et HARTMAN (1964) p.64, IIZUKA et IMAJIMA (1965) NIEFJ-I p.499.
2. *Eteone* sp. サシハコカイ sp.

FAMILY HESIONIDAE

1. *Hesion* sp. オトヒメコカイ sp.
2. *Podark* sp. (= *Ophiodromus* sp.) オトヒメコカイ sp.

FAMILY PILARGIDAE

1. *Ancistrosyllis hanaokai* KITAMORI ハナオカカキコカイ
KITAMORI (1960) p.1086, IMAJIMA et HARTMAN (1964) p.86, KITAMORI et
IMAJIMA (1965) p.503.

FAMILY NEREIDAE

1. *Neanthes succinea* (FREY et LEUCKART)
IMAJIMA (1972) p.108.
2. *Nectoneanthes oxypoda* (MARENZELLER) ウチウコカイ
IMAJIMA et HARTMAN (1964) p.145, IIZUKA et IMAJIMA (1965) NIEFJ-I
p.506, IMAJIMA (1972) p.113.

FAMILY NEPHTYIDAE

1. *Nephtys polybranchia* SOUTHERN ミナシロカネコカイ
IMAJIMA et HARTMAN (1964) p.158, IMAJIMA (1965) p.509.

FAMILY GLYCERIDAE

1. *Glycera* sp. チドリ sp.
IMAJIMA (1965) p.509.

FAMILY ONUPHIDAE

1. *Diopatra sugokai* IZUKA スコカイイリメ
IZUKA (1907) p.139, IMAJIMA et HARTMAN (1964) p.242, IMAJIMA (1965)
NIEFJ-I p.511.

FAMILY LUMBRINERIDAE

1. *Lumbrineris brevicirra* (SCHMARDA) キホシイリメ sp.
IMAJIMA et HARTMAN (1964) p.263, OKUDA et IMAJIMA (1965) NIEFJ-I p.513.

FAMILY DORVILLEIDAE

1. *Stauronereis rudolphi* ノリコイリメ sp.

FAMILY PARAONIDAE

1. *Paraonis* sp. ヒメイラコカイ sp.

FAMILY SPIONIDAE

1. *Pseudopolydora kempii japonica* IMAJIMA et HARTMAN ノニスビ°オ sp.
IMAJIMA et HARTMAN (1964) p.287.
2. *Pseudopolydora paucibranchiata* (OKUDA) コノニスビ°オ
OKUDA (1937) p.231, IMAJIMA et HARTMAN (1964) p.288, OKUDA et YAMADA
(1965) NIEFJ-I p.516.
3. *Prionospio japonicus* OKUDA ヤマトスビ°オ
OKUDA (1935) p.241, IMAJIMA et HARTMAN (1964) p.284, OKUDA et YAMADA
(1965) NIEFJ-I p.517.
4. *Prionospio krusadensis* FAUVEL ミツハ°ネスビ°オ
IMAJIMA et HARTMAN (1964) p.284, OKUDA et YAMADA (1965) NIEFJ-I p.517.
5. *Prionospio cirrifera*
6. *Paraprionospio pinnata* (EHLERS) ヨツハ°ネスビ°オ
IMAJIMA et HARTMAN (1964) p.286, OKUDA et YAMADA (1965) NIEFJ-I p.517.
7. *Spio* sp. スビ°オ sp.
8. *Spiophanes* sp. イラナシスビ°オ sp.
9. *Polydra flava* SÖDERSTRÖM
IMAJIMA et HARTMAN (1964) p.283.
10. *Polydra* sp.

FAMILY CHAETOPTERIDAE

1. *Telepsavus costarum* CLAPAREDE フシヒ°キツハ°サコ°カイ
IMAJIMA et HARTMAN (1964) p.294, OKUDA et IMAJIMA (1965) NIEFJ-I p.519.

FAMILY CIRRATULIDAE

1. *Cirriformia tentaculata* (MONTAGU) ミスヒキコカイ
IMAJIMA et HARTMAN (1964) p.299, OKUDA et YAMADA (1965) NIEFJ-I p.520..
2. *Cirratulus* sp. ミスヒキコカイ sp.

FAMILY OPHELIIDAE

1. *Armandia lanceolata* WILLEY オノリアコカイ sp.
IMAJIMA et HARTMAN (1964) p.306.

FAMILY CAPITELLIDAE

1. *Capitella capitata japonica* KITAMORI
KITAMORI et al. (1960) p.1, IMAJIMA et HARTMAN (1964) p.312.
2. *Notomastus* sp.

FAMILY OWENIIDAE

1. *Owenia fusiformis* DELLE CHIAJE チマキコカイ
IMAJIMA et HARTMAN (1964) p.322, IMAJIMA (1965) NIEFJ-I p.525.

FAMILY PECTINARIIDAE

1. *Lagis bocki nakaiensis* ウミイサコムシ
IMAJIMA et HARTMAN (1964) p.329

FAMILY SABELLIDAE

1. *Euchone* sp. ケヤリ sp.
2. *Chone* sp. ケヤリ sp.

FAMILY SERPULIDAE

1. *Serupula* sp. カササコカイ sp.

PHYLUM MOLLUSCA
CLASS GASTROPODA
ORDER PLEUROCOELA
FAMILY PHILINIDAE

1. *Philine argentata* GOULD キセワタカ"イ

KURODA et HABE (1965) NIEFJ-II p.165.

CLASS PELECYPODA
ORDER EUTAXODONTA
FAMILY ARCIDAE

1. *Scapharca subcrenata* (LISCHKE) サルホ"ウカ"イ

HABE (1965) NIEFJ-II p.225.

ORDER PTERIOMORPHIA
FAMILY MYTILIDAE

1. *Musculus (Musculista) senhousia* (BENSON) ホトキ"スカ"イ

HABE (1965) NIEFJ-II p.230.

ORDER HETERODONTA
FAMILY VENERIDAE

1. *Tapes (Amygdala) philippinarum* (ADAMS et REEVE) Pサリ

KURODA et HABE (1965) NIEFJ-II p.275.

2. *Paphia (Paratapes) undulata* (BORN) イオスタ"シカ"イ

HABE (1965) NIEFJ-II p.276.

FAMILY MACTRIDAE

1. *Raeta (Raetellops) rostralis* (REEVE) チヨノハナカ"イ

HABE (1965) NIEFJ-II p.280.

FAMILY SEMELIDAE

1. *Theora lata* (HINDS) シス"ウカ"イ

HABE (1965) NIEFJ-II p.287.

FAMILY TELLINIDAE

1. *Macoma tokyoensis* MAKIYAMA コ"イサキ"カ"イ

HABE (1965) NIEFJ-II p.290.

2. *Moerella iridescens* (BENSON) テリサ"クラカ"イ

KIRA (1959) p.157, HABE (1977) p.206.

ORDER ANOMALODESMATA

FAMILY LATERNULIDAE

1. *Laternula (Laternulina) flexuosa* (REEVE) スキナカ"イ

HABE (1965) NIEFJ-II p.304.

ORDER CEPHALASPIDEA

FAMILY PHILINIDAE

1. *Philine argentata* GOULD キセワタカ^イ
KURODA et HABE (1965) NIEFJ-II p.165.

ORDER ANASPIDEA

FAMILY APLYSIIDAE

1. *Petalifera punctulata* (TAPPARONE-CANEFRI) ウミナメクシ^ハ
HIRASE et BABA (1965) NIEFJ-II p.167.

ORDER NUDIBRANCHIA

1. *Nudibranchia* Fam., Gen. et sp. indet. ウミウシ ルイ Fam., Gen. sp.

PHYLUM COELENTERATA

CLASS ANTHOZOA

ORDER ACTINIARIA

1. *Actiniaria* Fam., Gen. et sp. indet. イソキ^ハンチヤク ルイ Fam., Gen. sp.

PHYLUM ANNELIDA

CLASS ECHIUROIDEA

1. *Echiuroidea* Ord., Fam., Gen. et sp. indet. コムシ ルイ Fam., Gen. sp.

CLASS OLIGOCHAETA

1. *Oligochaeta* Ord., Fam., Gen. et sp. indet. ミミス^ハ ルイ Fam., Gen. sp.

PHYLUM ECHINODERMATA

CLASS OPHIUROIDEA

1. *Ophiurae* Fam., Gen. et sp. indet. クモヒトテ^ハ ルイ Fam., Gen. sp.

PHYLUM ARTHROPODA

CLASS CRUSTACEA

SUBCLASS MALACOSTRACA

ORDER NEBALIACEA

FAMILY NEBALIIDAE

1. *Nebalia japonensis* CLAUS コノハヒ^ハ
UCHINOMI (1965) NIEFJ-II p.521 (as *Nebalia bipes* FABRICIUS), --- (1971)
p.69.

ORDER AMPHIPODA

1. *Amphipoda* Fam., Gen. et sp. indet. コノヒ^ハ ルイ Fam., Gen. sp.

ORDER DECAPODA

SUBORDER REPTANTIA

1. *Brachyura* Fam., Gen. et sp. indet. 加二 Fam., Gen. sp.

PHYLUM PROTOCHORDATA

CLASS UROCHORDATA

ORDER ASCIDIACEA

1. *Asciaceae* Fam., Gen. et sp. indet. 本中ルイ Fam. Gen. sp.

LIST OF THE LOCALITIES AND THE DATES OF COLLECTION OF THE BENTHIC
MACRO-INVERTEBRATES COLLECTED FROM THE RIVER TAMA SYSTEM
DURING THE PERIOD OF 1959-1980 ^{D)}

CLASS INSECTA
ORDER EPHEMEROPTERA
FAMILY POLYMITARCIDAE

(= EPHORONIDAE)

Genus Ephoron

1. *Ephoron shigae* (TAKAHASHI) (Fig.2)

(= *Polymitarcis shigae* TAKAHASHI)

Localities and dates of collection : R.Tama -- St.21 (Haijima Bridge) 1975-5-28, 1975-8-14 ; St.22 (Tama-Ôhashi Br.) 1975-8-14 : R.Akikawa -- St.26 (Takatsuki Br.) 1965-7-31, 1980-7-21.

SUPPLEMENT : IIMURA --- R.Akikawa (St.20) 1972-3-23, 1973-3-22, 1974-3-5, 1975-3-27 : TMG-BEP --- R.Akikawa (St.26) 1980-7-21.

FAMILY EPHEMERIDAE

Genus Ephemera

1. *Ephemera orientalis* McLACHLAN (Fig.2)

(= *Ephemera lineata* EATON)

Loc. & date : R.Tama -- St.15 (Chôfu Br.) 1963-6-24 ; St.20 (Tama Br.) 1963-8-25 ; St.21 (Haijima Br.) 1963-8-25, 1964-5-31, 1970-10-9, 1971-12-7 : R.Hirai -- St.2 (Tasai Br.) 1971-12-6, 1972-8-16 : R.Asakawa -- St.38 (Asakawa Br.) 1975-10-24.

SUPPLEMENT : IDE --- R.Tama -- (St.1), (St.2) 1973-8-21 ; (St.10), (St.15) 1979-1-6 ; (St.21) 1973-8-20, 1974-10-20 ; (St.22) 1973-8-20, 1975-7-29 ; R.Ôtanba -- (St.6) 1973-8-21 ; R.Hirai -- (St.2) 1978-8-17 : R.Akikawa -- (St.26) 1973-8-21, 1974-10-23, 1978-8-17 ; R.Asakawa -- (St.35) 1973-8-20 : IIMURA --- R.Tama -- (St.21) 1973-10-27, 1975-3-26 ; (St.22) 1973-10-27, 1974-5-24, 1975-3-22 ; R.Akikawa -- (St.26) 1976-2-27, 1978-1-27 ; R.Asakawa -- (St.42) 1974-2-26 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-9-29, 1981-2-16.

2. *Ephemera japonica* McLACHLAN (Fig.3)

Loc. & date : R.Taba -- St.4 (Kumakurazawa) 1977-4-26 ; R.Kosuge -- St.1, 2, 4 (small streams), St.5 (Campground), St.7 (Kawakubo) 1979-8-18 ; R.Nippara -- St.7 (Uodome Br.) 1979-10-25 ; St.12 (Hosokura Br.) 1977-5-9, 1979-10-23 ;

Irikawa Valley (R.Mineiri) -- St.1 (Debris barrier) 1977-5-10 ; R.Ôtanba --
 St.2 (Makinoo Br.), St.3 (Hônoki Br.) 1977-5-10 ; St.5 (Kitagawa Br.) 1969-
 7-23 ; R.Tama -- St.1 (Shôwa Br.) 1964-5-3, 1969-7-24 ; St.4 (Mansei Br.),
 1969-7-23 ; St.5 (Kawai), St.6 (Kawai) 1964-5-3, 1964-8-31 ; St.8 (Mitake Br.)
 1969-7-23 ; St.10 (Yoroi Br.) 1969-7-24 ; R.Akikawa -- St.3 (Kazuma) 1969-
 7-22 ; St.4 (Henbori) 1969-7-21 ; St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6
 (Kasuga Br.) 1965-7-29 ; St.7 (Sasano) 1965-7-30 ; St.9 (Shiroiwa) 1977-5-29
 ; St.10 (Ozawa), St.12 (Senzoku), St.13 (Wada Br.) 1969-7-21 ; St.15 (Hanaki-
 zawa) 1977-5-29 ; St.17 (Teraoka), St.18 (Hoshitake Br.), St.19 (Niitaka Br.)
 , St.21 (Kowada Br.), St.22 (Akikawa Br.) 1969-7-21 ; St.23 (Ajiro Br.) 1969-
 7-23 ; St.26 (Takatsuki Br.) 1959-summer ; R.Asakawa -- St.2 (Kayakukodani),
 St.3 (a trickle), St.6 (a small stream) 1979-3-12 ; St.13 (Iriyama), St.14
 (a small stream), St.15 (Iriyama-Hara) 1978-11-20 ; St.17 (Daigo), St.18
 (Ninikuzawa), St.20 (a trickle), St.21 (Kawaino) 1978-11-21 ; St.26 (Higashi
 -Yamashita Br.), St.28 (Takaosan-guchi), St.29 (Kami-Kunugida Br.) 1969-7-22
 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.), St.32 (Kogezawa
 junction), St.33 (Surisashi) 1976-7-16, 1976-8-5, 1976-8-18, 1976-9-25,
 1976-10-28, 1976-11-15, 1976-12-7 ; St.35 (Shikishima Br.) 1969-7-22.
 SUPPLEMENT : IDE --- R.Nippara -- (St.6), (St.7), (St.12), (St.H), (St.I)
 1977-6-4 ; R.Ôtanba -- (St.6) 1973-8-21 ; R.Tama -- (St.2) 1974-2-2, 1978-
 8-17, 1979-1-6 ; (St.10) 1978-8-17, 1979-1-6 ; (St.15) 1973-11-4 ; (St.18),
 (St.21), (St.22) 1975-7-29 ; R.Akikawa -- (St.26) 1973-11-4, 1979-1-6 :
 IIMURA --- R.Nippara -- (St.7) 1974-8-24, 1974-10-23 ; R.Tama -- (St.1)
 1971-10-29, 1972-3-23, 1972-10-30, 1973-3-23, 1973-10-23, 1974-3-7, 1974-
 5-22, 1974-10-2, 1975-3-25 ; (St.5) 1973-10-23, 1974-10-2 ; Unazawa Valley
 -- (St.K) 1972-12-6 ; R.Akikawa -- (St.1) 1974-10-22 ; (St.20) 1971-10-28,
 1972-10-29, 1973-11-6, 1974-10-1, 1975-10-9, 1976-9-21, 1977-9-29 ; (St.26)
 1972-3-23, 1973-3-22, 1974-3-5, 1974-5-28, 1975-3-27 : METOC --- R.Taba --
 (St.7) 1977-1-25 ; R.Kukizawa -- (St.B) 1976-10-26 ; R.Tama -- (St.1), (St.
 17) 1976-10-26 ; Irikawa Valley -- (St.1) 1976-9-28, 1977-1-25 ; R.Ôsawa --
 (St.M) 1976-11-25, 1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F),
 (St.G) 1976-10-23, 1976-11-17 & 18 ; (St.E) 1977-7-30 ; (St.F) 1977-7-29 &
 31.

3. *Ephemera strigata* EATON uncert. (Fig.4)

Loc. & date : R.Kosuge -- St.1 (a small stream), St.7 (Kawakubo) 1979-8-18 :
R.Nippara -- St.18 (Shōwa Br.) 1972-8-16 : R.Ôtānba -- St.5 (Kitagawa Br.)
1969-7-23 ; St.6 (Taishō Br.) 1963-8-25 : R.Tama -- St.1 (Shōwa Br.) 1963-
8-20, 1964-5-3, 1975-5-29, 1975-8-15, 1975-11-11 ; St.5 (Kawai junction)
1964-8-31 ; St.10 (Yoroi Br.) 1971-12-6 ; St.17 (Hamura Dam) 1971-12-6 ;
St.18 (Hamura Dam) 1963-8-25 ; St.21 (Haijima Br.) 1964-5-31, 1965-7-31,
1971-12-7, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1963-8-25 :
R.Hirai -- St.2 (Tasai Br.) 1965-7-31, 1971-12-6, 1975-8-15, 1975-11-11 :
R.Akikawa -- St.3 (Kazuma), St.4 (Henbori), St.5 (Minami-Akikawa Br.), St.6
(Kasuga Br.) 1969-7-21 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.11 (Shiro-
kura) 1963-8-25 ; St.12 (Kita-Akikawa Br.) 1965-7-30, 1969-7-21 ; St.13
(Wada Br.) 1969-7-21 ; St.16 (Gundō) 1965-7-30 ; St.17 (Teraoka), St.18
(Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1960-7-21, 1969-7-21 ;
St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1963-8-25, 1965-7-30,
1969-7-21, 1972-8-16, 1975-8-14 ; St.23 (Ajiro Br.) 1963-6-24, 1965-7-31,
1969-7-23 ; St.24 (Akiru Br.) 1965-7-31 ; St.25 (Higashi-Akiru Br.) 1965-
7-31 ; St.26 (Takatsuki Br.) 1965-7-31, 1971-12-6, 1972-8-16, 1975-8-14 :
R.Asakawa -- St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.24 (Motoki
Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.) 1969-
7-22 ; St.27 (Umenoki Br.) 1960-7-20, 1964-7-17 ; St.28 (Takaosan-guchi)
1964-7-17, 1969-7-22 ; St.29 (Kamikunugida Br.) 1964-7-17, 1969-7-22 ;
St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-
7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-
8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18 ;
St.35 (Shikishima Br.) 1969-7-22, 1971-12-6, 1972-8-17 ; St.38 (Asakawa Br.)
1972-8-17 ; St.40 (Hirayama Br.) 1975-8-14.

SUPPLEMENT : IDE --- R.Tama -- (St.18), (St.19) 1974-10-24 ; (St.20) 1974-
10-23 ; (St.21) 1974-10-21 ; (St.22) 1974-10-20 : R.Hirai -- (St.2) 1974-10-
22 : R.Akikawa -- (St.26) 1974-10-23 : IIMURA --- R.Tama -- (St.1) 1971-
6-30, 1971-10-29, 1972-8-16, 1972-10-30, 1973-7-21, 1973-10-23, 1974-10-2 ;
(St.5) 1973-10-23, 1974-10-2 ; (St.14) 1973-10-24, 1974-10-2 ; (St.16) 1971-
6-29, 1971-10-28, 1972-8-17, 1972-10-30, 1973-7-20, 1973-10-24, 1974-10-3 :
R.Akikawa -- (St.20) 1971-6-29, 1972-8-17, 1973-7-20 ; (St.26) 1971-6-29,
1972-3-23, 1972-8-17, 1973-3-22, 1973-7-20, 1974-3-5, 1974-5-28, 1975-3-27 :
METOC --- R.Tama -- (St.1) 1976-9-28 : R.Ôsawa -- (St.M) 1977-1-25 : TMG-
BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-8-12, 1981-2-16 : R.Akikawa --
(St.26) 1980-9-29, 1980-12-8 : HISAI --- R.Asakawa -- (St.28) 1979-11-28.

FAMILY POTAMANTHIDAE

Genus Potamanthus

1. *Potamanthus kamoni* IMANISHI (Fig. 5-)

Loc. & date : R.Tama -- St.1 (Shōwa Br.) 1959-summer ; St.6 (Kawai) 1964-5-3, 1964-8-31 ; St.15 (Chōfu Br.) 1963-6-24 ; St.16 (Tamagawa*Br.) 1959-summer, 1964-9-1, 1969-7-24 ; St.17 (Hamura Dam) 1964-9-2, 1972-8-16 ; St.18 (Hamura Dam) 1959-summer, 1963-6-24, 1963-8-25, 1969-7-24, 1975-5-28 ; St.19 (Nagata Br.) 1969-7-24 ; St.20 (Tama Br.) 1959-summer, 1963-8-25 ; St.21 (Haijima Br.) 1959-summer, 1963-8-25, 1964-5-31, 1965-7-31, 1969-8-11, 1975-5-28 ; St.22 (Tama-Ōhashi Br.) 1964-5-31, 1969-8-11, 1971-12-7 ; St.23 (Hino Br.) 1963-8-18, 1964-5-26, 1964-9-2, 1975-5-27 ; St.25 (Koremasa Br.) 1960-7-20, 1963-6-25, 1963-6-30 ; St.26 (Tamagawara Br.) 1960-7-20, 1963-7-1, 1975-5-27 ; St.30 (Tama-Suidō Br.) 1963-7-1 ; St.33 (Maruko Br.) 1975-5-26 : R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1965-7-31, 1969-7-24, 1971-12-6, 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.4 (Henbori) 1969-7-21 ; St.20 (Sawado Br.) 1965-7-30 ; St.22 (Akikawa Br.) 1959-summer, 1960-7-21, 1965-7-30, 1975-8-14 ; St.23 (Ajiro Br.) 1963-6-24, 1969-7-23, 1975-5-28 ; St.24 (Akiru Br.) 1969-7-23 ; St.26 (Takatsuki Br.) 1959-summer, 1965-7-31, 1969-7-23, 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.28 (Takaosan-guchi) 1964-7-17 ; St.33 (Surisashi) 1975-10-24 ; St.35 (Shikishima Br.) 1964-7-24, 1969-7-22 ; St.36 (Minase Br.) 1959-summer, 1964-7-24 ; St.37 (Asakawa Br.) 1975-10-24.

SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1979-1-6 : R.Tama -- (St.1), (St.2), (St.15) 1979-1-6 ; (St.20) 1975-7-29 ; (St.21) 1973-8-20, 1973-11-4, 1974-10-21 ; (St.22) 1974-10-20 : R.Ōtanba -- (St.5) 1979-1-6 : R.Hirai -- (St.2) 1974-10-22, 1978-8-17 : R.Akikawa -- (St.18) 1979-1-6 ; (St.25) 1973-5-29 ; (St.26) 1973-8-21, 1973-11-4, 1974-10-23, 1978-8-17 : R.Asakawa (St.35) 1978-8-16 : IIMURA --- R.Tama -- (St.14) 1973-10-24, 1974-10-2 ; (St.21) 1973-10-26 ; (St.22) 1973-10-27, 1974-8-22 : R.Akikawa -- (St.26) 1971-10-28, 1972-3-23, 1972-10-29, 1973-3-22, 1973-11-6, 1974-3-5, 1974-5-28, 1974-10-1, 1975-3-27, 1975-10-9, 1976-2-27, 1976-9-21, 1977-9-29, 1978-1-27 : METOC --- R.Tama -- (St.17) 1976-10-26 ; (St.31) 1979-12-14 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1981-2-16 : R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1981-2-16 : R.Asakawa -- (St.P) 1980-9-29 : MIYASHITA --- R.Tama -- (St.17), (St.21) 1970-10-9.

FAMILY LEPTOPHLEBIIDAE

Genus *Paraleptophlebia*

1. *Paraleptophlebia chocorata* IMANISHI (Fig. 6)
 Loc. & date : R.Kosuge -- St.1 (a small stream), St.5 (Campground) 1979-8-18 ; R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.18 (Shōwa Br.) 1975-11-11 ; R.Tama -- St.1 (Shōwa Br.) 1964-5-3, 1975-5-29 ; St.5 (Kawai) 1964-5-3, 1964-8-31 ; St.6 (Kawai) 1959-summer, 1964-5-3 ; St.10 (Yoroi Br.) 1969-7-24, 1971-12-6, 1975-5-28 ; St.18 (Hamura Dam) 1959-summer ; St.21 (Haijima Br.) 1959-summer, 1975-11-11 ; St.30 (Tama-Suido Br.) 1964-9-3 ; R.Otanba -- St.6 (Taishō Br.) 1963-6-15, 1963-8-21 ; R.Hirai -- St.2 (Tasai Br.) 1959-summer ; R.Akikawa -- St.4 (Henbori), St.5 (Minami-Akikawa Br.), St.6 (Kasuga Br.) 1969-7-21 ; St.7 (Sasano) 1959-summer ; St.11 (Shirokura) 1959-summer, 1963-8-25 ; St.14 (Ozu Br.) 1959-summer, 1969-7-21 ; St.16 (Gundo) 1959-summer ; St.17 (Teraoka) 1969-7-21 ; St.19 (Niitaka Br.) 1969-7-21 ; St.21 (Kowada Br.) 1963-6-24 ; St.22 (Akikawa Br.) 1959-summer, 1975-8-14, 1975-10-24 ; St.23 (Ajiro Br.) 1971-12-6, 1975-5-28 ; St.24 (Akiru Br.) 1959-summer, 1969-7-23 ; St.26 (Takatsuki Br.) 1959-summer, 1975-5-28 ; R.Asakawa -- St.3 (a small stream), St.6 (a small stream), St.8 (a small stream) 1979-3-12 ; St.13 (Hara) 1978-11-20 ; St.17 (R.Daigo) 1978-11-21 ; St.18 (Ninikuzawa) 1978-11-21 ; St.21 (Kawaino), St.22 (Kitsunezuka) 1978-11-21 ; St.24 (Motoki Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1964-7-17, 1969-7-22 ; St.29 (Kami-Kunugida Br.) 1959-summer ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-8-18, 1976-11-15.

SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.6), (St.7), (St.12), (St.15), (St.18) 1977-6-4 ; (St.J) 1977-6-5 ; R.Tama -- (St.D), (St.2) 1977-6-4 ; TMG-BEP -- R.Nippara -- (St.E), (St.F), (St.G) 1976-10-22, 1976-11-17 & 18 ; (St.F) 1977-7-29.

2. *Paraleptophlebia spinosa* UENO and *Paraleptophlebia* sp. (Fig.6)
 Loc. & date : R.Kosuge -- St.1 (a small stream), St.5 (Campground) 1979-8-18 ; R.Asakawa -- St.15 (Hara) 1978-11-20 ; St.17 (R.Daigo), St.18 (Ninikuzawa), St.21 (Kawaino), St.22 (Kitsunezuka) 1978-11-21.
 SUPPLEMENT : IIMURA --- R.Unazawa -- (St.K) 1972-12-6 ; R.Nippara -- (St.7) 1975-2-5 ; (St.18) 1974-3-7 ; R.Tama -- (St.1) 1971-10-29, 1972-10-30, 1973-10-23, 1974-10-2 ; (St.5) 1973-10-23, 1974-10-2 ; (St.14) 1974-3-2, 1975-3-25 ;

(St.16) 1971-10-28, 1972-10-30, 1973-10-24, 1974-2-28, 1974-10-3 ; (St.21) 1974--2-27 ; (St.22) 1973-10-27 : R.Nippara -- (St.7) 1975-2-5 ; (St.18) 1974-3-7 : R.Unazawa -- (St.K) 1972-12-6 : R.Akikawa -- (St.1) 1974-10-22, 1975-2-4 ; (St.7) 1974-9-28, 1975-3-28 ; (St.O) 1974-10-22, 1975-2-4 ; (St.11) 1974-9-28 ; (St.13) 1975-2-28 ; (St.20) 1971-6-29, 1971-10-28, 1972-8-17, 1972-10-29, 1973-7-20, 1973-11-6, 1974-10-1, 1975-10-9, 1976-2-27, 1976-9-21, 1977-9-29, 1978-1-27 ; (St.26) 1971-6-29, 1972-3-23, 1972-8-17 ; 1973-3-22, 1973-7-20, 1974-3-5, 1974-5-28, 1975-3-27, 1976-2-27, 1978-1-27 : METOC. --- R.Kukizawa -- (St.B) 1976-9-28, 1976-11-25, 1977-1-25 : R.Tama -- (St.D) 1976-9-28, 1976-10-26, 1976-11-25, 1977-1-25 ; (St.1) 1976-11-25, 1977-1-25 ; (St.8) 1977-1-25 ; (St.15) 1977-1-25 ; (St.31) 1979-11-15 : R.Taba -- (St.7) 1976-11-25, 1977-1-25 : R.Nippara -- (St.18) 1976-9-28, 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôtanba -- (St.6) 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôsawa (St.M) 1976-10-26, 1976-11-25, 1977-1-25 : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21, 1980-12-8 : R.Yaji -- (St.1) 1980-12-8 : HISAI --- R.Asakawa -- (St.28) 1979-11-28.

Genus *Choroterpes*

1. *Choroterpes trifurcata* UENO (Fig.7)

Loc. & date : R.Tama -- St.6 (Kawai) 1963-6-15 ; St.14 (Mannen Br.) 1963-8-25 ; St.16 (Tamagawa Br.) 1960-7-21 ; St.18 (Hamura Dam) 1959-summer ; St.20 (Tama Br.) 1959-summer ; St.21 (Haijima Br.) 1960-7-21, 1964-5-31, 1975-5-28 ; St.22 (Tama-Ôhashi Br.) 1963-8-25, 1964-5-31 : R.Ôtanba -- St.5 (Kitagawa Br.) 1969-7-23 ; St.6 (Taishô Br.) 1963-6-15, 1963-8-21 : R.Hirai -- St.2 (Tasai Br.) 1965-7-31, 1969-7-24 : R.Akikawa -- St.4 (Henbori) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29 ; St.7 (Sasano) 1959-summer, 1963-8-25, 1965-7-30 ; St.8 (Tachibana Br.) 1965-7-29 ; St.10 (Ozawa), St.12 (Kita-Akikawa Br.) , St.13 (Wada Br.) 1965-7-30 ; St.16 (Gundo) 1959-summer, 1965-7-30 ; St.17 (Teraoka) 1969-7-21 ; St.18 (Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1959-summer, 1960-7-21 ; St.20 (Sawado Br.) 1965-7-30 ; St.22 (Akikawa Br.) 1963-8-25, 1965-7-30, 1975-8-14 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23 ; St.24 (Akiru Br.) 1965-7-31, 1975-7-23 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1965-7-31, 1969-7-23, 1975-5-28 : R.Asakawa -- St.23 (Kawarajuku Br.) 1959-summer ; St.27 (Umenoki Br.) 1960-7-20, 1964-7-17 ; St.36 (Minase Br.) 1959-summer.

SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1974-2-2 : R.Tama -- (St.1), (St.2) 1974-2-2 ; (St.10) 1973-8-21, 1974-2-2 ; (St.21) 1974-2-1 : R.Ôtanba -- (St.5) 1974-2-2 ; (St.6) 1973-8-21 : R.Hirai -- (St.2) 1973-8-20 : R.Akikawa -- (St.25) 1973-5-29 ; (St.26) 1973-8-21 : TNG-BEP --- R.Hirai -- (St.2) 1980-9-29 : R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : KRIEP --- R.Tama -- (St.15) 1979-9-13 : MIYASHITA --- R.Tama (St.21) 1970-10-9.

FAMILY EPHEMERELLIDAE

Genus Ephemerella

Subgenus Torleya

1. *Ephemerella (Torleya) japonica* GOSE (Fig.8)

(= *Ephemerella* sp. ED)

Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1971-12-6 ; St.16 (Tamagawa Br.) 1969-7-24 ; St.17 (Hamura Dam) 1969-7-24, 1971-12-6 ; St.21 (Haijima Br.) 1969-8-11, 1972-8-17, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1971-12-7, 1972-8-17 : R.Hirai -- St.2 (Tasai Br.) 1969-7-24, 1971-12-6, 1972-8-16, 1975-8-15, 1975-11-11 : R.Akikawa -- St.5 (Minami-Akikawa Br.), St.6 (Kasuga Br.) 1969-7-21 ; St.10 (Ozawa), St.14 (Ozu Br.), St.18 (Hoshitake Br.), St.19 (Niitaka Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1969-7-21, 1972-8-17, 1975-8-14 ; St.23 (Ajiro Br.) 1969-7-23, 1971-12-6 ; St.24 (Akiru Br.) 1969-7-23 ; St.26 (Takatsuki Br.) 1972-8-18, 1975-8-14, 1975-11-11 : R.Asakawa -- St.25 (Kakuei Br.) 1979-3-13 ; St.28 (Takaosan-guchi) 1964-7-17, 1969-7-22 ; St.29 (Kami-Kunugida Br.) 1969-7-22 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.35 (Shikishima Br.) 1969-7-22, 1971-12-6 ; St.36 (Minase Br.) 1975-10-24 ; St.38 (Asakawa Br.) 1972-8-17.

SUPPLEMENT : IDE --- R.Tama -- (St.1) 1979-1-6 ; (St.15), (St.21) 1978-8-17 : R. Hirai -- (St.2) 1978-8-17 : R.Akikawa -- (St.26) 1978-8-17 : R.Asakawa -- (St.35) 1978-8-16 : IIMURA --- R.Tama -- (St.1) 1972-3-23, 1973-3-23, 1974-3-7, 1975-3-25 ; (St.5) 1973-10-23, 1974-10-2 ; (St.14) 1974-3-2, 1975-3-25 ; (St.16) 1972-3-23, 1973-3-22, 1974-2-28, 1975-3-26 ; (St.21) 1974-8-22 ; (St.22) 1974-8-22 ; (St.23) 1974-8-21 : R.Akikawa -- (St.0) 1974-8-23 ; (St.20) 1976-2-27, 1978-1-27 ; (St.26) 1971-6-29, 1971-10-28, 1972-8-17, 1972-10-29, 1973-7-20, 1973-11-6, 1974-10-1, 1975-10-9, 1976-2-27, 1976-9-21, 1977-9-29, 1978-1-27 : METOC -- R.Tama -- (St.1) 1976-9-28, 1977-1-25 ;

(St.8) 1976-11-25 ; (St.17) 1976-10-26, 1977-1-25 : R.Irikawa -- (St.1)
1976-9-28 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-9-29, 1980-12-8,
1981-2-16 : R.Akikawa -- (St.26) 1980-9-29, 1980-12-8, 1981-2-16 : R.Asakawa
-- (St.P) 1980-7-21 : MIYASHITA --- R.Tama -- (St.17), (St.18) 1970-10-9.

Subgenus Drunella

1. *Ephemerella (Drunella) cryptomeria* IMANISHI (Fig.9)

(= *Ephemerella yoshinoensis* ; *Ephemerella* sp. nG)

Loc. & date : R.Kosuge -- St.2 (a small stream), St.5 (Campground), St.7
(Kawakubo) 1979-8-18 : R.Nippara -- St.15 (Shiraishi Br.) 1969-7-24 ; St.18
(Shōwa Br.) 1959-summer, 1960-7-22, 1969-7-24, 1972-8-16, 1975-5-29 :
R.Ōtanba -- St.5 (Kitagawa Br.) 1963-6-15, 1969-7-23 ; St.6 (Taishō Br.)
1963-6-15 : R.Tama -- St.1 (Shōwa Br.) 1959-summer, 1963-6-24, 1963-8-20,
1969-7-24, 1972-8-16 ; St.6 (Kawai) 1959-summer, 1963-6-15 ; St.7 (Umezawa
Br.) 1963-6-24 ; St.8 (Mitake Br.) 1963-6-24, 1969-7-23 ; St.9 (Sawai) 1959-
-summer ; St.10 (Yoroi Br.) 1969-7-24, 1975-5-28 ; St.12 (Jindai Br.) 1959-
summer, 1960-7-21 ; St.15 (Chōfu Br.) 1969-7-23 ; St.16 (Tamagawa Br.) 1959-
summer, 1969-7-24 ; St.17 (Hamura Dam) 1969-7-24, 1972-8-16 ; St.18 (Hamura
Dam) 1959-summer, 1963-8-25 ; St.21 (Haijima Br.) 1972-8-17 ; St.26 (Tama-
gawara Br.) 1971-12-8 : R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1971-12-6
: R.Akikawa -- St.4 (Henbori) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-
-7-21 ; St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.7 (Sasano) 1959-summer,
1965-7-30 ; St.8 (Tachibana Br.) 1965-7-30 ; St.10 (Ozawa) 1965-7-30, 1969-
7-21 ; St.11 (Shirokura) 1959-summer, 1960-7-21, 1963-8-25 ; St.12 (Kita-
Akikawa Br.) 1965-7-30, 1969-7-21 ; St.13 (Wada Br.) 1959-summer, 1965-7-30,
1969-7-21 ; St.14 (Ozu Br.) 1965-7-30, 1969-7-21 ; St.16 (Gundō) 1959-
summer, 1965-7-30 ; St.17 (Teraoka) 1969-7-21 ; St.18 (Hoshitake Br.) 1960-
7-21, 1969-7-21 ; St.19 (Niitaka Br.) 1959-summer, 1960-7-21, 1969-7-21 ;
St.20 (Sawado Br.) 1965-7-30 ; St.21 (Kowada Br.) 1963-6-24 ; St.22 (Akikawa
Br.) 1959-summer, 1965-7-30, 1969-7-21, 1975-8-14 ; St.23 (Ajiro Br.) 1965-
7-31, 1975-5-28 ; St.24 (Akiru Br.) 1959-summer, 1965-7-31 ; St.26 (Takatsuki
Br.) 1975-8-14 : R.Asakawa -- St.23 (Kawarajuku Br.) 1959-summer ; St.24
(Motoki Br.) 1973-3-13 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-
guchi) 1969-7-22 ; St.29 (Kami-Kunugida Br.) 1959-summer ; St.31 (Hikage Br.)
1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28,
1975-8-14, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18, St.35

(Shikishima Br.) 1959-summer, 1964-7-24 ; St.38 (Asakawa Br.) 1971-12-7.
 SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.6), (St.7),
 (St.12), (St.15), (St.18) 1977-6-4 ; (St.J) 1977-6-5 ; (St.18) 1973-8-21 :
 R.Tama -- (St.1) 1979-1-6 ; (St.2) 1973-8-21, 1978-8-17 ; (St.10) 1973-8-21,
 1978-8-17 ; (St.15) 1973-8-21, 1978-8-17 : R.Hirai -- (St.2) 1973-8-20 :
 R.Akikawa -- (St.18) 1973-8-21, 1979-1-6 : IIMURA --- R.Nippara -- (St.18) :
 R.Tama -- (St.1), (St.5), (St.14), (St.16), (St.21), (St.22), (St.23) :
 R.Akikawa -- (St.1), (St.7), (St.11), (St.13), (St.20), (St.26)-- (Note :
 Dates are omitted) : METOC --- R.Kukizawa -- (St.B) 1976-9-28 : R.Nippara
 -- (St.18) 1976-9-28, 1977-1-25 : R.Ôtanba -- (St.6) 1977-1-25 : R.Irikawa
 -- (St.1) 1976-9-28, 1977-1-25 : R.Tama -- (St.D), (St.1), (St.4) 1977-1-25
 ; (St.15) 1976-9-28, 1977-1-25 ; (St.17) 1977-1-25 : TMG-BEP-T --- R.Nippara
 -- (St.E) 1977-7-30 ; (St.F) 1977-7-29, 1977-7-31 ; (St.G) 1977-7-31 :
 TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21 : KRIEP --- R.Taba -- (St.A)
 1979-9-13 : R.Tama -- (St.15) 1979-9-13 : HASHIGAMI --- R.Tama -- (St.15)
 1973-8-15.

2. *Ephemerella (Drunella) basalis* IMANISHI (Fig.10)

Loc. & date : R.Nippara -- St.17 (Meoto Br.) 1964-5-3 : R.Tama -- St.2
 (Unazawa) 1959-summer ; St.8 (Mitake Br.) 1964-5-3, 1964-8-31 ; St.10 (Yoroi
 Br.) 1971-12-6, 1975-11-11 ; St.17 (Hamura Dam) 1971-12-6, 1975-11-11 ; St.
 19 (Nagata Br.) 1975-11-11 ; St.21 (Haijima Br.) 1975-11-11 ; St.22 (Tama-
 Ôhashi Br.) 1971-12-7, 1975-11-11 ; St.23 (Hino Br.) 1971-12-7 : R.Hirai --
 St.2 (Tasai Br.) 1971-12-6, 1975-11-11 : R.Akikawa -- St.23 (Ajiro Br.)
 1971-12-6 ; St.26 (Takatsuki Br.) 1971-12-6, 1975-11-11 : R.Asakawa -- St.7
 (Nakai Br.), St.9 (Koashi) 1979-3-12 ; St.17 (R.Daigo), St.21 (Kawaino),
 St.22 (Kitsunozuka) 1978-11-21 ; St.24 (Motoki Br.) 1979-3-13 ; St.28 (Takao-
 san-guchi) 1964-7-17 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.33 (Surisashi)
 1975-10-24 ; St.35 (Shikishima Br.) 1971-12-6.

SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1977-6-4, 1979-1-6 : R.Tama --
 (St.2), (St.10), (St.15) 1979-1-6 ; (St.18) 1974-10-24 ; (St.20) 1974-10-22 ;
 (St.21) 1974-10-21 : R.Hirai -- (St.2) 1974-10-22 : R.Akikawa -- (St.18)
 1979-1-6 ; (St.26) 1974-10-23 : IIMURA --- R.Nippara -- (St.7), (St.18) :
 R.Tama -- (St.1), (St.16), (St.21), (St.22), (St.24) : R.Akikawa -- (St.1),
 (St.7), (St.0), (St.11), (St.13), (St.20), (St.26) --- (Dates are omitted) :
 METOC --- R.Taba -- (St.7) 1976-10-26, 1976-11-25, 1977-1-25 :

R.Kukizawa -- (St.B) 1976-10-26, 1976-11-25, 1977-1-25 : R.Tama -- (St.D) 1976-11-25, 1977-1-25 ; (St.1) 1976-10-26, 1976-11-25, 1977-1-25 ; (St.4), (St.18) 1976-10-26, 1976-11-25 ; (St.15), (St.17) 1976-11-25, 1977-1-25 : R.Nippara -- (St.18) 1976-11-25 : R.Irikawa -- (St.1) 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôtanba -- (St.6) 1976-11-25 : R.Ôsawa -- (St.M) 1976-11-25, 1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) 1976-10-22, 23, 24 ; (St.F) 1977-7-29 : METOC --- R.Tama (St.31) 1979-11-15, 1979-12-14 : TMG-BEP --- R.Hirai (St.2) 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1981-2-16 : TSUDA --- R.Tama -- (St.1), (St.15) 1973-Sept..

3. *Ephemerella (Drunella) trispina* UENO (Fig.11)

Loc. & date : R.Nippara -- St.18 (Shôwa Br.) 1959-summer, 1957-5-29 : R.Tama -- St.10 (Yoroi Br.) 1975-5-28 ; St.12 (Jindai Br.) 1969-7-23 : R.Akikawa -- St.23 (Ajiro Br.) 1975-5-28 : R.Asakawa -- St.33 (Surisashi) 1975-5-28. SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.6), (St.7), (St.12), (St.15) 1977-6-4 ; (St.18) 1974-2-2, 1977-6-4 ; (St.J) 1977-6-5 : R.Tama -- (St.1), (St.10) 1974-2-2 ; (St.15) 1973-5-29, 1974-2-2 ; (St.18), (St.21) 1977-10-9 ; (St.22) 1974-2-1 ; (St.23) 1977-10-9 : R.Akikawa -- (St.18) 1974-2-1 ; (St.25) 1973-5-29, 1973-11-4 ; (St.26) 1974-2-1 : R.Asakawa -- (St.35) 1974-2-1 : IIMURA --- R.Nippara -- (St.18) : R.Unazawa -- (St.K) : R.Tama -- (St.1), (St.14), (St.16) : R.Akikawa -- (St.7), (St.11), (St.13), (St.20), (St.26) --- (Dates are omitted.) : METOC --- R.Tama -- (St.D) 1977-1-25 ; (St.1) 1977-1-25 ; (St.4) 1976-11-25, 1977-1-25 ; (St.15), (St.17), 1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.E) 1977-7-30 ; (St.F) 1977-7-29 & 31 ; (St.G) 1977-7-31 : HASHIGAMI --- R.Tama -- (St.16) 1973-8-15.

Subgenus *Cincticostella*

1. *Ephemerella (Cincticostella) okumai* GOSE (Fig.12)

(= *Ephemerella* sp. EC)

Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1971-12-7, 1972-8-16 ; St.17 (Hamura Dam) 1971-12-6 ; St.21 (Haijima Br.) 1971-12-7 ; St.22 (Tama-Ôhashi Br.) 1971-12-7 : R.Hirai -- St.2 (Tasai Br.) 1971-12-6 : R.Akikawa -- St.23 (Ajiro Br.), St.26 (Takatsuki Br.) 1971-12-6 : R.Asakawa -- St.35 (Shiki-shima Br.) 1971-12-6.

SUPPLEMENT : METOC --- R.Kukizawa -- (St.B) 1976-9-28, 1977-1-25 : R.Nippara -- (St.18) 1977-1-25 : R.Tama -- (St.1), (St.4) 1977-1-25 ; (St.8) 1976-10-26 ; (St.17) 1977-1-25 : R.Irikawa -- (St.1) 1976-9-28, 1977-1-25 : R.Ôsawa -- (St.M) 1977-1-25.

2. *Ephemerella (Cincticostella) tschernová* BAJKOVA (Fig.13)

(= *Ephemerella* sp. nax)

Loc. & date : R.Tama -- St.9 (Ikusabata) 1964-5-3 ; St.10 (Yoroi Br.) 1975-11-11 : R.Ôtanba -- St.6 (Taishô Br.) 1964-5-3 : R.Akikawa -- St.7 (Sasano) 1959-summer ; St.10 (Ozawa) 1965-7-30 ; St.11 (Shirokura) 1959-summer ; St.12 (Kita-Akikawa Br.), St.13 (Wada Br.) 1965-7-30 ; St.16 (Gundo) 1959-summer ; St.20 (Sawado Br.) 1965-7-30 ; St.22 (Akikawa Br.) 1972-8-16 ; St.23 (Ajiro Br.) 1965-7-31 : R.Asakawa -- St.22 (Kitsunozuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1964-7-17, 1976-8-18.

SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1978-8-17, 1979-1-6 : R.Tama -- (St.1), (St.2) 1978-8-17, 1979-1-6 ; (St.10), (St.15) 1978-8-17, 1979-1-6 ; (St.21), (St.22) 1978-8-17 ; (St.25) 1978-8-16 : R.Ôtanba -- (St.5) 1978-8-17, 1979-1-6 : R.Akikawa -- (St.18) 1978-8-17, 1979-1-6 ; (St.26) 1978-8-17 : R.Asakawa -- (St.35) 1978-8-16, 1979-1-6 ; (St.39) 1978-8-16 :

METOC --- R.Taba -- (St.7) 1976-11-25 : R.Nippara -- (St.18) 1976-9-28, 1976-10-26 : R.Tama -- (St.D) 1976-10-26 ; (St.1) 1976-10-26 ; (St.4) 1976-11-25 ; (St.8) 1976-10-26, 1976-11-25, 1977-1-25 ; (St.17) 1976-9-28, 1976-10-26 : R.Irikawa -- (St.1) 1976-11-25 : R.Ôtanba -- (St.6) 1976-10-26 : R.Ôsawa -- (St.M) 1976-10-26 : TMG-BEP --- R.Hirai (St.2) 1980-7-21 : KRIEP -- R.Tama (St.2), (St.17) 1979-9-13.

3. *Ephemerella (Cincticostella) nigra* UENO (Fig.14)

Loc. & date : R.Nippara -- St.18 (Shôwa Br.) 1959-summer, 1975-5-29 : R.Tama -- St.10 (Yoroi Br.) 1971-12-6 : R.Hirai -- St.2 (Tasai Br.) 1964-7-17 : R.Akikawa -- St.8 (Tachibana Br.) 1965-7-29 ; St.11 (Shirokura) 1959-summer : R.Asakawa -- St.21 (Kawaino) 1978-11-21 ; St.28 (Takaosan-guchi) 1964-7-17 ; St.33 (Surisashi) 1975-5-28 ; St.35 (Shikishima Br.) 1964-7-24, 1971-12-6.

SUPPLEMENT : IDE --- R.Nippara -- (St.6), (St.7), (St.12), (St.15), (St.18), (St.H), (St.I) 1977-6-4 ; (St.J) 1977-6-5 ; (St.18) 1974-2-2 : R.Tama -- (St.2), (St.10) 1974-2-2 ; (St.15) 1973-5-29, 1974-2-2 ; (St.18) 1974-10-24, 1975-7-29, 1976-8-19 ; (St.19) 1974-10-24 ; (St.20) 1974-10-22 ;

(St.21) 1974-2-1, 1974-10-21 ; (St.22) 1974-10-20, 1975-7-29 : R.Ôtanba --
(St.5) 1974-2-2 : 1974-2-2 : R.Hirai -- (St.2) 1974-2-1, 1974-10-22 :
R.Akikawa -- (St.18) 1974-2-1 ; (St.26) 1974-10-23 : R.Asakawa -- (St.35)
1974-2-1 : IIMURA --- R.Nippara -- (St.7), (St.18) : R.Tama -- (St.1), (St.5),
(St.14), (St.16), (St.21), (St.22), (St.24) : R.Akikawa -- (St.1), (St.7),
(St.0), (St.11), (St.13), (St.20), (St.26) : R.Asakawa -- (St.42) --- (Dates
are omitted.).

METOC. --- R.Taba -- (St.7) 1977-1-25 : R.Kukizawa -- (St.B) 1977-1-25 :
R.Nippara -- (St.18) 1976-9-28, 1977-1-25 : R.Tama -- (St.8) 1976-10-26,
1976-11-25, 1977-1-25 ; (St.17) 1976-9-28 : R.Irikawa -- (St.1) 1976-9-28,
1977-1-25 : R.Ôtanba -- (St.6) 1977-1-25 : TSUDA --- R.Tama -- (St.18) 1973
-Sept. : HISAI --- R.Asakawa -- (St.28) 1979-11-28 : KRIEP --- R.Taba --
(St.A) 1979-9-13 : R.Tama -- (St.2), (St.15), (St.17) 1979-9-13 : MIYASHITA
--- R.Tama -- (St.17), (St.18) 1970-10-9.

4. *Ephemerella (Cincticostella) orientalis* TSCHERNOVA (Fig.15)
(= *Ephemerella* sp. nay)

Loc. & date : R.Nippara -- St.18 (Shôwa Br.) 1972-8-16 : R.Tama -- St.10
(Yoroi Br.) 1971-12-6, 1975-11-11 ; St.17 (Hamura Dam) 1972-8-16 ; St.18
(Hamura Dam) 1975-11-11 ; St.19 (Nagata Br.) 1975-11-11 ; St.21 (Haijima Br.)
1972-8-17, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1975-11-11 ; St.23 (Hino Br.)
, St.24 (Sekido Br.) 1975-10-23 : R.Hirai -- St.2 (Tasai Br.) 1972-8-16 :
R.Akikawa -- St.22 (Akikawa Br.) 1975-10-24 ; St.26 (Takatsuki Br.) 1975-
11-11 : R.Asakawa -- St.17 (R.Daigo), St.21 (Kawaino), St.22 (Kitsunozuka)
1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa
junction) 1976-9-25 ; St.33 (Surisashi) 1975-8-14, 1975-10-24, 1976-11-15 ;
St.36 (Minase Br.) 1975-10-24 ; St.38 (Asakawa Br.) 1972-8-17, 1975-10-24.
SUPPLEMENT : METOC --- R.Taba -- (St.7) 1976-11-25, 1977-1-25 : R.Kukizawa
-- (St.B) 1976-11-25, 1977-1-25 : R.Nippara -- (St.18) 1976-11-25, 1977-1-
25 : R.Tama -- (St.D) 1976-11-25 ; (St.1) 1976-11-25, 1977-1-25 ; (St.4)
1976-11-25 ; (St.8) 1977-1-25 ; (St.15) 1976-11-25, 1977-1-25 ; (St.17)
1976-10-26, 1976-11-25 : R.Irikawa -- (St.1) 1976-11-25, 1977-1-25 :
R.Ôtanba -- (St.6) 1976-11-25, 1977-1-25 : R.Ôsawa -- (St.M) 1976-11-25,
1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) 1976-Oct. & Nov.
; (St.E) 1977-7-30 ; (St.F) 1977-7-29 & 31 ; (St.G) 1977-7-31 : TMG-BEP ---
R.Akikawa -- (St.26) 1980-9-29, 1981-2-16 : R.Asakawa -- (St.36) 1980-9-29 :
TSUDA --- R.Tama -- (St.1), (St.3) 1973-Sept.

Subgenus *Acerella*

1. *Ephemerella* (*Acerella*) *longicaudata* UENO (Fig.16)
Loc. & date : R.Nippara -- St.18 (Shôwa Br.) 1976-9-28 : R.Tama -- St.1
(Shôwa Br.) 1976-9-28.

Subgenus *Ephemerella*

1. *Ephemerella* (*Ephemerella*) *imanishi* GOSE (Fig.16)
(= *Ephemerella* sp. nF)
Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.1 (Shôwa
Br.) 1975-5-28 : R.Asakawa -- St.32 (Kogezawa junction) 1976-9-25 ; St.33
(Surisashi) 1976-7-16 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.36 (Minase Br.)
1975-8-14.
SUPPLEMENT : METOC --- R.Nippara -- (St.18) : R.Tama -- (St.M) : R.Irikawa
-- (St.1) 1976-9-28 : HASHIGAMI --- R.Ôtanba -- (St.6) 1973-8-11 : R.Tama
-- (St.4) 1973-8-4 ; (St.5) 1973-8-11 ; (St.6), (St.12) 1973-8-13 ; (St.15),
(St.16) 1973-8-15 ; (St.21) 1973-8-25.
2. *Ephemerella* (*Ephemerella*) *cornutus* GOSE (Fig.16)
(= *Ephemerella* sp. EA)
Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1975-8-15.

Subgenus *Serratella*

1. *Ephemerella* (*Serratella*) *setigera* BOJKOVA (Fig.17)
(= *Ephemerella* sp. EB)
Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Nippara -- St.18
(Shôwa Br.) 1972-8-16, 1975-5-29, 1975-8-15 : R.Tama -- St.10 (Yoroi Br.)
1975-5-28, 1975-8-15, 1975-11-11 ; St.17 (Hamura Dam) 1972-8-16, 1975-5-28 ;
St.18 (Hamura Dam) 1975-8-15 ; St.19 (Nagata Br.) 1975-11-11 ; St.21
(Haijima Br.) 1972-8-17, 1975-5-28, 1975-8-14, 1975-11-11 ; St.22 (Tama-
Ôhashi Br.) 1972-8-17 ; St.23 (Hino Br.) 1972-8-17 ; St.25 (Koremasa Br.)
1972-8-18 ; St.26 (Tamagawara Br.) 1975-8-13 : R.Hirai -- St.2 (Tasai Br.)
1972-8-16, 1975-5-28, 1975-8-15 : R.Akikawa -- St.16 (Gundo) 1965-7-30 ;
St.22 (Akikawa Br.) 1972-8-16, 1975-8-14 ; St.23 (Ajiro Br.) 1975-5-28 ;
St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1972-8-16, 1975
-5-28, 1975-8-14 : R.Asakawa -- St.25 (Kakuei Br.) 1979-3-13 ; St.31 (Hikage
Br.) 1976-10-28 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi)
1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-
guchi) 1976-8-18 ; St.35 (Shikishima Br.) 1972-8-17 ; St.38 (Asakawa Br.)

1972-8-17, 1975-10-24 ; St.40 (Hirayama Br.) 1975-10-24.

SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.I), (St.6), (St.7), (St.12), (St.15) 1977-6-4 ; (St.18) 1973-8-21, 1974-2-2, 1977-6-4 ; (St.J) 1977-6-5 : R.Tama -- (St.D)1977-6-4 ; (St.1) 1974-2-2 ; (St.2) 1973-8-21, 1974-2-2, 1977-6-4 ; (St.10) 1973-8-21, 1974-2-2 ; (St.15) 1973-5-29, 1973-8-20, 1973-11-4, 1974-2-2 ; (St.18) 1974-10-24, 1975-7-29, 1976-8-19, 1977-10-9 ; (St.19) 1974-10-24, 1975-7-29, 1976-8-19 ; (St.20) 1974-10-22, 1975-7-29 ; (St.21) 1973-5-29, 1973-8-20, 1973-11-4, 1974-2-1, 1974-10-21, 1975-7-29, 1976-8-19, 1977-10-9 ; (St.22) 1973-8-20, 1974-2-1, 1975-7-29 ; (St.23) 1975-7-30, 1977-10-9 ; (St.24), (St.29), (St.31) 1977-10-9 : R.Ôtanba -- (St.5) 1974-2-2 ; (St.6) 1973-8-21 : R.Hirai -- (St.2) 1973-8-20, 1974-2-1, 1974-10-22 : R.Akikawa -- (St.18) 1973-8-21, 1974-2-1 ; (St.25) 1973-5-29 ; (St.26) 1973-8-21, 1973-11-4, 1974-2-1, 1974-10-23 : R.Asakawa -- (St.29) 1973-8-20 ; (St.35) 1974-2-1 : R.Yaji -- (St.1) 1974-2-1 : TMG-BEP --- R.Hirai -- (St.2) 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1980-9-29, 1980-12-8, 1981-2-16 : MIYASHITA --- R.Tama -- (St.18) 1970-10-9.

2. *Ephemerella* (*Serratella*) *rufa* IMANISHI (Fig.18)

Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Kawakubo) 1979-8-18 : R.Nippara -- St.17 (Meoto Br.) 1963-8-20 ; St.18 (Shôwa Br.) 1972-8-16 : R.Tama -- St.1 (Shôwa Br.) 1972-8-16, 1975-8-15 ; St.10 (Yoroi Br.) 1969-7-24, 1971-12-6, 1975-5-28, 1975-11-11 ; St.16 (Tamagawa Br.) 1963-8-25 ; St.17 (Hamura Dam) 1969-7-24, 1971-12-6 ; St.18 (Hamura Dam) 1964-5-31, 1975-8-15, 1975-11-11 ; St.19 (Nagata Br.) 1975-8-14, 1975-11-11 ; St.20 (Tama Br.) 1960-7-21, 1975-8-14, 1975-11-11 ; St.21 (Haijima Br.) 1964-5-31, 1965-7-31, 1969-8-11, 1971-12-6, 1972-8-17, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1971-12-7, 1972-8-17, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1969-8-11, 1971-12-7, 1975-10-23 ; St.29 (Tama-Suidô Br.) 1969-8-15 : R.Ôtanba -- St.6 (Taishô Br.) 1964-5-3 : R.Hirai -- St.2 (Tasai Br.) 1965-7-31, 1969-7-24, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.5 (Minami-Akikawa Br.), St.6 (Kasuga Br.) 1969-7-21 ; St.7 (Sasano) 1959-summer, 1965-7-30 ; St.17 (Teraoka), St.19 (Niitaka Br.), St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1969-7-21, 1972-8-16, 1975-8-14, 1975-10-24 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23, 1971-12-6, 1975-5-28 ; St.24 (Akiru Br.) 1969-7-23 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1965-7-31, 1969-7-23, 1972-8-16, 1975-5-28,

1975-8-14, 1975-11-11 : R.Asakawa -- St.21 (Kawaino), St.22 (Kitsunezuka)
1978-11-21 ; St.25 (Kakuei Br.) 1979-3-13 ; St.27 (Umenoki Br.) 1964-7-17
; St.28 (Takaosan-guchi) 1964-7-17, 1969-7-22 ; St.29 (Kami-Kunugida Br.)
1964-7-17, 1969-7-22 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32
(Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-8-14,
1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.34
(R.Kobotoke - Kami-Kunugida Br.) 1969-7-22 ; St.35 (Shikishima Br.) 1964-
7-24, 1971-12-6, 1972-8-17 ; St.36 (Minase Br.) 1975-10-24 ; St.38
(Asakawa Br.) 1972-8-17, 1975-8-14, 1975-10-24 ; St.40 (Hirayama Br.) 1975
-8-14, 1975-10-24 ; St.42 (Arai Br.) 1975-8-13.

SUPPLEMENT : IDE --- R.Nippara -- (St.G) 1977-6-4 ; (St.18) 1979-1-6 :
R.Tama -- (St.1) 1979-1-6 ; (St.2) 1973-8-21, 1974-2-1, 1978-8-17, 1979-1-
-6 ; (St.10) 1974-2-1 ; (St.15) 1973-5-29, 1973-11-4, 1974-2-1, 1979-1-6 ;
(St.18) 1974-10-24, 1975-7-29, 1976-8-19, 1977-10-9 ; (St.19) 1973-8-20,
1974-10-24, 1975-7-29, 1976-8-19 ; (St.20) 1974-10-22, 1975-7-29 ; (St.21)
1973-8-20, 1973-11-4, 1974-10-20, 1975-7-29, 1976-8-19, 1978-8-17, 1979-1-
6 ; (St.22) 1973-8-20, 1974-10-20, 1975-7-29, 1978-8-17 ; (St.31) 1977-10-
9 : R.Ôtanba -- (St.5) 1974-2-2, 1978-8-17 ; (St.6) 1973-8-21 : R.Hirai --
(St.2) 1973-8-20, 1974-10-22, 1978-8-17, 1979-1-6 : R.Akikawa -- (St.18)
1974-2-1, 1979-1-6 ; (St.25) 1973-5-29 ; (St.26) 1973-8-21, 1973-11-4, 1974
-2-1, 1974-10-23, 1978-8-17 : R.Asakawa -- (St.29) 1973-8-20 ; (St.35)
1974-2-1, 1978-8-16 : IIMURA --- R.Nippara -- (St.18) : R.Tama -- (St.1),
(St.14), (St.16), (St.21), (St.22), (St.23), (St.24) : R.Akikawa -- (St.7),
(St.0), (St.11), (St.13), (St.20), (St.26) --- (Dates are omitted.).
METOC --- R.Tama -- (St.1) 1976-9-28, 1976-11-25 ; (St.8) 1976-10-26, 1976
-11-25 ; (St.15) 1976-11-25, 1977-1-25 ; (St.17) 1976-10-26, 1976-11-25,
1977-1-25 ; (St.D) 1977-1-25 : R.Irikawa -- (St.1) 1976-9-28, 1976-10-26,
1976-11-25, 1977-1-25 : R.Ôtanba -- (St.6) 1976-11-25 : METOC-W --- R.Tama
-- (St.31) 1979-12-14 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-9-29,
1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1980-12
-8, 1981-2-16 : R.Asakawa -- (St.P) 1980-7-21, 1980-9-29, 1980-12-8, 1981-
2-16 : TSUDA --- R.Tama -- (St.1), (St.3), (St.15), (St.18) 1973-Sept. :
KRIEP --- R.Taba -- (St.A) 1979-9-13 : R.Tama -- (St.2), (St.15), (St.17)
1979-9-13 : HASHIGAMI --- R.Tama -- (St.16) 1973-8-15 ; (St.21) 1973-8-25
: MIYASHITA --- R.Tama -- (St.18), (St.21), (St.23) 1970-10-9.

FAMILY CAENIDAE

Genus *Caenis*

1. *Caenis* sp. (Fig.19)

Loc. & date : R.Nippara -- St.18 (Shôwa Br.) 1959-summer : R.Otanba -- St.5 (Kitagawa Br.) 1963-6-15 ; St.6 (Taishô Br.) 1959-summer, 1963-6-15, 1963-8-21 : R.Tama -- St.1 (Shôwa Br.) 1959-summer, 1964-5-3, 1975-5-29, 1975-11-11 ; St.6 (Kawai) 1959-summer, 1963-6-15, 1964-5-3, 1964-8-31 ; St.7 (Umezawa Br.) 1963-6-24 ; St.8 (Mitake Br.) 1963-6-24, 1964-5-3, 1964-8-31 ; St.9 (Ikusabata) 1959-summer ; St.10 (Yoroi Br.) 1971-12-6, 1975-5-28, 1975-11-11 ; St.12 (Jindai Br.) 1969-7-23 ; St.14 (Mannen Br.) 1959-summer, 1964-9-1 ; St.15 (Chôfu Br.) 1963-6-24 ; St.16 (Tamagawa Br.) 1959-summer, 1964-9-1 ; St.17 (Hamura Dam) 1969-7-24, 1971-12-6, 1972-8-16, 1975-5-28 ; St.18 1963-6-24, 1963-8-25, 1975-11-11 ; St.20 (Tama Br.) 1963-8-25 ; St.21 (Haijima Br.) 1964-5-31, 1965-7-31, 1969-8-11, 1975-5-28, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1969-8-11 ; St.23 (Hino Br.) 1969-8-11, 1975-5-27 ; St.25 (Koremasa Br.) 1975-10-23 ; St.30 (Tama-Suido Br.) 1963-7-1 ; St.33 (Maruko Br.) 1975-5-26 : R.Hirai -- St.2 (Tasai Br.) 1965-7-31, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.7 (Sasano), St.11 (Shirokura), St.14 (Ozu Br.), St.16 (Gundô), St.19 (Niitaka Br.) 1959-summer ; St.20 (Sawado Br.) 1965-7-30 ; St.22 (Akikawa Br.) 1959-summer, 1965-7-30, 1975-10-24 ; St.23 (Ajiro Br.) 1963-6-24, 1965-7-31, 1971-12-6, 1975-5-28 ; St.24 (Akiru Br.) 1965-7-31, 1969-7-23 ; St.26 (Takatsuki Br.) 1972-8-16, 1975-11-11 : R.Asakawa -- St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.33 (Surisashi) 1975-5-28, 1975-10-24, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.34 (R.Kobotoke -- Kamikunugida Br.) 1963-8-25 ; St.35 (Shiki-shima Br.) 1971-12-6, 1972-8-17 ; St.38 (Asakawa Br.), St.40 (Hirayama Br.) 1975-10-24.

SUPPLEMENT : IDE --- *Caenis* sp. CB -- R.Tama -- (St.22) 1978-8-17 ; (St.26) 1976-8-18 : R.Hirai -- (St.2) 1978-8-17 : R.Asakawa -- (St.35) 1978-8-16 : *Caenis* sp. -- R.Tama -- (St.15) 1973-5-29 ; (St.20) 1975-7-29 ; (St.21) 1973-8-20 ; (St.22) 1973-8-20, 1975-7-29 ; (St.24) 1975-7-28 : R.Hirai -- (St.2) 1974-10-22 : R.Akikawa -- (St.25) 1973-5-29 ; (St.26) 1973-8-21 : IIMURA --- *Caenis* sp. -- R.Nippara -- (St.18) : R.Tama -- (St.1), (St.6), (St.14), (St.16), (St.19), (St.21), (St.22), (St.23) : R.Akikawa -- (St.7), (St.11), (St.20), (St.26) : R.Asakawa -- (St.42) --- (Dates are omitted.).

TMG-BEP --- *Caenis* sp. CA -- R.Hirai -- (St.2) 1980-7-21, 1980-9-29 :
Caenis sp. -- R.Hirai -- (St.2) 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26)
1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : MIYASHITA --- *Caenis* sp. --
R.Tama -- (St.21) 1970-10-9.

FAMILY BAETIDAE

Genus *Cloëon*

1. *Cloëon dipterum* LINNE (Fig.21)

Loc. & date : R.Tama -- St.27 (Kamigawara Dam) 1969-8-11 ; St.30 (Tama-Suidô Br.) 1969-8-15, 1975-5-26 ; St.33 (Maruko Br.) 1972-8-18 : R.Asakawa -- St.11 (Oyashiki) 1979-3-13.

Genus *Baëtis*

1. *Baëtis* spp. (Fig.20)

(Note : Three species which are uncertainly identified with *Baëtis sahoensis*, *B. yoshinensis*, and *B. yamatoensis* respectively are comprised in this group together with a few indeterminable species. Dates of collection are omitted.)

Localities : R.Kosuge -- St.1, St.2 (small streams) ; St.5 (Campground) ; St.7 (Kawakubo) : R.Nippara -- St.6 (Nippara Lodge) ; St.15 (Shiraishi Br.) ; St.17 (Meoto Br.) ; St.18 (Shôwa Br.) : R.Tama -- St.1 (Shôwa Br.) ; St.2 (Unazawa junction) ; St.3 (Shiromaru) ; St.4 (Mansei Br.) ; St.5 (Kawai Dam) ; St.6 (below the Kawai junction) ; St.7 (Umezawa Br.) , St.8 (Mitake Br.) ; St.9 (Ikusabata) ; St.10 (Yoroi Br.) ; St.12 (Jindai Br.) ; St.14 (Mannen Br.) ; St.15 (Chôfu Br.) ; St.16 (Tamagawa Br.) ; St.17 (Hamura Dam) ; St.18 (Hamura Dam) ; St.19 (Nagata Br.) ; St.20 (Tama Br.) ; St.21 (Haijima Br.) ; St.22 (Tama-Ôhashi Br.) ; St.23 (Hino Br.) ; St.24 (Sekido Br.) ; St.25 (Koremasa Br.) ; St.26 (Tamagawara Br.) ; St.27 (above the Kamigawara Dam) ; St.28 (below the Kamigawara Dam) ; St.29 (Shimofuda) ; St.30 (Tama-Suidô Br.) ; St.31 (below the Shukugawara Dam) ; St.32 (Futago Br.) ; St.33 (below the Maruko Dam) : R.Ôtanba -- St.5 (Kitagawa Br.) ; St.6 (Taishô Br.) : R.Hirai -- St.2 (Tasai Br.) : R.Akikawa -- St.3 (Kazuma) ; St.4 (Henbori) ; St.5 (Minami-Akikawa Br.) ; St.6 (Kasuga Br.) ; St.7 (Sasano) ; St.8 (Tachibana Br.) ; St.10 (Ozawa) ; St.11 (Shirokura) ; St.12 (Kita-Akikawa Br.) ; St.13 (Wada Br.) ; St.14 (Ozu Br.) ; St.16 (Gundo) ; St.17 (Teraoka) ; St.18 (Hoshitake Br.) ; St.19 (Niitaka Br.) ; St.20 (Sawado Br.) ; St.21 (Kowada Br.) ; St.22 (Akikawa Br.) ; St.23 (Ajiro Br.) ; St.24 (Akiru Br.) ;

St.25 (Higashi-Akiru Br.) ; St.26 (Takatsuki Br.) : R.Yaji -- St.1 (Asahi Br.) : R.Asakawa -- St.2 (Kayakko-dani) ; St.7 (Nakai Br.) ; St.8 (a small stream, Koashi) ; St.9 (Koashi) ; St.10 (Yashiki) ; St.14 (a small stream, Iriyama) ; St.17 (R.Daigo) ; St.18 (Ninikuzawa) ; St.20 (a small stream) ; St.21 (Kawaino) ; St.22 (Kitsunezuka) ; St.23 (Kawarajuku Br.) ; St.24 (Motoki Br.) ; St.25 (Kakuei Br.) ; St.27 (Umenoki Br.) ; St.28 (Takaosanguchi) ; St.29 (Kamikunugida Br.) ; St.30 (Kobotoke Lodge) ; St.31 (Hikage Br.) ; St.32 (Kogezawa junction) ; St.33 (Surisashi) ; St.34 (Jadaki-guchi) ; St.35 (Shikishima Br.) ; St.36 (Minase Br.) ; St.38 (Asakawa Br.) ; St.39 (Ôwada Br.) ; St.40 (Hirayama Br.) ; St.41 (Takahata Br.) ; St.42 (Arai Br.) : R.Ôkuri -- St.1.

SUPPLEMENT : IDE --- *Baetis thermicus* -- R.Nippara -- (St.G), (St.H), (St.I), (St.J), (St.6), (St.7), (St.15), (St.18) : R.Tama -- (St.D), (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.25), (St.26), (St.27), (St.29), (St.31), (St.32), (St.33) : R.Ôtanba -- (St.5) : R.Hirai -- (St.2) : R.Akikawa -- (St.18), (St.25), (St.26) : R.Yaji -- (St.1) : R.Asakawa -- (St.35), (St.36), (St.39), (St.42) : R.Ôkuri -- (St.1) : IIMURA --- *Baetis* sp. -- R.Nippara -- (St.7), (St.18) : R.Tama -- (St.1), (St.5), (St.15), (St.16), (St.19), (St.21), (St.22), (St.23), (St.24) : R.Unazawa -- (St.K) : R.Akikawa -- (St.1), (St.7), (St.O), (St.11), (St.13), (St.20), (St.26) : R.Asakawa -- (St.42) :

METOC --- R.Taba -- (St.7) : R.Kukizawa -- (St.B) : R.Nippara -- (St.18) : R.Tama -- (St.D), (St.1), (St.4), (St.8), (St.14), (St.15), (St.17) : R.Irikawa -- (St.1) : R.Ôtanba -- (St.6) : R.Ôsawa -- (St.M) : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G), (St.6) : METOC-W --- R.Tama -- (St.31) : TMG-BEP --- R.Hirai -- (St.2) : R.Akikawa -- (St.26) : R.Yaji -- (St.1) : R.Asakawa -- (St.P), (St.36), (St.41) : TSUDA --- R.Tama -- (St.1), (St.3), (St.15), (St.18), (St.21), (St.22), (St.23), (St.24), (St.25), (St.26), (St.30), (St.31) : R.Akikawa -- (St.26) : HASHIGAMI --- R.Ôtanba -- (St.6) : R.Tama -- (St.5), (St.6), (St.12), (St.15), (St.16), (St.21) : KRIEP --- R.Taba -- (St.A) : R.Tama -- (St.2), (St.15), (St.17), (St.23), (St.26), (St.31), (St.32), (St.33) : MIYASHITA --- R.Tama -- (St.17), (St.18), (St.21), (St.23), (St.24), (St.27), (St.28), (St.31), (St.32) : HISAI --- R.Asakawa -- (St.28).

Genus *Pseudocloëon*

1. *Pseudocloëon japonica* (IMANISHI) (Fig. 21)

(= *Baëtiella japonica* IMANISHI)

Loc. & date : R.Kosuge -- St.7 (Urakubo) 1979-8-18 : R.Nippara -- St.G (Nippara Lodge), St.15 (Shiraishi Br.) 1969-7-24 ; St.16 (above the Meoto Br.), St.17 (below the Meoto Br.) 1963-8-20 ; St.18 (Shōwa Br.) 1959-summer, 1963-6-24, 1963-8-20, 1969-7-24, 1975-5-29, 1975-8-15 : R.Ôtanba -- St.5 (Kitagawa Br.) 1963-6-15, 1969-7-23 ; St.6 (Taishō Br.) 1960-7-21, 1963-6-15, 1963-8-21 : R.Tama -- St.1 (Shōwa Br.) 1963-6-24, 1963-8-20, 1969-7-24, 1975-8-15 ; St.3 (Shiromaru) 1959-summer ; St.4 (Mansei Br.) 1969-7-23 ; St.5 (Kawai) 1959-summer, 1960-7-21, 1964-8-31 ; St.6 (Kawai) 1963-6-15, 1964-8-31 ; St.7 (Umezawa Br.) 1963-6-24 ; St.8 (Mitake Br.) 1963-6-24, 1964-8-31, 1969-7-23 ; St.10 (Yoroi Br.) 1969-7-24, 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 ; St.12 (Jindai Br.) 1969-7-23 ; St.14 (Mannen Br.) 1959-summer ; St.15 (Chōfu Br.) 1969-7-23 ; St.16 (Tamagawa Br.) 1959-summer, 1969-7-24 ; St.17 (above the Hamura Dam) 1960-7-21, 1969-7-24 ; St.18 (below the Hamura Dam) 1959-summer, 1963-6-24, 1963-8-25, 1969-7-24, 1971-12-6, 1975-8-15, 1975-11-11 ; St.19 (Nagata Br.) 1975-11-11 ; St.20 (Tama Br.) 1960-7-21, 1975-11-11 ; St.21 (Haijima Br.) 1960-7-21, 1964-5-31, 1965-7-31, 1969-8-11, 1971-12-7, 1972-8-17, 1975-5-28, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1969-8-11, 1971-12-7, 1972-8-17, 1975-5-27, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1971-12-7, 1972-8-17, 1975-10-23 ; St.24 (Sekido Br.) 1969-8-11, 1975-10-23 ; St.25 (Koremasa Br.) 1975-10-23 ; St.31 (below the Shukugawara Dam) 1969-8-15 ; St.32 (Futago Br.) 1963-6-25, 1975-10-22 : R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1965-7-31, 1969-7-24, 1971-12-6, 1975-5-28, 1975-11-11 : R.Akikawa -- St.4 (Henbori) 1969-7-21 ; St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ; St.7 (Sasano) 1959-summer, 1960-7-21, 1965-7-30 ; St.8 (Tachibana Br.) 1965-7-29 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.11 (Shirokura) 1959-summer, 1960-7-21 ; St.12 (Kita-Akikawa Br.) 1965-7-30, 1969-7-21 ; St.13 (Wada Br.) 1959-summer, 1965-7-30, 1969-7-21 ; St.14 (Ozu Br.) 1965-7-30, 1969-7-21 ; St.16 (Gundō) 1959-summer, 1965-7-30 ; St.17 (Teraoka) 1969-7-21 ; St.18 (Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1959-summer, 1960-7-21, 1969-7-21 ; St.20 (Sawado Br.) 1965-7-30 ; St.21 (Kowada Br.) 1963-6-24, 1969-7-21 ; St.22 (Akikawa Br.) 1959-summer, 1965-7-30, 1969-7-21, 1972-8-16, 1975-8-14, 1975-10-24 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23, 1971-12-6, 1975-5-28 ;

St.24 (Akiru Br.) 1959-summer, 1960-7-21, 1965-7-31, 1969-7-23 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1959-summer, 1965-7-31, 1969-7-23, 1972-8-16, 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.22 (Kitsunezuka) 1978-11-21 ; St.23 (Kawarajuku Br.) 1959-summer ; St.24 (Motoki Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.27 (Umenoki Br.) 1959-summer, 1960-7-20 ; St.28 (Takaosan-guchi) 1969-7-22 ; St.29 (Kami-Kunugida Br.) 1959-summer, 1969-7-22 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16 ; St.34 (Jadaki-guchi) 1969-7-22, 1976-8-18 ; St.35 (Shikishima Br.) 1959-summer, 1969-7-22, 1972-8-17 ; St.36 (Minase Br.) 1975-10-24 ; St.38 (Asakawa Br.) 1975-8-14, 1975-10-24 ; St.40 (Hirayama Br.) 1969-7-22, 1972-8-17.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.J), (St.6), (St.7), (St.12), (St.15), (St.18) : R.Tama -- (St.D), (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.29), (St.31) : R.Ôtanba -- (St.5) : R.Hirai -- (St.2) : R.Akikawa -- (St.18), (St.25), (St.26) : R.Asakawa -- (St.35).

IIMURA --- R.Nippara -- (St.7), (St.18) : R.Unazawa -- (St.K) : R.Tama -- (St.1), (St.5), (St.14), (St.16), (St.21), (St.22), (St.23) : R.Akikawa -- (St.1), (St.7), (St.0), (St.11), (St.13), (St.20), (St.26) : R.Asakawa -- (St.42) : METOC --- R.Taba -- (St.7) : R.Kukizawa -- (St.B) : R.Nippara -- (St.18) : R.Irikawa -- (St.1) : R.Tama (St.D), (St.1), (St.4), (St.8), (St.15), (St.17) : R.Ôtanba -- (St.6) : R.Ôsawa -- (St.M) : TMG-BEP-T --- R.Nippara -- (St.E), (St.G) : TMG-BEP --- R.Akikawa -- (St.26) : R.Asakawa -- (St.P0, (St.36) : TSUDA --- R.Tama -- (St.1), (St.3), (St.15) : KRIEP --- R.Taba -- (St.A) : R.Tama -- (St.2), (St.15), (St.17) : HASHIGAMI --- R.Ôtanba -- (St.6) : R.Tama -- (St.4), (St.5), (St.6), (St.12), (St.15), (St.16), (St.21) : MIYASHITA --- R.Tama -- (St.17), (St.18), (St.21), (St.24).

FAMILY ISONYCHIIDAE

Genus *Isonychia*

1. *Isonychia japonica* ULMER (Fig.22)

Loc. & date : R.Kosuge -- St.7 (Urakubo) 1979-8-18 : R.Tama -- St.3-4 (Hatonosu) 1964-5-3 ; St.10 Yoroi Br.) 1969-7-24, 1971-12-6, 1972-8-16, 1975-11-11 ; St.12 (Jindai Br.) 1960-7-21, 1969-7-23 ; St.17 (above the Hamura

Dam) 1972-8-16 ; St.18 (below the Hamura Dam) 1971-12-6, 1975-8-15, 1975-11-11 ; St.19 (Nagata Br.) 1972-8-16, 1975-11-11 ; St.20 (Tama Br.) 1960-7-21 ; St.21 (Haijima Br.) 1965-7-31, 1971-12-7, 1972-8-17, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1960-7-20, 1971-12-7, 1972-8-17, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1960-7-20, 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.) 1975-5-27 : R.Hirai -- St.2 (Tasai Br.) 1960-7-21, 1965-7-31, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.6 (Kasuga Br.) 1969-7-21 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.11 (Shirokura) 1960-7-21 ; St.12 (Kita-Akikawa Br.) 1965-7-30, 1969-7-21 ; St.14 (Ozu Br.) 1969-7-21 ; St.16 (Gundô) 1965-7-30 ; St.17 (Teraoka) 1969-7-21 ; St.17-18 (Ochiai Br.) 1960-7-21 ; St.18 (Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1960-7-21, 1969-7-21 ; St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1969-7-21, 1972-8-16, 1975-8-14, 1975-11-11 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23, 1971-12-6, 1975-5-28 ; St.24 (Akiru Br.) 1965-7-31, 1969-7-23 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1965-7-31, 1969-7-23, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.25 (Kakuei Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.27 (Umenoki Br.) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28 ; St.33 (Surisashi) 1975-5-28, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-7-16, 1976-11-15 ; St.35 (Shikishima Br.) 1971-12-6 ; St.38 (Asakawa Br.) 1972-8-17.

SUPPLEMENT : IDE --- R.Nippara -- (St.18) : R.Ôtanba -- (St.5) : R.Tama -- (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.26), (St.31), (St.32), (St.33) : R.Hirai -- (St.2) : R.Akikawa -- (St.18), (St.25), (St.26) : R.Asakawa -- (St.35)--- (Dates are omitted.) : IIMURA --- R.Nippara -- (St.18) : R.Unazawa -- (St.K) : R.Tama -- (St.1), (St.14), (St.16), (St.21), (St.22), (St.23) : R.Akikawa -- (St.13), (St.20), (St.26) --- (Dates are omitted.) : METOC --- R.Taba -- (St.7) 1976-9-28 : R.Tama -- (St.8), (St.15), (St.17) 1976-10-26, 1976-11-25, 1977-1-25 : R.Irikawa -- (St.1) 1976-9-28, 1976-11-25 : METOC-W --- R.Tama -- (St.31) 1979-12-14 : TMG-BEP --- R.Hirai -- (St.2) 1980-9-29, 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1980-7-21, 1980-12-8 : TSUDA --- R.Tama -- (St.3), (St.15), (St.21) 1973-Sept. : R.Akikawa -- (St.26) 1973-Sept. : HISAI --- R.Asakawa -- (St.28) 1979-11-28 :

KRIEP --- R.Tama -- (St.15) 1979-9-13 ; (St.17) 1979-9-13 : HASHIGAMI ---
R.Tama -- (St.4) 1973-8-4 ; (St.5) 1973-8-11 ; (St.15) 1973-8-15 ; (St.21)
1973-8-25 : MIYASHITA --- R.Tama -- (St.18), (St.21) 1975-10-9.

FAMILY SIPHLONURIDAE

Genus Siphonurus

1. *Siphonurus sanukensis* TAKAHASHI (Fig.21)
Loc. & date : R.Asakawa -- St.24 (Motoki Br.) 1979-3-13.
2. *Siphonurus binotatus* EATON (Fig.21)
Loc. & date : R.Asakawa -- St.35 (Shikishima Br.) 1982-4-23.
3. *Siphonurus* sp. (Fig.21)
Loc. & date : R.Tama -- St.17 (above the Hamura Dam) 1975-5-28.

Genus Ameletus

1. *Ameletus kyotoensis* IMANISHI (Fig.23)
Loc. & date : R.Asakawa -- St.3, St.6 (small streams) 1979-3-12.
2. *Ameletus montanus* IMANISHI (Fig.23)
Loc. & date : R.Asakawa -- St.8 (Koashi) 1979-3-12 ; St.11 (Oyashiki), St.12
(Mikami Br.) 1979-3-13 ; St.17 (R.Daigo), St.21 (Kawaino), St.22 (Kitsune-
zuka) 1978-11-21 ; St.33 (Surisashi) 1976-11-15.
SUPPLEMENT : IIMURA --- R.Unazawa -- (St.K) 1972-12-6 : METOC --- R.Kukizawa
-- (St.B) 1976-11-25 ; R.Tama -- (St.1) 1977-1-25 ; (St.3) 1976-11-25 ;
R.Ôtanba -- (St.6) 1977-1-25 ; R.Ôsawa -- (St.M) 1976-11-25, 1977-1-25.
3. *Ameletus costalis* MATSUMURA (Fig.23)
Loc. & date : R.Akikawa -- St.22 (Akikawa Br.) 1965-7-30.
SUPPLEMENT : IIMURA --- R.Tama -- (St.5) 1974-3-2, 1975-3-25 : R.Nippara --
(St.7) 1974-3-1, 1975-2-5 : R.Akikawa -- (St.1) 1975-2-4.
4. *Ameletus* sp. (Fig.23)
Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1971-12-6 : R.Akikawa -- St.10
(Ozawa), St.13 (Wada Br.), St.16 (Gundo), St.20 (Sawado Br.), St.22 (Akikawa
Br.) 1965-7-30 ; St.23 (Ajiro Br.), St.24 (Akiru Br.) 1965-7-31.
SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.E) 1976-autumn : TMG-BEP ---
R.Asakawa -- (St.P) 1980-9-29.

FAMILY HEPTAGENIIDAE

(= ECDYONURIDAE)

Genus BLEPTUS

1. *Bleptus fasciatus* EATON (Fig.24)

Loc. & date : R.Taba -- St.2 (a small stream) 1977-4-26 : R.Kosuge -- St.3 (a small stream), St.6 (Wasabida) 1979-8-18 : R.Nippara -- St.1, St.2, St.3, St.4 (small streams) 1977-5-9, 1979-10-25 : R.Ôtanba -- St.1, St.4 (small streams) 1977-5-10 : R.Akikawa -- St.2 (a small stream) 1979-5-30 : R.Asakawa -- St.14 (a small stream) 1978-11-20 ; St.20 (a small stream) 1978-11-21.
SUPPLEMENT : IDE --- *Bleptus* sp. --- R.Tama -- (St.21) 1975-7-29.

Genus Epeorus

1. *Epeorus hiemalis* IMANISHI (Fig.24)

Loc. & date : R.Akikawa -- St.31 (Hikage Br.) 1976-10-28.
SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.6), (St.7) 1977-6-4 : R.Tama -- (St.1) 1974-2-2 ; (St.2) 1977-6-4 ; (St.31) 1977-10-9 : METOC --- R.Kukizawa -- (St.B) 1976-9-28, 1976-11-25, 1977-1-25 ; R.Tama -- (St.1) 1977-1-25 : HASHIGAMI --- R.Tama -- (St.4) 1973-8-4 ; (St.15) 1973-8-15 : MIYASHITA --- R.Tama -- (St.17) 1970-10-9.

2. *Epeorus uenoi* MATSUMURA (Fig.25)

Loc. & date : R.Kosuge -- St.7 (Urakubo) 1979-8-18 : R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.15 (Shiraishi Br.) 1969-7-24 ; St.18 (Shôwa Br.) 1963-6-24, 1963-8-20, 1969-7-24, 1975-5-29 : R.Tama -- St.1 (Shôwa Br.) 1969-7-24, 1975-5-29 ; St.10 (Yoroi Br.) 1969-7-24, 1975-5-28, 1975-8-15 ; St.17 (Hamura Dam) 1960-7-21, 1969-7-24 ; St.18 (Hamura Dam) 1975-11-11 : R.Hirai -- St.2 (Tasai Br.) 1975-8-15 : R.Akikawa -- St.11 (Shirokura) 1960-7-21 ; St.16 (Gundô) 1959-summer ; St.22 (Akikawa Br.) 1975-10-24 ; St.23 (Ajiro Br.) 1975-5-28 ; St.26 (Takatsuki Br.) 1975-8-14 : R.Asakawa -- St.22 (Kitsunezuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1959-summer, 1976-8-18.
SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.I), (St.6), (St.12), (St.15) 1977-6-4 ; (St.J) 1977-6-5 ; (St.18) 1973-8-21, 1974-2-2, 1977-6-4, 1978-8-17 : R.Tama -- (St.D) 1977-6-4 ; (St.1) 1973-8-21, 1974-2-2, 1979-1-6 ; (St.2) 1973-8-21, 1974-2-2, 1977-6-4, 1978-8-17, 1979-1-6 ; (St.10) 1973-8-21 ; (St.15) 1973-5-29, 1973-8-21, 1974-2-2, 1978-8-17 ; (St.18) 1976-8-19 ;

(St.20) 1974-10-22 ; (St.21) 1974-10-21, 1975-7-29, 1976-8-19 : R.Ôtanba
 -- (St.5) 1973-8-21, 1974-2-2, 1978-8-17 : R.Hirai -- (St.2) 1974-2-1,
 1974-10-22 : R.Akikawa -- (St.18) 1973-8-21 ; (St.25) 1973-5-29 ; (St.26)
 1974-10-23, 1978-8-17 : R.Asakawa -- (St.35) 1978-8-16, 1979-1-6 ;
 IIMURA --- R.Nippara -- (St.7), (St.18) : R.Tama -- (St.1), (St.14), (St.16),
 (St.21), (St.22) : R.Unazawa -- (St.K) : R.Akikawa -- (St.1), (St.0), (St.7),
 (St.11), (St.13), (St.20), (St.26) --- (Dates are omitted.)
 METOC --- R.Taba -- (St.7) 1976-9-28, 1976-10-26, 1977-1-25 : R.Kukizawa --
 (St.B) 1976-9-28, 1977-1-25 : R.Tama -- (St.1) 1976-10-26, 1976-11-25 ;
 (St.8) 1976-10-26, 1977-1-25 ; (St.15) 1976-10-26 ; (St.17) 1976-9-28 :
 R.Nippara -- (St.18) 1976-9-28, 1976-10-26, 1976-11-25, 1977-1-25 :
 R.Irikawa -- (St.1) 1976-9-28 : R.Ôtanba -- (St.6) 1976-9-28, 1976-10-26,
 1976-11-25, 1977-1-25 : R.Ôsawa -- (St.M) 1976-9-28, 1976-11-25 : TSUDA ---
 R.Tama -- (St.1) 1973-Sept. : R.Akikawa -- (St.26) 1973-Sept. : KRIEP ---
 R.Taba -- (St.A) 1979-9-13 : R.Tama -- (St.2), (St.17) 1979-9-13 : HASHIGAMI
 --- R.Ôtanba -- (St.6) 1973-8-11 : R.Tama -- (St.4) 1973-8-4 ; (St.5) 1973
 -8-11 ; (St.6), (St.12) 1973-8-13 ; (St.15), (St.16) 1973-8-15.

3. *Epeorus latifolium* UENO (Fig.26)

Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Urakubo) 1979-8-18 :
 R.Nippara -- St.15 (Shiraishi Br.) 1969-7-24 ; St.16 (above the Meoto Br.),
 St.17 (below the Meoto Br.) 1963-8-30 ; St.18 (Shôwa Br.) 1963-6-24, 1963-
 8-20, 1969-7-24, 1975-5-29, 1975-8-15, 1975-11-11 : R.Ôtanba -- St.5 (Kita-
 gawa Br.) 1963-6-15, 1963-8-2 ; St.6 (Taishô Br.) 1960-7-21 : R.Tama --
 St.1 (Shôwa Br.) 1960-7-22, 1969-7-24, 1975-8-15, 1975-11-11 ; St.2 (Unazawa)
 1959-summer ; St.3-4 (Hatonosu) 1964-5-3 ; St.4 (Mansei Br.) 1969-7-23 ;
 St.5 (Kawai junction) 1960-7-21, 1963-6-15, 1963-8-21, 1964-8-31 ; St.6
 (below the Kawai Dam) 1959-summer, 1963-6-15 ; St.7 (Umezawa Br.) 1963-6-24 ;
 St.8 (Mitake Br.) 1963-6-24, 1964-5-3, 1964-8-31, 1969-7-23 ; St.9 (Ikusabata)
 1963-8-21, 1964-5-3, 1964-8-31 ; St.10 (Yoroi Br.) 1969-7-24, 1971-12-6,
 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 ; St.12 (Jindai Br.) 1960-7-21,
 1964-5-3, 1969-7-23 ; St.14 (Mannen Br.) 1960-7-21, 1963-8-25, 1964-5-3,
 1964-9-1 ; St.15 (Chôfu Br.) 1969-7-23 ; St.16 (Tamagawa Br.) 1959-summer,
 1963-8-25, 1969-7-24 ; St.17 (above the Hamura Dam) 1960-7-21, 1969-7-24,
 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15 ; St.18 (below the Hamura Dam)
 1959-summer, 1960-7-21, 1964-5-31, 1964-9-2, 1969-7-24, 1975-5-28, 1975-8-15,
 1975-11-11 ; St.19 (Nagata Br.) 1975-8-14, 1975-11-11 ; St.20 (Tama Br.)

1959-summer, 1960-7-21, 1963-8-25, 1975-11-11 ; St.21 (Haijima Br.) 1960-7-21, 1963-8-25, 1964-5-31, 1965-7-31, 1969-8-11, 1972-8-17, 1975-5-28, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ōhashi Br.) 1960-7-20, 1964-5-31, 1971-12-7, 1972-8-17, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1960-7-20, 1972-8-17, 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.) 1972-8-18, 1975-8-13, 1975-10-23 ; St.25 (Koremasa Br.) 1972-8-18, 1975-8-13 ; St.26 (Tamagawara Br.) 1975-8-13 ; St.31 (below the Shukugawara Dam) 1969-8-15 ; St.32 (Futago Br.) 1975-8-12, 1975-10-22 : R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1960-7-21, 1965-7-31, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.6 (Kasuga Br.) 1965-7-29 ; St.7 (Sasano) 1960-7-21, 1963-8-25, 1965-7-30 ; St.8 (Tachibana Br.) 1965-7-29 ; St.10 (Ozawa) 1965-7-30, St.11 (Shirokura) 1969-7-21, 1963-8-25 ; St.12 (Kita-Akikawa Br.) 1965-7-30 ; St.13 (Wada Br.) 1965-7-30 ; St.14 (Ozu Br.) 1963-8-25, 1965-7-30 ; St.16 (Gundō) 1959-summer, 1960-7-21, 1965-7-30 ; St.17-18 (Ochiai Br.) 1960-7-21 ; St.19 (Niitaka Br.) 1959-summer, 1960-7-21 ; St.20 (Sawado Br.) 1965-7-30 ; St.21 (Kowada Br.) 1959-summer ; St.22 (Akikawa Br.) 1959-summer, 1960-7-21, 1963-8-25, 1965-7-30, 1972-8-16, 1975-5-28, 1975-10-24 ; St.23 (Ajiro Br.) 1965-7-31, 1971-12-6, 1975-5-28 ; St.24 (Akiru Br.) 1959-summer, 1960-7-21, 1965-7-31 ; St.25 (Higashi-Akiru Br.) 1963-8-25, 1965-7-31 ; St.26 (Takatsuki Br.) 1959-summer, 1960-7-21, 1965-7-31, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-14, 1975-11-11 : R.Yaji -- St.1 (Asahi Br.) 1960-7-20 : R.Asakawa -- St.17 (R.Daigo) 1978-11-21 ; St.22 (Kitsunozuka) 1978-11-21 ; St.23 (Kawarajuku Br.) 1959-summer, 1963-8-25 ; St.24 (Motōki Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1964-7-17 ; St.29 (Kamikunugida Br.) 1964-7-17 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1959-summer, 1960-7-20, 1976-8-18 ; St.35 (Shikishima Br.) 1960-7-20, 1964-7-24, 1972-8-17 ; St.36 (Minase Br.) 1975-10-24 ; St.38 (Asakawa Br.) 1972-8-17, 1975-8-14, 1975-10-24 ; St.40 (Hirayama Br.) 1975-8-14, 1975-10-24 ; St.42 (Arai Br.) 1975-10-23.

SUPPLEMENT : (Localities above noted are omitted.)

IDE --- R.Nippara -- (St.G), (St.H), (St.6), (St.7), (St.12) : R.Tama -- (St.D), (St.29), (St.33) : IIMURA --- R.Nippara -- (St.7) : R.Unazawa -- (St.K) : R.Akikawa -- (St.1), (St.O) : METOC --- R.Taba -- (St.7) :

R.Kukizawa -- (St.B) : R.Tama -- (St.D) : R.Irikawa -- (St.1) : R.Ôsawa
-- (St.M) : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G), (St.6) :
TMG-BEP --- R.Asakawa -- (St.P) : KRIEP --- R.Ôtamba -- (St.A).

4. *Epeorus aesculus* IMANISHI (Fig.24)

Loc. & date : R.Asakawa -- St.34 (Jadaki-guchi) 1959-summer.

SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.6), (St.12),
(St.15), (St.18) 1977-6-4 ; (St.J) 1977-6-5 : R.Tama -- (St.2) 1977-6-4,
1979-1-6 ; (St.15) 1979-1-6 : R.Akikawa -- (St.26) 1978-8-17, 1979-1-6.

5. *Epeorus curvatulus* MATSUMURA (Fig.27)

Loc. & date : R.Kosuge -- St.1 (a small stream), St.7 (Urakubo) 1979-8-18 :

R.Tama -- St.1 (Shôwa Br.) 1975-5-29, 1975-8-15 ; St.10 (Yoroi Br.) 1971-
12-7, 1975-11-11 ; St.17 (above the Hamura Dam) 1960-7-21, 1971-12-6 ;
St.22 (Tama-Ôhashi Br.) 1971-12-7 : R.Akikawa -- St.22 (Akikawa Br.) 1975-
10-24 : R.Hirai -- St.2 (Tasai Br.) 1975-8-15 : R.Asakawa -- St.20 (a small
stream), St.21 (Kawaino) 1978-11-21 ; St.30 (Kobotoke Lodge) 1964-7-17 ;
St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-
9-25 : St.33 (Surisashi) 1975-5-28, 1975-8-14, 1976-7-16, 1976-11-15 ; St.34
(Jadaki-guchi) 1976-8-18 ; St.35 (Shikishima Br.) 1972-8-17 ; St.38
(Asakawa Br.) 1972-8-17.

SUPPLEMENT : IDE --- R.Nippara -- (St.G) 1977-6-4 ; (St.J) 1977-6-5 :
R.Ôtamba -- (St.5) 1973-8-21 : R.Tama -- (St.22) 1975-7-29 : IIMURA ---
R.Akikawa -- (St.7), (St.26) : METOC --- R.Kukizawa -- (St.B) 1976-9-28 :
R.Tama -- (St.D), (St.1) 1976-11-25 ; (St.8) 1976-11-25, 1977-1-25 ; (St.15)
1976-11-25 ; (St.17) 1976-11-25, 1977-1-25 : R.Nippara -- (St.18) 1976-9-
28 : R.Ôtamba -- (St.6) 1976-11-25, 1977-1-25 : R.Ôsawa -- (St.M) 1976-9-28,
1976-11-25 : TMG-BEP-T --- R.Nippara -- (St.E) 1977-7-30 ; (St.F) 1977-7-
31 ; (St.G) 1977-7-31 ; (St.6) 1977-9-11 : TMG-BEP --- R.Hirai -- (St.2)
1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-12-8, 1981-2-16 : HASHIGAMI
--- R.Tama -- (St.4) 1973-8-4 : MIYASHITA --- R.Tama -- (St.17) 1970-10-9.

6. *Epeorus ikanonis* TAKAHASHI (Fig.28)

Loc. & date : R.Akikawa -- St.7 (Sasano) 1965-7-30 : R.Asakawa -- St.30
(Kobotoke Lodge) 1964-7-17 ; St.35 (Shikishima Br.) 1971-12-6.

SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1979-1-6 : R.Tama -- (St.1),
(St.2), (St.10) 1976-1-6 : R.Ôtamba -- (St.5) 1976-1-6 : R.Akikawa -- (St.13),
(St.26) 1979-1-6 : R.Asakawa -- (St.35) 1979-1-6 : IIMURA --- R.Nippara --

(St.7), (St.18) : R.Tama -- (St.1), (St.5) : R.Unazawa -- (St.K) :
R.Akikawa -- (St.1), (St.7), (St.11), (St.13), (St.20), (St.26) : METOC
--- R.Kukizawa -- (St.B) 1976-9-28, 1977-1-25 ; R.Taba -- (St.7) 1977-1-25 :
R.Tama -- (St.D), (St.1) 1977-1-25 ; (St.4) 1976-11-25, 1977-1-25 ; (St.15)
1976-9-28, 1977-1-25 : R.Nippara -- (St.18) 1977-1-25 : R.Ôtanba -- (St.6)
1977-1-25 : R.Ôsawa -- (St.M) 1977-1-25 : TMG-BEP --- R.Akikawa -- (St.26)
1981-2-16 : HASHIGAMI --- R.Ôtanba -- (St.6) 1973-8-11 : R.Tama -- (St.4)
1973-9-4 : MIYASHITA --- R.Tama -- (St.21) 1970-10-9.

7. *Epeorus napaeus* IMANISHI (Fig.24)

SUPPLEMENT :

Loc. & date : HASHIGAMI --- R.Tama -- (St.5) 1973-8-11.

8. *Epeorus* sp.

Loc. & date : R.Kosuge -- St.1 (a small stream) 1979-8-18 : R.Nippara --
St.G (Nippara Lodge) 1975-5-29 ; St.17 (Meoto Br.) 1963-8-20 ; St.18
(Shôwa Br.) 1960-7-22 : R.Tama -- St.1 (Shôwa Br.) 1960-7-22, 1975-11-11 ;
St.2 (Unazawa) 1959-summer ; St.3 (Shiromaru) 1960-7-22 ; St.6 (Kawai) 1959
-summer, 1963-6-15, 1964-5-3, 1964-8-31 ; St.7 (Umezawa Br.) 1963-6-24 ;
St.8 (Mitake Br.) 1964-5-3, 1964-8-31 ; St.9 (Ikusabata) 1963-8-21 ; St.14
(Mannen Br.) 1959-summer, 1963-8-25 ; St.16 (Tamagawa Br.) 1960-7-21, 1963
-8-25 ; St.18 (Hamura Dam) 1960-7-21, 1964-5-31, 1964-9-2 ; St.20 (Tama Br.)
1959-summer ; St.21 (Haijima Br.) 1975-5-28 : R.Ôtanba -- St.5 (Kitagawa Br.)
1963-6-15 ; St.6 (Taishô Br.) 1963-8-21, 1964-5-3 : R.Hirai -- St.2 (Tasai
Br.) 1959-summer, 1965-7-31 : R.Akikawa -- St.7 (Sasano) 1959-summer, 1963-
8-25, 1965-7-30 ; St.10 (Ozawa) 1965-7-30 ; St.11 (Shirokura) 1963-8-25 ;
St.12 (Kita-Akikawa Br.), St.13 (Wada Br.), St.14 (Ozu Br.) 1965-7-30 ;
St.16 (Gundô) 1959-summer, 1965-7-30 ; St.19 (Niitaka Br.) 1959-summer ;
St.20 (Sawado Br.) 1965-7-30 ; St.22 (Akikawa Br.) 1963-8-25, 1965-7-30,
1975-10-24 ; St.23 (Ajiro Br.) 1965-7-31 ; St.24 (Akiru Br.) 1960-7-21,
1965-7-31 : R.Asakawa -- St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ;
St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28 ; St.33
(Surisashi) 1975-10-23 ; St.34 (Jadaki-guchi) 1964-7-17.

Genus *Ecdyonurus*

1. *Ecdyonurus yoshidae* TAKAHASHI (Fig.30)

Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Urakubo) 1979-8-18 ;
 R.Nippara -- St.16 (upper stream of the Meoto Br.), St.17 (lower stream
 of the Meoto Br.), St.18 (Shōwa Br.) 1963-8-20 ; R.Ōtanba --- St.5
 (Kitagawa Br.) 1963-6-15 ; St.6 (Taishō Br.) 1963-6-15, 1963-8-21 ;
 R.Tama -- St.1 (Shōwa Br.) 1975-5-29 ; St.10 (Yoroi Br.) 1975-8-15, 1975
 -11-11 ; St.12 (Jindai Br.) 1963-8-25 ; St.17 (upper stream of the Hamura
 Dam) 1972-8-17 ; St.18 (lower stream of the Hamura Dam) 1971-12-6; 1975-
 8-15, 1975-11-11 ; St.19 (Nagata Br.) 1975-8-14, 1975-11-11 ; St.20 (Tama
 Br.) 1975-8-14, 1975-11-11 ; St.21 (Haijima Br.) 1971-12-7, 1972-8-17,
 1975-5-28, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ōhashi Br.) 1960-7-20, 1963
 -8-25, 1971-12-7, 1972-8-17, 1975-8-13, 1975-11-11 ; St.23 (Hino Br.)
 1960-7-20, 1963-6-30, 1972-8-17, 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.)
 1963-7-1, 1975-8-13 ; St.25 (Koremasa Br.) 1975-8-13, 1975-10-23 ; St.26
 (Tamagawara Br.) 1963-7-1 ; St.30 (Tama-Suidō Br.) 1963-7-1 ; St.33 (Maruko
 Br.) 1963-6-30 ; St.34 (Tamagawa-Ōhashi Br.), St.35 (Hirama Br.), St.36
 (Rokugō Br.) 1963-6-24 ; R.Hirai -- St.2 (Tasai Br.) 1963-8-25, 1971-12-6,
 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 ; R.Akikawa -- St.7 (Sasano)
 1960-7-21 ; St.8 (Tachibana Br.) 1965-7-29 ; St.11 (Shirokura) 1960-7-21 ;
 St.14 (Ozu Br.) 1963-8-25 ; St.16 (Gundō) 1960-7-21, 1965-7-30 ; St.17-18
 (Ochiai Br.) 1960-7-21 ; St.19 (Niitaka Br.) 1960-7-21, 1969-7-21 ; St.20
 (Sawado Br.) 1963-7-21 ; St.21 (Kowada Br.) 1963-6-24 ; St.22 (Akikawa Br.)
 1960-7-21, 1963-8-25, 1972-8-16, 1975-8-14 ; St.23 (Ajiro Br.) 1963-6-24,
 1975-5-28 ; St.24 (Akiru Br.) 1963-8-25 ; St.25 (Higashi-Akiru Br.) 1963-
 8-25, 1965-7-31 ; St.26 (Takatsuki Br.) 1963-7-21, 1965-7-31, 1971-12-6,
 1972-8-16, 1975-5-28, 1975-8-14, 1975-11-11 ; R.Yaji -- St.1 (Asahi Br.)
 1960-7-20, 1963-8-25 ; R.Asakawa -- St.17 (R.Daigo), St.21 (Kawaino), St.22
 (Kitsunozuka) 1978-11-21 ; St.23 (Kawarajuku Br.) 1963-8-25 ; St.24 (Motoki
 Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.32 (Kogezawa junction) 1976-9-25 ;
 St.33 (Surisashi) 1975-10-24, 1976-11-15 ; St.34 (Jadaki-guchi) 1963-8-25,
 1976-8-18 ; St.36 (Minase Br.) 1975-10-24 ; St.38 (Asakawa Br.) 1972-8-17,
 1975-8-14, 1975-10-24 ; St.40 (Hirayama Br.) 1975-8-14, 1975-10-24 ; St.42
 (Arai Br.) 1972-8-17, 1975-10-23.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Tama -- (St.1), (St.2),
 (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23),

(St.24), (St.26) : R.Ôtanba -- (St.5) : R.Hirai -- (St.2) : R.Akikawa --
(St.18), (St.26) : R.Asakawa -- (St.35), (St.39) : IIMURA --- R.Tama --
(St.15), (St.16), (St.21), (St.22), (St.23), (St.24) : R.Akikawa -- (St.O),
(St.20), (St.26) : R.Asakawa -- (St.42) : METOC --- R.Tama -- (St.D),
(St.8), (St.17) : R.Ôsawa -- (St.M) : METOC-W --- R.Tama -- (St.31) :
TMG-BEP --- R.Hirai -- (St.2) : R.Akikawa -- (St.26) : R.Asakawa -- (St.P)
: TSUDA --- R.Tama -- (St.3), (St.18), (St.22) : R.Akikawa -- (St.26) :
KRIEP --- R.Taba -- (St.a) : R.Tama -- (St.2), (St.15), (St.17) : HASHI-
GAMI --- R.Tama -- (St.12) : MIYASHITA --- R.Tama -- (St.18), (St.21).

2. *Ecdyonurus tobiirenis* TAKAHASHI (Fig.31)

Loc. & date : R.Kosuge -- St.1 (a small stream), St.7 (Urakubo) 1979-8-18 :
R.Tama -- St.10 (Yoroi Br.) 1971-12-6 ; St.12 (Jindai Br.) 1960-7-21 ;
St.20 (Tama Br.) 1960-7-21 : R.Asakawa -- St.6 (a small stream) 1978-3-12 ;
St.18 (Ninikuzawa) 1978-11-21 ; St.20 (a small stream), St.21 (Kawaino),
St.22 (Kitsunozuka) 1978-11-21 ; St.24 (Motoki Br.) 1978-3-13 ; St.30
(Kobotoke Lodge) 1964-7-17.

SUPPLEMENT : IDE --- R.Nippara -- (St.5), (St.7), 1977-6-4 : R.Tama --
(St.2), (St.10), (St.15) 1974-2-2 ; (St.18) 1975-7-29, 1977-10-9 ; (St.21)
1977-10-9 ; (St.22) 1973-8-20, 1975-7-30 ; (St.23) 1977-10-9 ; (St.29),
(St.31) 1977-10-9 ; (St.32) 1977-10-11 ; (St.33) 1977-10-12 : R.Hirai --
(St.2) 1973-8-20, 1974-2-1 : R.Ôtanba -- (St.5) 1974-2-2 : R.Akikawa --
(St.18) 1974-2-1 ; (St.26) 1974-2-1, 1978-8-17 : METOC --- R.Taba --
(St.7) 1976-11-25, 1977-1-25 : R.Kukizawa -- (St.B) 1977-1-25 : R.Tama --
(St.D) 1977-1-25 ; (St.1) 1976-11-25 : R.Nippara -- (St.18) 1977-1-25 :
R.Ôsawa -- (St.M) 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôtanba -- (St.6)
1977-1-25 : HISAI --- R.Asakawa -- (St.28) 1979-11-28 : MIYASHITA ---
R.Tama -- (St.17), (St.21) 1970-10-9.

3. *Ecdyonurus kibunensis* IMANISHI (Fig.32)

Loc. & date : R.Kosuge -- St.7 (Urakubo) 1979-8-18 : R.Tama -- St.1
(Shôwa Br.) 1975-8-15 ; St.21 (Haijima Br.) 1975-5-28 : R.Hirai -- St.2
(Tasai Br.) 1975-5-28 : R.Asakawa -- St.21 (Kawaino), St.22 (Kitsunozuka)
1978-11-21 ; St.31 (Hikage Br.) 1976-12-7 ; St.32 (Kogezawa junction) 1976
- 9-25 ; St.33 (Surisashi) 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ;
St.34 (Jadaki-guchi) 1976-8-18 ; St.38 (Asakawa Br.) 1975-10-24.

SUPPLEMENT : IDE --- R.Nippara -- (St.H), (St.6), (St.7), (St.12), (St.18)
1977-11-4 : R.Tama -- (St.D) 1977-6-4 ; (St.1) 1978-8-17 ; (St.2) 1977-6
-4 ; (St.15) 1978-8-17 ; (St.18) 1974-10-24, 1976-8-19 ; (St.21) 1974-10-
21 ; (St.22) 1974-10-20 : R.Hirai -- (St.2) 1974-10-22 : R.Akikawa --
(St.26) 1974-10-23 : R.Asakawa -- (St.35) 1978-8-16 : IIMURA --- R.Nippara
-- (St.7), (St.18) : R.Tama -- (St.1), (St.5), (St.16), (St.22) : R.Akikawa
-- (St.1), (St.7), (St.11), (St.20), (St.26) --- (Dates are omitted.) :
METOC --- R.Taba -- (St.7) 1976-9-28 : R.Tama -- (St.D), (St.4) 1976-9-28
; (St.8) 1976-11-25 : R.Irikawa (St.1) 1976-9-28 : R.Ôsawa -- (St.M) 1977
-1-25.

SUPPLEMENT

1. *Ecdyonurus tigris* IMANISHI (Fig.33)

Loc. & date : IDE --- R.Nippara -- (St.H), (St.6), (St.7), (St.12), (St.18)
1977-6-4 : R.Tama -- (St.1), (St.2) 1973-8-21 ; (St.15) 1973-11-4 ; (St.21)
1973-8-20, 1973-11-4 ; (St.22) 1973-8-20 : R.Ôtanba -- (St.5) 1973-8-21 :
R.Hirai -- (St.2) 1973-8-20 : R.Akikawa -- (St.18) 1973-8-21 ; (St.26) 1973
-8-21, 1973-11-4.

2. *Ecdyonurus* sp. EA (Fig.33)

Loc. & date : IDE --- R.Tama -- (St.18), (St.19) 1975-7-29 ; (St.21) 1976
-8-19 ; (St.23) 1976-8-20 ; (St.26), (St.27) 1976-8-18.

Genus *Heptagenia*

1. *Heptagenia* sp. (Fig.33)

Loc. & date : R.Tama -- St.21 (Haijima Br.) 1975-11-11 : R.Akikawa --
St.23 (Ajiro Br.) 1975-5-28 : R.Asakawa -- St.33 (Surisashi) 1975-8-14 ;
St.34 (Jadaki-guchi) 1976-8-18.

SUPPLEMENT : IDE --- R.Tama -- (St.22) 1975-7-30 : METOC --- R.Tama --
(St.31) 1980-11-15 : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21, 1980-9-29,
1980-12-8, 1981-2-16 : MIYASHITA --- (*Heptagenia kihada*) -- R.Tama --
(St.21) 1970-10-9.

Genus *Cinygma*

1. *Cinygma hirasana* IMANISHI (Fig.34)

Loc. & date : R.Tama -- St.1 (Shôwa Br.) 1964-5-3 ; St.3 (Shiromaru) 1959
-summer ; St.6 (Kawai) 1963-6-15 ; St.7 (Umezawa Br.), St.8 (Mitake Br.)
1963-6-24 ; St.9 (Ikusabata) 1963-8-21 ; St.14 (Mannen Br.) 1959-summer,

1963-8-25, 1964-5-3 ; St.16 (Tamagawa Br.) 1963-8-25, 1964-9-1 ; St.18 (lower stream of the Hamura Dam) 1959-summer, 1963-8-25, 1964-5-31 ; St.20 (Tama Br.) 1959-summer, 1963-8-25, 1964-9-2 ; St.21 (Haijima Br.) 1959-summer, 1963-8-25, 1964-5-31, 1965-7-31 ; St.22 (Tama-Ôhashi Br.) 1963-8-25, 1964-5-31 ; St.23 (Hino Br.) 1963-8-18 : R.Ôtanba -- St.5 (Kitagawa Br.) 1963-6-15 ; St.6 (Taishô Br.) 1959-summer, 1963-6-15, 1963-8-21, 1964-5-3 : R.Hirai -- St.2 (Tasai Br.) 1959-summer : R.Akikawa -- St.7 (Sasano) 1959-summer ; St.10 (Ozawa) 1965-7-30 ; St.11 (Shirokura) 1959-summer, 1963-8-25 ; St.12 (Kita-Akikawa Br.) 1965-7-30 ; St.13 (Wada Br.) 1965-7-30 ; St.14 (Ozu Br.) 1963-8-25, 1965-7-30 ; St.16 (Gundô) 1959-summer, 1965-7-30 ; St.20 (Sawado Br.) 1965-7-30 ; St.22 (Akikawa Br.) 1959-summer, 1963-8-25, 1965-7-30 ; St.23 (Ajiro Br.) 1963-6-24, 1965-7-31 ; St.24 (Akiru Br.) 1959-summer, 1963-8-25, 1965-7-31 ; St.25 (Higashi-Akiru Br.) 1963-8-25 ; St.7 (Sasano) 1963-8-25 : R.Asakawa -- St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1964-7-17 ; St.29 (Kamikunugida Br.) 1964-7-17 ; St.34 (R.Kobotoke -- Kamikunugida Br.) 1959-summer.

SUPPLEMENT : IDE --- R.Nippara -- (St.H), (St.15) 1977-6-4 : R.Tama -- (St.18) 1977-10-9 : R.Akikawa -- (St.26) 1978-8-17 : METOC --- R.Tama -- (St.17) 1976-9-28 : IIMURA --- R.Nippara -- (St.7), (St.18) : R.Tama -- (St.1), (St.5), (St.14), (St.16), (St.22) : R.Akikawa -- (St.1), (St.0), (St.7), (St.11), (St.13), (St.20), (St.26) --- (Dates are omitted.)

2. *Cinygma* sp.

SUPPLEMENT : Loc. & date : IDE --- R.Tama -- (St.22) 1975-7-29 : METOC --- R.Nippara -- (St.18) 1976-11-25 : R.Tama -- (St.1), (St.4) 1976-9-28 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F) 1976-autumn ; (St.E) 1977-7-30 : TMG-BEP --- R.Akikawa -- (St.26) 1981-2-16 : HASHIGAMI --- R.Tama -- (St.4) 1973-8-4.

Genus *Rhithrogena*

1. *Rhithrogena japonica* UENO (Fig.35)

Loc. & date : R.Kosuge -- St.5 (Campground) 1979-8-18 : R.Nippara -- St.18 (Shôwa Br.) 1975-5-29, 1975-8-15, 1975-11-11 : R.Tama -- St.8 (Mitake Br.) 1964-8-31 ; St.10 (Yoroi Br.) 1975-5-28, 1975-8-15, 1975-11-11 ; St.12 (Jindai Br.) 1960-7-21 ; St.15 (Chôfu Br.) 1969-7-23 ; St.17 (upper stream of the Hamura Dam) 1969-7-24, 1972-8-16 ; St.18 (lower stream of the Hamura Dam) 1959-summer, 1975-8-15, 1975-11-11 ; St.19 (Nagata Br.) 1975-11-11 ;

St.21 (Haijima Br.) 1964-5-31, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1972-8-17, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.) 1975-10-23 : R.Ôtanba -- St.5 (Kitagawa Br.) 1969-7-23 : R.Hirai -- St.2 (Tasai Br.) 1969-7-24, 1975-11-11 : R.Akikawa -- St.4 (Henbori), St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ; St.7 (Sasano) 1959-summer ; St.8 (Tachibana Br.) 1965-7-29 ; St.10 (Ozawa) 1969-7-21 ; St.11 (Shirokura) 1960-7-21 ; St.12 (Kita-Akikawa Br.), St.13 (Wada Br.), St.14 (Ozu Br.), St.17 (Teraoka), St.18 (Hoshitake Br.), St.19 (Niihata Br.), St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1969-7-21, 1972-8-16, 1975-5-28, 1975-10-24 ; St.23 (Ajiro Br.) 1969-7-23, 1975-5-28 ; St.24 (Akiru Br.) 1960-7-21, 1969-7-23 ; St.26 (Takatsuki Br.) 1969-7-23, 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.22 (Kitsunozuka) 1978-11-21 ; St.28 (Takaosan-guchi), St.29 (Kamikunugida Br.) 1969-7-22 ; St.31 (Hikage Br.) 1976-10-28 ; St.32 (Kogezawa junction) 1975-9-25 ; St.33 (Surisashi) 1975-8-14, 1975-10-24 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.35 (Shikishima Br.) 1972-8-17 ; St.40 (Hirayama Br.) 1975-10-24.

SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.J), (St.6), (St.12), (St.15), (St.18) : R.Tama -- (St.D), (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.31), (St.33) 1973-1979 : IIMURA --- R.Nippara -- (St.7) : R.Tama -- (St.1), (St.5), (St.14), (St.16), (St.21), (St.22), (St.23) : R.Akikawa -- (St.1), (St.7), (St.11), (St.13), (St.20), (St.26) --- (Dates are omitted.)

METOC --- R.Taba -- (St.7) 1976-9-28, 1976-10-26, 1976-11-25 : R.Kukizawa -- (St.B) 1977-1-25 : R.Tama -- (St.D) 1976-10-26, 1976-11-25, 1977-1-25 ; (St.1), (St.4), (St.15) 1976-9-28, 1976-10-26, 1976-11-25, 1977-1-25 ; (St.8) 1976-10-26, 1976-11-25 ; (St.17) 1976-10-26, 1976-11-25, 1977-1-25 :

R.Nippara -- (St.18) 1976-9-28, 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôtanba -- (St.6) 1976-9-28, 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôsawa -- (St.M) 1976-10-26 : METOC-W --- R.Tama -- (St.31) 1980-10-26, 1980-11-15 : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21, 1980-12-8, 1981-2-16 : KRIEP --- R.Taba -- (St.A) 1979-9-13 : R.Tama -- (St.2), (St.15), (St.17) 1979-9-13 : MIYASHITA --- R.Tama -- (St.17) 1970-10-9.

2. *Rhithrogena* ap.

(Fig.36)

Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Urakubo) 1979-8-18 : R.Nippara -- St.18 (Shôwa Br.) 1975-11-11 : R.Tama -- St.1 (Shôwa Br.)

1969-7-24 ; St.8 (Mitake Br.) 1964-5-3 ; St.10 (Yoroi Br.) 1975-5-28, 1975-8-15, 1975-11-11 ; St.12 (Jindai Br.) 1969-7-23 ; St.14 (Mannen Br.) 1959-summer ; St.18 (lower stream of the Hamura Dam) 1959-summer, 1975-11-11 ; St.19 (Nagata Br.) 1975-11-11 ; St.20 (Tama Br.) 1959-summer ; St.21 (Haijima Br.) 1965-7-31, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ōhashi Br.) 1972-8-17, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.) 1975-10-23 ; St.32 (Futago Br.) 1975-10-22 : R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1975-5-28, 1975-11-11 : R.Akikawa -- St.4 (Henbori), St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ; St.7 (Sasano) 1960-7-21, 1965-7-30 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.12 (Kita-Akikawa Br.), St.13 (Wada Br.), St.14 (Ozu Br.) 1965-7-30, 1969-7-21 ; St.18 (Hoshitake Br.) 1969-7-21 ; St.20 (Sawado Br.) 1965-7-30 ; St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1960-7-21, 1969-7-21, 1972-8-16, 1975-8-14, 1975-11-11 ; St.23 (Ajiro Br.) 1971-12-6, 1957-5-28 ; St.24 (Akiru Br.) 1965-7-31 : St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1972-8-16, 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.33 (Surisashi) 1975-10-24.

SUPPLEMENT : IDE --- *Rhithrogena* sp. na --- R.Nippara -- (St.18) 1977-6-4, 1978-8-17 : R.Tama -- (St.D), (St.2) 1977-6-4 ; (St.15) 1973-8-21, 1979-1-6 : R.Hirai -- (St.2) 1978-8-17 : R.Akikawa -- (St.18) 1973-8-21, 1978-8-17 ; (St.26) 1973-8-21 : METOC --- *Rhithrogena* sp. na --- R.Nippara -- (St.18) 1976-11-25 : R.Tama -- (St.D) 1976-11-25 ; (St.1) 1976-10-26, 1976-11-25 ; (St.4) 1977-1-25 ; (St.15) 1976-11-25 ; (St.17) 1976-10-26, 1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.E) 1976-autumn : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : R.Asakawa -- (St.O) 1980-9-29 : KRIEP --- *Rhithrogena* sp. na --- R.Taba -- (St.A) 1979-9-13 : R.Tama -- (St.2), (St.15), (St.17) 1979-9-13.

ORDER ODONATA
FAMILY CALOPTERYGIDAE

Genus *Mnais*

1. *Mnais strigata* SELYS (Fig.37)
Loc. & date : R.Kosuge -- St.4 (a small stream), St.6 (Wasabida) 1979-8-18 :
R.Asakawa -- St.11 (Oyashiki) 1979-3-13 ; St.18 (Ninikuzawa), St.20 (a small
stream), St.21 (Kawaino) 1978-11-21.

Genus *Calopteryx*

1. *Calopteryx cornelia* SELYS (Fig.37)
Loc. & date : R.Tama -- St.30 (Tama-Suidō Br.) 1963-7-1 : R.Akikawa --
St.14 (Ozu Br.) 1969-7-21 : R.Asakawa -- St.8 (a small stream) 1979-3-12 ;
St.31 (Hikage Br.) 1976-10-28 ; St.35 (Shikishima Br.) 1964-7-24.

FAMILY AGRIONIDAE

Genus *Enallagma*

1. *Enallagma deserti circulatum* SELYS (Fig.37)
Loc. & date : R.Asakawa -- St.9 (Koashi) 1979-3-12.
2. AGRIONIDAE Fam., Gen. et sp. indet. (Fig.37)
Loc. & date : R.Tama -- St.1 (Shōwa Br.), St.17 (Hamura Dam) 1969-7-24 ;
St.30 (Tama-Suidō Br.) 1969-8-15.

FAMILY PLATYCNEMIDIDAE

Genus *Copera*

1. *Copera tokyoensis* ASAHINA (Fig.37)
Loc. & date : R.Tama -- St.30 (Tama-Suidō Br.) 1969-8-15.

FAMILY LESTIDAE

Genus *Sympecna*

1. *Sympecna paedisca* BRAUER (Fig.38)
Loc. & date : R.Asakawa -- St.41 (Takahata Br.) 1964-7-24.

SUBORDER ZYGOPTERA

1. ZYGOPTERA Fam., Gen. et sp. indet. (Fig.44)
Loc. & date : R.Asakawa -- St.34 (Jadaki-guchi) 1976-8-18.

FAMILY EPIOPHLEBIIDAE

Genus *Epiophlebia*

1. *Epiophlebia superstes* SELYS (Fig.38)

Loc. & date : R.Taba -- St.2 (Ichinose), St.4 (Kumakurazawa) 1977-4-26 ;
St.5 (Wasabida) 1977-4-25 : R.Kosuge -- St.4 (a small stream), St.6
(Wasabida) 1979-8-18 : R.Nippara -- St.1 (a small stream), St.2 (a small
stream) 1977-5-9, 1979-10-23 ; St.12 (Hosokura Br.) 1979-10-22 : R.Irikawa
-- St.1 (upper stream of the debris barrier) 1979-5-10 : R.Ôtanba -- St.1
(a small stream) 1977-5-10 : R.Akikawa -- St.2 (a small stream at Kazuma)
1979-5-30 : R.Asakawa -- St.14 (a small stream at Iriyama) 1979-11-20 ;
St.18 (Ninikuzawa), St.20 (a small stream at Kami-Ange) 1978-11-21 ; St.30
(Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28.

SUPPLEMENT : IDE --- *Epiophlebia* sp. --- R.Tama -- (St.20) 1974-10-22 :
TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn, 1977-7-29 : HISAI ---
R.Asakawa -- (St.28) 1979-11-28.

FAMILY GOMPHIDAE

Genus *Sieboldius*

1. *Sieboldius albardae* SELYS (Fig.38)

Loc. & date : R.Tama -- St.21 (Haijima Br.) 1972-8-17 : R.Akikawa -- St.23
(Ajiro Br.) 1969-7-23 : R.Asakawa -- St.28 (Takaosan-guchi) 1964-7-17,
1969-7-22 ; St.29 (Kamikunugida Br.) 1964-7-17 ; St.35 (Shikishima Br.)
1964-7-24.

Genus *Onychogomphus*

1. *Onychogomphus viridicostus* OGUMA (Fig.40)

Loc. & date : R.Tama -- St.21 (Haijima Br.) 1975-5-28 ; St.22 (Tama-Ôhashi
Br.) 1975-5-27 : R.Hirai -- St.2 (Tasai Br.) 1975-8-15, 1975-11-11, 1969-
7-24, 1972-8-16 : R.Akikawa -- St.24 (Akiru Br.) 1969-7-23 ; St.25 (Higashi-
Akiru Br.) 1963-8-25 ; St.26 (Takatsuki Br.) 1965-7-31, 1971-12-6, 1972-8-16
: R.Asakawa -- St.35 (Shikishima Br.) 1972-8-17.

SUPPLEMENT : IIMURA --- R.Tama -- (St.22) 1974-2-27 ; (St.23) 1974-2-27 :
TMG-Bep --- R.Hirai -- (St.2) 1980-7-21, 1980-9-28, 1980-12-8, 1981-2-16 :
R.Akikawa -- (St.26) 1980-9-29, 1980-12-8, 1981-2-16.

Genus *Sinogomphus*

1. *Sinogomphus flavolimbatus* OGUMA (Fig.40)

Loc. & date : R.Asakawa -- St.33 (Surisashi) 1976-11-15.

SUPPLEMENT : TMG-BEP --- R.Akikawa -- (St.26) 1980-9-29.

Genus *Anisogomphus*

1. *Anisogomphus maacki* SELYS (Fig.39)

Loc. & date : R.Asakawa -- St.38 (Asakawa Br.) 1975-10-24.

Genus *Nihonogomphus*

1. *Nihonogomphus viridis* OGUMA (Fig.41)

SUPPLEMENT : Loc. & date : TMG-BEP --- R.Akikawa -- (St.26) 1980-12-8,
1981-2-16 : IDE --- *Nihonogomphus* sp. --- R.Tama -- (St.21) 1974-10-20 ;
(St.22) 1974-10-20 : R.Hirai -- (St.2) 1974-10-22 : R.Akikawa -- (St.26)
1974-10-23.

Genus *Gomphus*

1. *Gomphus postocularis* SELYS (Fig.39)

Loc. & date : R.Akikawa -- St.24 (Akiru Br.) 1969-7-23.

SUPPLEMENT : IDE --- *Gomphus* sp. --- R.Tama -- (St.2) 1974-2-2 ; (St.21)
1973-5-29 ; (St.22) 1977-7-30 : R.Hirai -- (St.2) 1973-8-20, 1974-2-1 ;
R.Akikawa -- (St.18) 1973-8-21 ; (St.26) 1973-11-4, 1979-1-6.

Genus *Stylogomphus*

1. *Stylogomphus suzukii* OGUMA (Fig.41)

Loc. & date : R.Hirai -- St.2 (Tasai Br.) 1975-5-28, 1975-8-15 : R.Akikawa
-- St.21 (Kowada Br.) 1963-6-24 : R.Asakawa -- St.27 (Umenoki Br.), St.28
(Takaosan-guchi) 1964-7-17 ; St.33 (Surisashi) 1976-11-15.

SUPPLEMENT : TMG-BEP --- R.Hirai (St.2) 1980-9-29.

Genus *Lanthus*

1. *Lanthus fujiacus* FRASER (Fig.39)

Loc. & date : R.Tama -- St.6 (Kawai) 1964-5-3, 1964-8-31 : R.Hirai -- St.2
(Tasai Br.) 1972-8-16 : R.Akikawa -- St.7 (Sasano) 1959-summer ; St.22
(Akikawa Br.) 1972-8-16 : R.Asakawa -- St.18 (Ninikuzawa) 1978-11-21 ; St.28
(Takaosan-guchi) 1964-7-17 ; St.33 (Surisashi) 1975-10-24, 1976-11-15 ;
St.35 (Shikishima Br.) 1972-8-17 : St.36 (Minase Br.) 1964-7-24, 1971-12-7.

SUPPLEMENT : IDE --- R.Tama -- (St.20) 1974-10-23 ; (St.21) 1974-10-21 ;
TMG-BEP --- R.Hirai -- (St.2) 1980-7-21 : HISAI --- R.Asakawa -- (St.28)
1979-11-28.

Genus *Davidius*

1. *Davidius fujiama* FRASER (Fig.40)

Loc. & date : R.Tama -- St.15 (Chôfu Br.) 1963-6-24 : R.Akikawa -- St.22 (Akikawa Br.) 1965-7-30 : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18.

SUPPLEMENT : IIMURA --- R.Tama -- (St.5), (St.12) --- (Dates are omitted.)

2. *Davidius nanus* SELYS (Fig.41)

Loc. & date : R.Kosuge -- St.1, St.2, St.4 (small streams), St.5 (Campground), St.6 (Wasabida), St.7 (Urakubo) 1979-8-18 : R.Tama -- St.18 (lower stream of the Hamura Dam) 1969-7-24 : R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.10 (Ozawa), St.13 (Wada Br.) 1965-7-30 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23 : R.Asakawa -- St.14 (a small stream) 1978-11-20 ; St.17 (R.Daigo) 1978-11-21 ; St.18 (Ninikuzawa) 1978-11-21 ; St.21 (Kawaino) 1978-11-21 ; St.25 (Kakuei Br.) 1979-3-13 ; St.27 (Umenoki Br.), St.28 (Takaosan-guchi) 1964-7-17 ; St.29 (Kamikunugida Br.) 1969-7-22 ; St.34 (Jadaki-guchi) 1960-7-20, 1969-7-22 ; St.35 (Shikishima Br.) 1964-7-24.

SUPPLEMENT : TMG-BEP --- R.Akikawa -- (St.26) 1980-12-8, 1981-2-16 : TMG-Bep-T --- R.Nippara -- (St.E) 1976-autumn : HISAI --- R.Asakawa -- (St.28) 1979-11-28.

FAMILY GOMPHIDAE

1. GOMPHIDAE Gen.et sp. indet. (Fig.42)

Loc. & date : R.Tama -- St.8 (Mitake Br.) 1969-7-23 ; St.9 (Ikusabata) 1964-5-3, 1964-8-31 ; St.10 (Yoroi Br.) 1971-12-6 ; St.21 (Haijima Br.) 1959-summer, 1964-5-31 ; St.22 (Tama-Ôhashi Br.) 1963-8-25, 1975-8-14 : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.4 (Henbori), St.5 (Minami-Akikawa Br.), St.10 (Ozawa), St.12 (Kita-Akikawa Br.), St.13 (Wada Br.), St.14 (Ozu Br.), St.17 (Teraoka), St.18 (Hoshitake Br.), St.19 (Niitaka Br.), St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1959-summer, 1969-7-21, 1975-10-24 ; St.23 (Ajiro Br.) 1965-7-31 ; St.24 (Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1975-8-14, 1975-11-11 : R.Asakawa -- St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1969-7-22 ; St.29 (Kamikunugida Br.) 1964-7-17 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.35 (Shikishima Br.)

1964-7-24 ; St.40 (Hirayama Br.) 1975-10-24.

SUPPLEMENT : TMG-BEP --- R.Hirai -- (St.2) 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-9-29, 1980-12-8 : R.Asakawa -- (St.P) 1980-9-29 : IIMURA --- R.Tama -- (St.11), (St.16), (St.20), (St.21), (St.26) --- (Dates are omitted.)

FAMILY CORDULEGASTERIDAE

Genus Anotogaster

1. *Anotogaster sieboldii* SELYS (Fig.43)

Loc. & date : R.Asakawa -- St.8 (a small stream), St.9 (R.Yamairi-Koashi) 1979-3-12 ; St.17 (R.Daigo) 1978-11-21 ; St.28 (Takaosan-guchi) 1964-7-17 ; St.38 (Asakawa Br.) 1975-10-24.

Genus Chlorogomphus

1. *Chlorogomphus brunneus costalis* ASAHINA (Fig.43)

Loc. & date : R.Asakawa -- St.34 (Jadaki-guchi) 1969-7-22.

FAMILY AESCHNIDAE

Genus Planaeshna

1. *Planaeshna milnei* SELYS (Fig.43)

Loc. & date : R.Kosuge -- St.1 (a small stream) 1979-8-18 : R.Asakawa -- St.14 (Iriyama) 1978-11-20 ; St.18 (Ninikuzawa) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28 ; St.35 (Shikishima Br.) 1964-7-24.

FAMILY LIBELLULIDAE

Genus Macromia

1. *Macromia amphigena* SELYS (Fig.43)

Loc. & date : R.Asakawa -- St.27 (Umenoki Br.), St.28 (Takaosan-guchi) 1964-7-17 ; St.35 (Shikishima Br.) 1964-7-24.

Genus Epitheca

1. *Epitheca marginata* SELYS (Fig.43)

Loc. & date : R.Tama -- St.31 (lower stream of the Shukugawara Dam) 1979-9-11.

Genus Orthetrum

1. *Orthetrum albistylum speciosum* UHLER (Fig.44)

Loc. & date : R.Tama -- St.33 (Maruko Br.) 1975-10-22 : R.Asakawa -- St.24 (Motoki Br.) 1979-3-13.

Genus *Sympetrum*

1. *Sympetrum frequens* SELYS (Fig.44)
Loc. & date : R.Asakawa -- St.35 (Shikishima Br.) 1969-7-22.
2. *Sympetrum pedemontanum elatum* SELYS (Fig.44)
Loc. & date : R.Asakawa -- St.35 (Shikishima Br.), St.36 (Minase Br.) 1964-7-24.

SUBFAMILY LIBELLULINAE

1. LIBELLULINAE Gen. et sp. indet. (Fig.44)
Loc. & date : R.Asakawa, --- St.11 (Oyashiki) 1979-3-13.

ORDER PLECOPTERA

FAMILY SCOPURIDAE

Genus *Scopura*

1. *Scopura longa* UENO (Fig.45)
Loc. & date : R.Taba -- St.2 (a small stream) 1977-4-26 ; St.6 (Wasabida-Kamanosawa) 1977-4-25 ; R.Nippara -- St.1 (a small stream), St.2 (a small stream-Kajigoyakubo), St.3 (Nagurizawa Br.) 1977-5-9.
SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn.

FAMILY PELTOPERLIDAE

Genus *Nogiperla*

1. *Nogiperla japonica* OKAMOTO (Fig.45)
Loc. & date : Akikawa -- St.7 (Sasano) 1959-summer : R.Asakawa -- St.15 (R.Daigo) 1978-11-20 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28.
SUPPLEMENT : IDE --- R.Tama -- (St.18) 1974-10-24, 1977-10-9 : R.Akikawa -- (St.26) 1974-10-23 : IIMURA --- R.Akikawa -- (St.7) 1974-5-29 :
TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn.

Genus *Peltoperla*

1. *Peltoperla* sp.
SUPPLEMENT : IDE --- R.Tama -- (St.18) 1975-7-29.

FAMILY NEMOURIDAE

Genus *Nemoura*

1. *Nemoura* sp.

(Fig.45)

Loc. & date : R.Kosuge -- St.7. (Urakubo) 1979-8-18 : R.Tama -- St.1 (Shôwa Br.) 1975-8-15 : R.Nippara -- St.G (Nippara Lodge) 1975-5-29 : R.Akikawa -- St.8 (Tachibana Br.) 1965-7-29 : R.Asakawa -- St.6 (a small stream), St.8 (a small stream at Koashi), St.9 (R.Yamairi, Koashi) 1979-3-12 ; St.10 (Oyashiki), St.12 (Mikami Br.), St.24 (Motoki Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.31 (Hikage Br.) 1976-10-28 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1976-7-16 ; St.34 (Jadaki-guchi) 1976-8-18.

SUPPLEMENT : IDE --- *Nemoura asakawae* --- R.Nippara -- (St.6) 1977-6-4 :

METOC --- R.Nippara -- (St.18) 1976-9-28, 1976-10-26 : R.Tama -- (St.1)

1976-9-28, 1971-1-25 : R.Irikawa -- (St.1) 1977-1-25 : TMG-BEP-T ---

Nemoura asakawae --- R.Nippara -- (St.F) 1976-autumn : TMG-BEP --- R.Hirai

-- (St.2) 1981-2-16 : R.Akikawa -- (St.26) 1981-2-16 : R.Asakawa -- (St.P)

1980-7-21, 1980-9-29, 1980-12-8 : HISAI --- *Nemouridae* sp. --- R.Asakawa

-- (St.28) 1979-11-28 : TSUDA --- R.Tama -- (St.1) 1973-September.

Genus *Amphinemura*

1. *Amphinemura* sp.

(Fig.46)

Loc. & date : R.Kosuge -- St.1 (a small stream), St.5 (campground), St.7

(Urakubo) 1975-8-18 : R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.15

(Shiraishi Br.) 1969-7-24 ; St.18 (Shôwa Br.) 1969-7-24, 1975-5-29 :

R.Tama -- St.10 (Yoroi Br.) 1971-12-6, 1975-11-11 ; St.18 (lower stream os

the Hamura Dam) 1975-8-15 : R.Akikawa -- St.7 (Sasano) 1975-7-30 ; St.19

(Niitaka Br.) 1969-7-21 : R.Asakawa -- St.17 (R.Daigo), St.21 (Kawaino),

St.22 (Kitsunozuka) 1978-11-21 ; St.28 (Takaosan-guchi), St.29 (Kamikunugida

Br.) 1969-7-22 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa

junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24,

1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.35 (Shikishima

Br.) 1971-12-6, 1972-8-17 ; St.38 (Asakawa Br.) 1975-8-14.

SUPPLEMENT : IDE --- R.Nippara -- (St.6), (St.7), (St.I) 1977-6-4 : R.Tama

-- (St.1) 1973-8-21 ; (St.2) 1973-8-21, 1974-2-2 ; (St.10) 1973-8-21 :

R.Ôtanba -- (St.5) 1973-8-21 : IIMURA --- R.Akikawa -- (St.13), (St.20),

(St.26) --- (Dates are omitted.) : METOC --- R.Taba -- (St.7) 1976-11-25,

1977-1-25 : R.Kukizawa -- (St.B) 1976-10-26, 1976-11-25, 1977-1-25 :

R.Nippara -- (St.18) 1976-11-25, 1977-1-25 : R.Irikawa -- (St.1) 1976-11-25 :

R.Tama -- (St.1), (St.4), (St.8) 1976-11-25 ; (St.17) 1977-1-25 : R.Ôtanba
 -- (St.6) 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôsawa -- (St.M) 1976-9-28,
 1976-11-25, 1977-1-25 : IIMURA --- R.Tama -- (St.1), (St.5), (St.16) :
 R.Nippara -- (St.18) : R.Akikawa -- (St.3), (St.10), (St.13), (St.20), (St.
 26) : R.Unazawa -- (St.K) --- (Dates are omitted.) : TMG-BEP-T --- R.Nippara
 -- (St.E), (St.F), (St.G) 1976-autumn ; (St.E) 1977-7-30 ; (St.F) 1977-7-26
 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21 : R.Asakawa -- (St.P) 1980-12-8 :
 HISAI --- R.Asakawa -- (St.28) 1979-11-28.

Genus *Protonemura*

1. *Protonemura* sp. (Fig.47)

Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Urakubo) 1979-8-18 :
 R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.18 (Shôwa Br.) 1975-5-29 :
 R.Asakawa -- St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa
 junction) 1976-9-25 ; St.33 (Surisashi) 1976-7-16.

SUPPLEMENT : IDE --- R.Nippara -- (St.6), (St.7), (St.12), (St.15), (St.18),
 (St.I) 1977-6-4 ; (St.J) 1977-6-5 ; (St.18) 1974-10-24 : IIMURA --- R.Tama
 -- (St.5) : R.Akikawa -- (St.1), (St.13), (St.26) --- (Dates are omitted.)
 : METOC --- R.Taba -- (St.7) 1976-11-25, 1977-1-25 : R.Kukizawa -- (St.B)
 1976-11-25, 1977-1-25 : R.Tama -- (St.1) 1976-10-26 : TMG-BEP-T ---
 R.Nippara -- (St.F) 1976-autumn, 1977-7-29.

FAMILY TAENIOPTERYGIDAE

1. TAENIOPTERYGIDAE Gen. et sp. indet. (Fig.48)

SUPPLEMENT : Loc. & dates : IIMURA --- R.Tama -- (St.5), (St.14) : R.Akikawa
 -- (St.7), (St.11), (St.13), (St.20), (St.26) --- (Dates are omitted.).
 METOC --- R.Taba -- (St.7) 1977-1-25 : R.Kukizawa -- (St.B) 1977-1-25 :
 R.Nippara -- (St.18) 1977-1-25.

FAMILY CAPNIIDAE

1. CAPNIIDAE Gen. et sp. indet. (Fig.48)

Loc. & date : R.Tama -- St.1 (Shôwa Br.) 1975-11-11 ; St.2 (Unazawa) 1959-
 -summer : R.Hirai -- St.2 (Tasai Br.) 1971-12-6 : R.Asakawa -- St.22
 (Kitsunezuka) 1978-11-21.

SUPPLEMENT : IIMURA --- R.Tama -- (St.5) : R.Unazawa -- (St.K) 1972-12-6 :
 METOC --- R.Tama -- (St.8) 1976-11-25 : R.Ôsawa -- (St.M) 1977-1-25 :
 TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn, 1977-7-29, 1977-7-31.

FAMILY PERLODIDAE

Genus *Pseudomegarcys*

1. *Pseudomegarcys japonica* KOHNO (Fig.49)
SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G), 1976-autumn.
2. *Pseudomegarcys* sp. (Fig.49)
SUPPLEMENT : METOC --- R.Nippara -- (St.18) 1977-1-25 : R.Tama -- (St.1) 1977-1-25.

Genus *Megarcys*

1. *Megarcys ochracea* KLAPALEK (Fig.49)
SUPPLEMENT : IDE --- R.Tama -- (St.1) 1973-8-21, 1979-1-6 ; (St.2) 1973-8-21, 1974-2-2, 1978-8-17, 1979-1-6 ; (St.10), (St.15) 1978-1-6 ; (St.21) 1976-8-19 : R.Nippara -- (St.18) 1979-1-6 : R.Ôtanba -- (St.5) 1973-8-21 ; 1978-8-17 ; 1979-1-6 : R.Akikawa -- (St.18) 1979-1-6 ; (St.26) 1973-8-21, 1978-8-17, 1979-1-6.

Genus *Stavsolus*

1. *Stavsolus japonicus* OKAMOTO (Fig.49)
SUPPLEMENT : IIMURA --- R.Tama -- (St.14), (St.16) : R.Unazawa -- (St.K) 1972-12-6 : R.Akikawa -- (St.7), (St.13), (St.20), (St.26) -- (Dates are omitted.).

Genus *Isoperla*

1. *Isoperla towadensis* OKAMOTO (Fig.50)
SUPPLEMENT : IIMURA --- R.Tama -- (St.1) : R.Unazawa -- (St.K) 1972-12-6.
2. *Isoperla nipponica* OKAMOTO (Fig.50)
SUPPLEMENT : IIMURA --- R.Tama -- (St.18) : R.Akikawa -- (St.20), (St.26) -- (Dates are omitted.) : METOC --- R.Irikawa -- (St.1) 1976-9-28.
3. *Isoperla okamotonis* KOHNO (Fig.50)
Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1971-12-6 : R.Akikawa -- St.23 (Ajiro Br.) 1971-12-6.
4. *Isoperla asakawae* KOHNO (Fig.50)
Loc. & date : R.Tama -- St.6 (Kawai) 1963-6-15.
5. *Isoperla* sp. (Fig.50)
SUPPLEMENT : IDE --- R.Tama -- (St.1) 1974-2-2 : METOC --- R.Tama -- (St.5) 1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) 1976-autumn ; (St.E) 1977-7-30 ; (St.F) 1977-7-31 ; (St.6) 1977-9-11 : TMG-BEP --- R.Hirai -- (St.2) 1982-2-16 : R.Akikawa -- (St.26) 1981-2-16.

Genus *Perlodes*

1. *Perlodes frisonana* HOHNO (Fig.51)

Loc. & date : R.Tama -- St.14 (Mannen Br.) 1959-summer ; St.6 (Kawai) 1963-6-15.

FAMILY PERLODIDAE

1. PERLODIDAE Gen. et sp. indet. (Fig.51)

Loc. & date : R.Kosuge -- St.5 (Campground) 1979-8-18 : R.Tama -- St.10 (Yoroi Br.) 1975-5-28 ; St.18 (lower stream of the Hamura Dam) 1971-12-6 : R.Asakawa -- St.19 (R.Ange), St.21 (Kawaino), St.22 (Kitsunezuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1976-11-15 ; St.35 (Shikishima Br.) 1971-12-6.

SUPPLEMENT : IIMURA --- R.Nippara -- (St.18) : R.Tama -- (St.1), (St.5), (St.21) : R.Akikawa -- (St.1), (St.7), (St.0), (St.11), (St.13), (St.20), (St.26) --- (Dates are omitted.) : METOC --- R.Taba -- (St.7) 1977-1-25 : R.Kukizawa -- (St.B) 1976-11-25 : R.Nippara -- (St.18) 1977-1-25 : R.Irikawa -- (St.1) 1977-1-25 : R.Ôtanba -- (St.6) 1977-1-25 : R.Ôsawa -- (St.M) 1977-1-25 : R.Tama -- (St.D), (St.1), (St.4), (St.15), (St.17) 1977-1-25.

FAMILY PERLIDAE

Genus *Paragnetina*

1. *Paragnetina tinctipennis* McLACHLAN (Fig.52)

Loc. & date : R.Nippara -- St.15 (Shiraishi Br.), St.16 (Meoto Br.) 1969-7-24 : R.Akikawa -- St.7 (Sasano), St.10 (Ozawa) 1965-7-30 ; St.11 (Shirokura) 1959-summer ; St.16 (Gundô) 1965-7-30 ; St.19 (Niitaka Br.) 1969-7-21 ; St.24 (Akiru Br.), St.26 (Takatsuki Br.) 1969-7-23.

SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.12) 1977-6-4 ; (St.J) 1977-6-5 : R.Tama -- (St.1) 1973-8-21, 1974-2-2, 1979-1-6 ; (St.2) 1973-8-21, 1974-2-2 ; (St.10) 1973-8-21, 1974-2-2, 1979-1-6 ; (St.15) 1973-5-29, 1973-8-21, 1974-2-2, 1979-1-6 ; (St.18) 1974-10-24, 1977-10-9 ; (St.21) 1974-10-21 ; (St.22) 1974-10-20 ; (St.23) 1977-10-9 : R.Ôtanba -- (St.5) 1973-8-21, 1974-2-2, 1978-8-17, 1979-1-6 : R.Hirai -- (St.2) 1979-1-6 : R.Akikawa -- (St.18) 1973-8-21, 1974-2-1, 1978-8-17, 1979-1-6 ; (St.26) 1973-5-29, 1973-8-21, 1973-11-4, 1978-8-17, 1979-1-6 : IIMURA --- R.Tama -- (St.14) : R.Akikawa -- (St.1), (St.11), (St.13), (St.20), (St.26) -- (Dates are omitted.) : METOC --- R.Taba -- (St.7) 1976-10-26 : R.Tama -- (St.1)

1976-11-25 : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21, 1981-2-16.

Genus *Gibosia*

1. *Gibosia* sp. (Fig.52)

Loc. & date : R.Akikawa -- St.4 (Henbori), St.10 (Ozawa) 1969-7-21 ; St.26 (Takatsuki Br.) 1965-7-31.

SUPPLEMENT : IIMURA --- R.Unazawa -- (St.K) 1972-12-6 : R.Akikawa -- (St.7), (St.20), (St.26) --- (Dates are omitted.) : TMG-BEP-T --- R.Nippara -- (St.E) 1976-autumn.

Genus *Acroneuria*

1. *Acroneuria joukllii* KLAPALEK (Fig.52)

Loc. & date : R.Asakawa -- St.33 (Surisashi) 1975-8-14.

SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.G) 1976-autumn.

2. *Acroneuria stigmatica* KLAPALEK (Fig.52)

Loc. & date : R.Kosuge -- St.4 (a small stream) 1979-8-18 : R.Asakawa -- St.23 (Kawarajuku Br.) 1963-8-25 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.33 (Surisashi) 1976-11-15.

SUPPLEMENT : IDE --- R.Nippara -- (St.6), (St.I) 1977-6-4 : IIMURA --- R.Nippara -- (St.7) 1974-3-1 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) 1976-autumn ; (St.E) 1977-7-30 ; (St.F) 1977-7-29 & 30 ; (St.6) 1977-9-11 : HISAI --- R.Asakawa -- (St.28) 1979-11-28.

Genus *Neoperla*

1. *Neoperla nipponensis* (McLACHLAN) (Fig.53)

Loc. & date : R.Tama -- St.1 (Shôwa Br.) 1975-5-29 ; St.10 (Yoroi Br.) 1969-7-24 ; St.21 (Haijima Br.) 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1975-10-23 : R.Ôtanba -- St.6 (Taishô Br.) 1963-8-21 : R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1975-8-15, 1975-11-11 : R.Akikawa -- St.17 (Teraoka) 1969-7-21 ; St.22 (Akikawa Br.) 1975-10-24 ; St.23 (Ajiro Br.) 1969-7-23, 1975-5-28 ; St.24 (Akiru Br.) 1969-7-23 ; St.26 (Takatsuki Br.) 1960-7-21, 1969-7-21, 1975-8-14, 1975-11-11 : R.Asakawa -- St.20 (a small stream at Ange), St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.24 (Motoki Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.33 (Surisashi) 1975-10-24, 1976-11-15.

SUPPLEMENT : IIMURA --- R.Tama -- (St.5) : R.Akikawa -- (St.20), (St.26) --- (Dates are omitted.) : METOC --- R.Taba -- (St.7) 1977-1-25 :

R.Tama -- (St.4) 1976-9-28 : R.Irikawa -- (St.1) 1976-11-25, 1977-1-25 :
R.Ôtanba -- (St.6) 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôsawa -- (St.M)
1976-10-26, 1976-11-25, 1977-1-25 : TMG-BEP --- R.Akikawa -- (St.26) 1980
-7-21, 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1980-12-8, 1981-2-16 :
R.Hirai -- (St.2) 1981-2-16 : HISAI --- R.Asakawa -- (St.28) 1979-11-28.

Genus *Oyamia*

1. *Oyamia gibba* KLAPALEK

(Fig.54)

Loc. & date : R.Nippara -- St.15 (Shiraishi Br.) 1969-7-24 ; St.18 (Shôwa
Br.) 1972-8-16 : R.Tama -- St.1 (Shôwa Br.) 1969-7-24, 1972-8-16, 1975-5-29
; St.5 (Kawai) 1964-8-31 ; St.6 (Kawai) 1963-6-15, 1964-5-3, 1964-8-31 ;
St.8 (Mitake Br.) 1964-5-3, 1964-8-31 ; St.10 (Yoroi Br.) 1969-7-24 ; St.16
(Tamagawa Br.) 1960-7-21, 1963-8-25, 1964-9-1, 1969-7-24 ; St.18 (Hamura Dam)
1971-12-6 ; St.21 (Haijima Br.) 1965-7-31, 1971-12-7, 1975-8-14 ; St.22
(Tama-Ôhashi Br.) 1960-7-20 ; St.23 (Hino Br.) 1960-7-20, 1975-5-27 :
R.Ôtanba -- St.5 (Kitagawa Br.) 1963-6-15, 1969-7-23 ; St.6 (Taishô Br.)
1964-5-3 : R.Hirai -- St.2 (Tasai Br.) 1972-8-16 : R.Akikawa -- St.4
(Henbori), St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-
29 ; St.7 (Sasano) 1960-7-21, 1965-7-30 ; St.10 (Ozawa) 1965-7-30 ; St.13
(Wada Br.) 1969-7-21 ; St.14 (Ozu Br.) 1959-summer ; St.16 (Gundô) 1960-7-
21 ; St.17 (Teraoka), St.18 (Hoshitake Br.), St.19 (Niitaka Br.) 1969-7-21
; St.20 (Sawado Br.) 1965-7-30 ; St.21 (Kowada Br.) 1963-6-24, 1969-7-21 ;
St.22 (Akikawa Br.) 1969-7-21, 1972-8-16 ; St.23 (Ajiro Br.) 1969-7-23,
1971-12-6 ; St.24 (Akiru Br.) 1959-summer, 1960-7-21, 1965-7-31, 1969-7-23 ;
St.25 (Higashi-Akiru Br.) 1963-8-25, 1965-7-31 ; St.26 (Takatsuki Br.) 1965-
7-31, 1971-12-6, 1975-8-14, 1972-8-16 : R.Asakawa -- St.15 (R.Ozu) 1978-11-
20 ; St.17 (R.Daigo), St.18 (Ninikuzawa), St.21 (Kawaino), St.22 (Kitsune-
zuka) 1978-11-21 ; St.25 (Kakuei Br.) 1979-3-13 ; St.27 (Umenoki Br.) 1960-
7-20, 1964-7-17 ; St.28 (Takaosan-guchi) 1964-7-17, 1969-7-22 ; St.29 (Kami-
Kunugida Br.) 1964-7-17 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage
Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33
(Surisashi) 1976-11-15, 1975-5-28 ; St.34 (Jadaki-guchi) 1959-summer, 1960-
7-20, 1976-8-18.

SUPPLEMENT : IDE --- R.Nippara -- (St.G) 1977-6-4 ; (St.J) 1977-6-5 :

IIMURA --- R.Nippara -- (St.18) : R.Tama -- (St.1), (St.5), (St.16) :

R.Akikawa -- (St.1), (St.7), (St.O), (St.20), (St.26) -- (Dates are omitted.):

METOC --- R.Tama-- (St.D) 1976-9-28 ; (St.8) 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôtanba -- (St.6) 1976-11-25, 1977-1-25 : R.Ôsawa -- (St.M) 1976-10-26 : TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn : TMG-BEP ---R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : R.Hirai -- (St.2) 1981-2-16 : TSUDA --- R.Tama -- (St.1), (St.3), (St.15), (St.18) 1973-Sept.: HASHIGAMI --- R.Tama -- (St.4) 1973-8-4 ; (St.5) 1973-8-11 ; (St.6), (St.12) 1973-8-13 : (St.15), (St.16) 1973-8-15 : R.Ôtanba -- (St.6) 1973-8-11 : MIYASHITA --- R.Tama -- (St.18) 1970-10-9.

Genus *Kiotina*

1. *Kiotina* sp. (Fig.55)
 Loc. & date : R.Asakawa -- St.15 (R.Ozu - Hara) 1978-11-20.

Genus *Togoperla*

1. *Togoperla limbata* PICTET (Fig.55)
 SUPPLEMENT : HISAI --- R.Asakawa -- (St.28) 1979-11-28.
 2. *Togoperla* sp. (Fig.55)
 Loc. & date : R.Asakawa -- St.15 (R.Ozu - Hara) 1978-11-20 ; St.18 (Ninikuzawa) 1978-11-21.

Genus *Caroperla*

1. *Caroperla pacifica* KOHNO (Fig.55)
 Loc. & date : R.Tama -- St.6 (Kawai) 1963-6-15 : R.Akikawa -- St.4 (Henbori), St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.16 (Gundô) 1959-summer ; St.22 (Akikawa Br.) 1969-7-21 ; St.26 (Takatsuki Br.) 1975-11-11 : R.Asakawa -- St.14 (a small stream - Iriyama), St.15 (R.Ozu - Hara) 1978-11-20 ; St.17 (R.Daigo), St.20 (a small stream), St.22 (Kitsunezuka) 1978-11-21 ; St.29 (Kamikunugida Br.) 1959-summer ; St.32 (Kogezawa junction) 1976-9-25 : St.33 (Surisashi) 1976-7-16.
 SUPPLEMENT : IDE --- R.Tama -- (St.D) 1977-6-4 : TMG-BEP-T --- R.Nippara -- (St.F) 1977-7-29.

Genus *Nipponiella*

1. *Nipponiella limbatella* KLAPALEK (Fig.55)
 SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1979-1-6 : R.Tama -- (St.1) 1973-8-21, 1974-2-2, 1978-8-17 ; (St.2) 1973-8-21, 1974-2-2, 1978-8-17, 1979-1-6 ; (St.10) 1973-8-21, 1974-2-2, 1978-8-17, 1979-1-6 ; (St.15) 1973-8-21, 1973-11-4, 1974-2-2 ; (St.20) 1975-7-29 : R.Ôtanba -- (St.5)

1973-8-21, 1974-2-2, 1978-8-17 : R.Hirai -- (St.2) 1973-8-20, 1974-2-1 :
R.Akikawa -- (St.18) 1973-8-21, 1974-2-1, 1978-8-17, 1979-1-6 ; (St.26)
1973-8-21, 1973-11-4, 1974-2-1, 1978-8-17 : R.Asakawa ----(St.35) 1978-8-16.

Genus *Kamimuria*

1. *Kamimuria quadrata* Klapálek (Fig.56)

Loc. & date : R.Kosuge -- St.3 (a small stream), St.4 (a small stream),
St.5 (Campground), St.6 (Wasabida) 1979-8-18 : R.Tama -- St.10 (Yoroi Br.)
1975-11-11 : R.Asakawa -- St.14 (a small stream - Iriyama) 1978-11-20 ;
St.20 (a small stream), St.21 (Kawaino), St.22 (Kitsunezuka) 1978-11-21 ;
St.25 (Kakuei Br.) 1979-3-13 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ;
St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-10-24, 1976-
11-15.

SUPPLEMENT : IDE --- *Perla quadrata* --- R.Nippara -- (St.18) 1977-6-4 :
R.Tama -- (St.18) 1974-10-24 ; (St.19) 1974-10-24 ; (St.20) 1974-10-22 ;
(St.21) 1974-10-21 ; (St.22) 1974-10-20 : R.Hirai -- (St.2) 1974-10-22 :
R.Akikawa -- (St.26) 1974-10-23 : IIMURA --- *Perla quadrata* -- R.Tama --
(St.1), (St.5), (St.14), (St.16), (St.22) : R.Akikawa -- (St.7), (St.0),
(St.11), (St.20), (St.26) --- (Dates are omitted.) : METOC --- R.Kukizawa
-- (St.B) 1976-11-25 : R.Tama -- (St.D) 1976-11-25 ; (St.15) 1976-11-25,
1977-1-25 ; (St.17) 1976-11-25 : R.Irikawa -- (St.1) 1976-11-25 : R.Ôtanba
-- (St.6) 1977-1-25 : R.Ôsawa -- (St.M) 1976-11-25 : TMG-BEP --- R.Hirai --
(St.2) 1980-9-29, 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-12-8,
1981-2-16 : R.Asakawa -- (St.P) 1981-2-16.

2. *Kamimuria tibialis* Pictet (Fig.57)

Loc. & date : R.Kosuge -- St.5 (Campground), St.6 (Wasabida) 1979-8-18 :
R.Tama -- St.9 (Ikusabata) 1964-5-3, 1964-8-31 : R.Akikawa -- St.22 (Akikawa
Br.) 1975-10-24 ; St.26 (Takatsuki Br.) 1975-8-14, 1975-11-11 : R.Asakawa --
St.18 (Ninikuzawa) 1978-11-21 ; St.33 (Surisashi) 1975-8-14.

SUPPLEMENT : IDE --- *Perla tibialis* --- R.Tama -- (St.1) 1973-8-21, 1974-
2-1 ; (St.2) 1973-8-21, 1974-2-2 ; (St.10) 1973-8-21, 1974-2-2 ; (St.15)
1974-2-2 ; (St.22) 1973-8-20 : R.Nippara -- (St.6), (St.7), (St.12), (St.15),
(St.18), (St.I) 1977-6-4 ; (St.J) 1977-6-5 : R.Hirai -- (St.2) 1974-2-1 :
R.Otanba -- (St.5) 1973-8-21, 1974-2-2 : R.Akikawa -- (St.18) 1973-8-21, 1974
-2-1 ; (St.26) 1973-5-29, 1973-8-21, 1973-11-4, 1974-2-1 : R.Asakawa --
(St.42) 1973-8-20 : IIMURA --- *Perla tibialis* --- R.Tama -- (St.1), (St.14),

(St.16) : R.Akikawa -- (St.20), (St.26) --- (Dates are omitted.) :
METOC --- R.Taba -- (St.7) 1976-9-28 : R.Kukizawa -- (St.B) 1976-9-28,
1976-10-26 : R.Nippara -- (St.18) 1976-9-28 : R.Tama -- (St.D) 1976-10-26
; (St.1) 1976-9-28 ; (St.8) 1976-11-25 ; (St.17) 1976-10-26, 1977-1-25 :
R.Irikawa -- (St.1) 1976-9-28, 1976-10-26 : R.Ôtanba -- (St.6) 1976-10-26 :
HISAI --- R.Asakawa -- (St.28) 1979-11-28 : KRIEP --- R.Tama -- (St.2),
(St.15), (St.17) 1979-9-13.

PERLIDAE Gen. et sp. indet. (Fig.58)

Loc. & date : R.Kosuge -- St.5 (Campground) 1979-8-18 : R.Nippara -- St.15
(Shiraishi Br.) 1969-7-24 ; St.17 (Meoto Br.) 1963-8-20 ; St.18 (Shôwa Br.)
1969-7-24, 1975-8-15 : R.Tama -- St.1 (Shôwa Br.) 1963-8-20, 1969-7-24 ;
St.4 (Mansei Br.) 1969-7-23 ; St.6 (Kawai) 1963-6-15 ; St.7 (Umezawa Br.)
1963-6-24 ; St.8 (Mitake Br.) 1969-7-23 ; St.9 (Ikusabata) 1963-8-21 ; St.12
(Jindai Br.) 1960-7-21 ; St.16 (Tamagawa Br.) 1963-8-25, 1964-9-1, 1969-7-
24 ; St.18 (Hamura Dam) , St.21 (Haijima Br.) 1965-7-31 : R.Ôtanba -- St.6
(Taishô Br.) 1963-8-21 : R.Hirai -- St.2 (Tasai Br.) 1960-7-21, 1975-5-28,
1975-8-15 : R.Akikawa -- St.4 (Henbori), St.5 (Minami-Akikawa Br.) 1969-7-
21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ; St.7 (Sasano) 1960-7-21, 1963
-8-25 ; St.10 (Ozawa) 1969-7-21 ; St.11 (Shirokura) 1960-7-21, 1963-7-21 ;
St.12 (Kita-Akikawa Br.), St.14 (Ozu Br.) 1969-7-21 ; St.16 (Gundô) 1960-7-
21 ; St.17 (Teraoka) , St.18 (Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.)
1960-7-21, 1969-7-21 ; St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.)
1969-7-21, 1975-8-14 ; St.23 (Ajiro Br.) 1969-7-23, 1971-12-6 ; St.24 (Akiru
Br.) 1960-7-21, 1969-7-23 ; St.26 (Takatsuki Br.) 1969-7-23, 1975-5-28, 1975
-11-11 : R.Asakawa -- St.22 (Kitsunozuka) 1978-11-21 ; St.26 (Higashi-
Yamashita Br.) 1969-7-22 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage
Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33
(Surisashi) 1976-7-16 ; St.34 (Jadaki-guchi) 1976-8-18.

SUPPLEMENT : IIMURA --- R.Nippara -- (St.7), (St.18) : R.Tama -- (St.1),
(St.5), (St.14), (St.16), (St.21), (St.22) --- (Dates are omitted.) :

METOC --- R.Taba -- (St.7) 1976-11-25, 1977-1-25 : R.Kukizawa -- (St.B) 1977
-1-25 : R.Tama -- (St.1) 1976-11-25 ; (St.8) 1976-10-26, 1976-11-25 ; (St.
15), (St.17) 1977-1-25 : R.Nippara -- (St.18) 1976-9-28 : R.Irikawa -- (St.1)
1976-9-28, 1976-10-26 ; R.Ôtanba -- (St.6) 1976-10-26 : R.Ôsawa -- (St.M)
1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.E) 1977-7-30.

FAMILY CHLOROPERLIDAE

Genus Haploperla

1. *Haploperla japonica* KOHNO (Fig.59)

SUPPLEMENT : IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.6), (St.7), (St.12), (St.15), (St.18) 1977-6-4 ; (St.J) 1977-6-5 : R.Tama -- (St.D) 1977-6-4.

Genus Alloperla

1. *Alloperla* sp. (Fig.59)

Loc. & date : R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.16 (Meoto Br.) 1975-5-29 ; St.18 (Shōwa Br.) 1975-8-16 : R.Tama -- St.10 (Yoroi Br.), St.18 (Hamura Dam) 1975-11-11 : R.Akikawa -- St.7 (Sasano), St.19 (Niitaka Br.), St.22 (Akikawa Br.) 1959-summer : R.Asakawa -- St.33 (Surisashi) 1975-8-14.

SUPPLEMENT : IDE --- R.Nippara -- (St.7), (St.12), (St.18) 1977-6-4 : R.Tama -- (St.1) 1974-2-2 ; (St.2) 1974-2-2 : IIMURA --- R.Tama -- (St.12) : R.Akikawa -- (St.1), (St.7), (St.O), (St.11), (St.20), (St.26) : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) 1976-autumn ; (St.E) 1977-7-30 ; (St.F) 1977-7-29.

CHLOROPERLIDAE Gen. et sp. indet. (Fig.59)

Loc. & date : R.Kosuge -- St.7 (Urakubo) 1979-8-18 : R.Nippara -- St.18 (Shōwa Br.) 1969-7-24 : R.Tama -- St.2 (Unazawa) 1959-summer ; St.10 (Yoroi Br.) 1971-12-6 : R.Asakawa -- St.4 (Henbori) 1969-7-21 ; St.6 (Kasuga Br.) 1969-7-29 ; St.7 (Sasano) 1965-7-30 ; St.8 (Tachibana Br.) 1965-7-29 ; St.22 (Akikawa Br.) 1975-10-24 ; St.23 (Ajiro Br.) 1971-12-6 : R.Asakawa -- St.6 (a small stream) 1979-3-12 ; St.14 (a small stream), St.15 (R.Ozu) 1978-11-20, St.17 (R.Daigo), St.18 (Ninikuzawa), St.20 (a small stream), St.21 (Kawaino), St.22 (Kitsunezuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-10-24.

SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1979-1-6 : R.Ôtanba -- (St.5) 1975-1-6 : R.Tama -- (St.1), (St.2), (St.10), (St.15) 1979-1-6 : R.Hirai -- (St.2) 1979-1-6 : R.Akikawa -- (St.18) 1979-1-6 : METOC --- R.Taba -- (St.7) 1976-10-26, 1976-11-25, 1977-1-25 : R.Kukizawa -- (St.B) 1976-11-25, 1977-1-25 : R.Tama -- (St.D) 1976-11-25, 1977-1-25 ; (St.1) 1976-11-25, 1977-1-25 ; (St.4) 1976-10-26, 1976-11-25, 1977-1-25 ; (St.15) 1977-1-25 : R.Irikawa --

(St.1) 1976-9-28, 1976-11-25 : TMG-BEP --- R.Akikawa -- (St.26) 1980-9-29,
1980-12-8 : HISAI --- R.Asakawa -- (St.28) 1979-11-28 : KRIEP --- R.Taba
-- (St.A) 1979-9-13 : R.Tama -- (St.2), (St.15) 1979-9-13.

ORDER HEMIPTERA

FAMILY CORIXIDAE

1. CORIXIDAE Gen. et sp. indet. (Fig.60)

Loc. & date : R.Tama -- St.30 (Tama-Suidō Br.) 1963-7-1.

FAMILY APHELOCHIRIDAE

Genus Aphelochirus

1. Aphelochirus vittatus MATSUMURA (Fig.60)

Loc. & date : R.Akikawa -- St.4 (Henbori), St.5 (Minami-Akikawa Br.) 1969
-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ; St.10 (Ozawa) 1965-7-30 ;
St.13 (Wada Br.) 1969-7-21 ; St.14 (Ozu Br.) 1965-7-30 ; St.19 (Niitaka
Br.) 1969-7-21 ; St.23 (Ajiro Br.) 1969-7-23, 1971-12-6 : R.Asakawa --
St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1964-7-17, 1969-7-
22 ; St.29 (Kamikunugida Br.) 1963-8-25 ; St.35 (Shikishima Br.) 1971-12-6.

2. Aphelochirus sp. (Fig.60)

Loc. & date : R.Ôtanba -- St.5 (Kitagawa Br.) 1963-6-15 : R.Akikawa --
St.7 (Sasano) 1960-7-21 ; St.11 (Shirokura) 1959-summer : R.Asakawa --
St.28 (Takaosan-guchi) 1964-7-17 ; St.29 (Kamikunugida Br.) 1963-8-25,
1964-7-17 ; St.35 (Shikishima Br.) 1964-7-24.

3. APHELOCHIRIDAE Gen. et sp. indet. (Fig.60)

SUPPLEMENT : IIMURA --- R.Akikawa -- (St.7) 1974-3-6, 1974-5-29.

FAMILY GERRIDAE

1. GERRIDAE Gen. et sp. indet. (Fig.60)

Loc. & date : R.Hirai -- St.2 (Tasai Br.) 1975-8-15 : R.Asakawa -- St.2
(a small stream) 1979-3-12 ; St.24 (Motoki Br.), St.25 (Kakuei Br.) 1979-
3-13 ; St.31 (Hikage Br.) 1976-12-7.

FAMILY NOTONECTIDAE

1. NOTONECTIDAE Gen. et sp. indet. (Fig.60)

Loc. & date : R.Hirai -- St.2 (Tasai Br.) 1975-8-15.

ORDER MEGALOPTERA

FAMILY CORYDALIDAE

Genus *Protohermes*

1. *Protohermes grandis* THUNBERG (Fig.61)

Loc. & date : R.Tama -- St.6 (Kawai) 1964-8-31 ; St.21 (Haijima Br.) 1971-12-7 ; R.Hirai -- St.2 (Tasai Br.) 1965-7-31, 1969-7-24, 1972-8-16 ; R.Akikawa -- St.6 (Kasuga Br.) 1969-7-21 ; St.7 (Sasano) 1965-7-30 ; St.8 (Tachibana Br.) 1965-7-29 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.12 (Kita-Akikawa Br.) 1965-7-30 ; St.13 (Wada Br.) 1965-7-30 ; St.16 (Gundō), St.18 (Hoshitake Br.), St.19 (Niitaka Br.), St.21 (Kowada Br.) 1969-7-21 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23 ; St.24 (Akiru Br.) 1965-7-31 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1965-7-31, 1971-12-6 ; R.Asakawa -- St.10 (Oyashiki) 1979-3-13 ; St.15 (R.Ozu) 1978-11-20 ; St.22 (Kitsunezuka) 1978-11-21 ; St.25 (Kakuei Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1964-7-17, 1969-7-22 ; St.29 (Kamikunugida Br.) 1964-7-17 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5 ; St.35 (Shikishima Br.) 1964-7-24 ; St.36 (Minase Br.) 1971-12-7.

SUPPLEMENT : IDE --- R.Nippara -- (St.12) 1977-6-4 ; (St.18) 1978-8-17 ; R.Tama -- (St.2) 1978-8-17 ; (St.20) 1974-10-22 ; (St.21) 1974-10-21 ; R.Ôtanba -- (St.6) 1973-8-21 ; R.Akikawa -- (St.26) 1973-11-4, 1974-10-23 ; R.Asakawa -- (St.35) 1974-2-1, 1978-8-16, 1979-1-6 : IIMURA --- R.Tama -- (St.22) 1974-2-27 ; R.Akikawa -- (St.11) 1974-3-6 ; (St.20), (St.26) --- (Dates are omitted.) : METOC --- R.Kukizawa -- (St.B) 1976-11-25 ; R.Irikawa -- (St.1) 1976-9-28, 1976-10-26, 1976-11-25 ; R.Ôsawa -- (St.M) 1976-11-25 : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21, 1981-2-16 ; R.Asakawa -- (St.P) 1981-2-16 : HISAI --- R.Asakawa -- (St.28) 1979-11-28.

Genus *Parachauliodes*

1. *Parachauliodes japonicus* McLACHLAN (Fig.61)

Loc. & date : R.Asakawa -- St.28 (Takaosan-guchi), St.29 (Kamikunugida Br.), St.30 (Kobotoke Lodge), St.35 (Shikishima Br.) 1964-7-17 & 24.

FAMILY SIALIDAE

1. SIALIDAE sp. (Fig.61)

SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.F) 1977-7-29.

ORDER NEUROPTERA

FAMILY OSMYLIDAE

Genus *Osmylus*

1. *Osmylus kisoensis* IWATA (Fig.61)

Loc. & date : R.Akikawa -- St.1 (Hachinosuzawa) 1977-5-30 : R.Asakawa --
St.31 (Hikage Br.) 1975-5-28.

ORDER TRICHOPTERA

FAMILY RHYACOPHILIDAE

SUBFAMILY RHYACOPHILINAE

Genus *Rhyacophila*

1. *Rhyacophila yamanakensis* IWATA (Fig.62)

Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1975-8-15, 1975-11-11 ; St.12
(Jindai Br.) 1960-7-21 ; St.21 (Haijima Br.) 1964-5-31 : R.Akikawa -- St.7
(Sasano) 1965-7-30 ; St.23 (Ajiro Br.) 1975-5-28 ; St.25 (Higashi-Akiru
Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1965-7-31, 1975-5-28, 1975-8-14,
1975-11-11 : R.Asakawa -- St.33 (Surisashi) 1975-8-14 ; St.35 (Shikishima
Br.) 1960-7-20.

SUPPLEMENT : IIMURA -- R.Nippara -- (St.18) : R.Tama -- (St.14), (St.16) :
METOC --- R.Tama -- (St.8) 1976-11-25 ; (St.17) 1976-9-28, 1976-11-25,
1977-1-25 : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21, 1976-12-8, 1981-
2-16 : R.Hirai -- (St.2) 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1981
-2-16.

2. *Rhyacophila articulata* MORTON (Fig.62)

Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-12-7.

SUPPLEMENT : IIMURA --- R.Nippara -- (St.7) 1975-2-5 : R.Akikawa -- (St.1)
1974-8-23, 1975-2-4 ; (St.0) 1974-10-22 : METOC --- R.Taba -- (St.7) 1977-
1-25 : R.Kukizawa -- (St.B) 1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.E)
1976-autumn.

3. *Rhyacophila nigrocephala* IWATA (Fig.63)

Loc. & date : R.Kosuge -- St.7 (Urakubo) 1979-8-18 : R.Tama -- St.18 (Hamura
Dam) 1975-8-15 ; St.21 (Haijima Br.) 1972-8-17, 1975-11-11 : R.Hirai --
St.2 (Tasai Br.) 1965-7-31, 1969-7-24, 1971-12-6, 1975-8-15 : R.Akikawa --
St.4 (Henbori) 1969-7-21 ; St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6
(Kasuga Br.) 1965-7-29 ; St.14 (Ozu Br.) 1959-summer ; St.16 (Gundō) 1959-
summer, 1965-7-30, 1969-7-21 ; St.18 (Hoshitake Br.), St.19 (Niitaka Br.),

St.21 (Kowada Br.) 1969-7-21 ; St.23 (Ajiro Br.) 1969-7-23, 1971-12-6 ;
St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1972-8-16, 1975
-8-14, 1975-11-11 : R.Asakawa -- St.22 (Kitsunēzuka) 1978-11-21 ; St.24
(Motoki Br.), St.25 (Kaluei Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.),
St.28 (Takaosan-guchi), St.29 (Kamikunugida Br.) 1969-7-22 ; St.31 (Hikage
Br.) 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi)
1975-5-28, 1975-8-14, 1975-10-24, 1876-7-16, 1976-11-15 ; St.34 (Jadaki-
guchi) 1969-7-22 ; St.35 (Shikishima Br.) 1972-8-17.

SUPPLEMENT : IDE --- R.Nippara -- (St.J) 1977-6-5 ; (St.12), (St.15) 1977-
6-4 ; (St.18) 1973-8-21, 1974-2-2, 1978-8-17, 1979-1-6, 1977-6-4 : R.Tama
-- (St.D) 1977-6-4 ; (St.1) 1974-2-2, 1979-1-6 ; (St.2) 1973-8-21, 1974-2-
2, 1979-1-6 ; (St.10) 1978-8-17, 1979-1-6 ; (St.15) 1974-2-2 ; (St.18)
1974-10-24, 1975-7-29 ; (St.19) 1975-7-29 ; (St.20) 1974-10-22, 1975-7-29 ;
(St.21) 1974-10-21, 1975-7-29 ; (St.22) 1975-7-29 : R.Ôtanba -- (St.5) 1973
-8-21, 1978-8-17, 1979-1-6 : R.Hirai -- (St.2) 1973-8-20, 1974-2-1, 1974-10
-22, 1978-8-17, 1979-1-6 : R.Akikawa -- (St.18) 1973-8-21, 1974-2-1, 1979-1
-6 ; (St.26) 1973-8-21, 1973-11-4, 1974-2-1, 1974-10-23 : R.Asakawa --
(St.35) 1973-8-20, 1974-2-1 : IIMURA --- R.Tama -- (St.1), (St.16), (St.21),
(St.22) : R.Akikawa -- (St.11), (St.13), (St.20), (St.26) -- (Dates are
omitted.) : METOC --- R.Kukizawa -- (St.D) 1976-10-26, 1977-1-25 : R.Tama --
(St.1) 1976-10-26 ; (St.8) 1976-10-26 ; (St.17) 1976-11-25, 1977-1-25 :
R.Irikawa -- (St.1) 1976-10-26, 1976-11-25 : R.Ôtanba -- (St.6) 1976-10-26,
1976-11-25, 1977-1-25 : R.Ôsawa -- (St.M) 1976-11-25, 1977-1-25 : TMG-BEP-T
--- R.Nippara -- (St.E) 1976-autumn, 1977-7-30 : TMG-BEP --- R.Hirai --
(St.2) 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-7-21, 1980-12-8,
1981-2-16 : R.Asakawa -- (St.P) 1980-7-21.

4. *Rhyacophila clemens* TSUDA (Fig.64)

Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-12-7.

SUPPLEMENT : IDE --- R.Nippara -- (St.6) 1977-6-4 : IIMURA --- R.Nippara --
(St.18) : R.Tama -- (St.1) : R.Akikawa -- (St.1), (St.7) -- (Dates are
omitted.) : METOC --- R.Taba -- (St.7) 1976-11-25 : R.Kukizawa -- (St.B)
1976-11-25 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F) 1976-autumn ; (St.6)
1977-9-11.

5. *Rhyacophila kawamurai* TSUDA (Fig.64)

Loc. & date : R.Kosuge -- St.1 (a small stream) 1979-8-18 : R.Tama -- St.10
(Yoroi Br.) 1975-5-28, 1975-11-11 : R.Akikawa -- St.26 (Takatsuki Br.)

1975-8-14 : R.Asakawa -- St.33 (Surisashi) 1975-8-14.

Supplement : TMG-BEP --- R.Akikawa -- (St.26) 1980-12-8, 1981-2-16 :

R.Asakawa -- (St.P) 1980-12-8.

6. *Rhyacophila transquilla* TSUDA (Fig.65)

Loc. & date : R.Kosuge -- St.5 (Çampground), St.7 (Kawakubo) 1979-8-18 :

R.Nippara -- St.18 (Shōwa Br.) 1975-11-11 : R.Tama -- St.1 (Shōwa Br.) 1969

-7-24 ; St.10 (Yoroi Br.) 1971-12-6, 1975-11-11 ; St.18 (Hamura Dam) 1971-

12-6, 1975-11-11 : R.Hirai -- St.2 (Tasai Br.) 1971-12-6 : R.Akikawa --

St.22 (Akikawa Br.) 1975-10-24 ; St.23 (Ajiro Br.) 1971-12-6 ; St.26

(Takatsuki Br.) 1975-11-11 : R.Asakawa -- St.21 (Kawaino), St.22 (Kitsune-

zuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Koge-

zawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-10-24, 1976-11-15 ;

St.34 (Jadaki-guchi) 1976-8-5 ; St.35 (Shikishima Br.) 1971-12-6.

SUPPLEMENT : IDE --- R.Nippara -- (St.7) 1977-6-4 : IIMURA --- R.Nippara

-- (St.7), (St.18) : R.Tama -- (St.1), (St.5), (St.14), (St.16), (St.21),

(St.22) : R.Akikawa -- (St.1), (St.7), (St.O), (St.11), (St.20), (St.26)

-- (Dates are omitted.) : METOC --- R.Taba -- (St.7) 1976-11-25, 1977-1-25

: R.Kukizawa -- (St.B) 1976-11-25, 1977-1-25 : R.Tama -- (St.D) 1976-11-25,

1977-1-25 ; (St.1) 1976-9-28, 1976-11-25, 1977-1-25 ; (St.4) 1976-11-25,

1977-1-25 ; (St.8) 1976-10-26, 1976-11-25, 1977-1-25 ; (St.15) 1976-9-28,

1976-10-26, 1976-11-25, 1977-1-25 ; (St.17) 1976-10-26, 1976-11-25, 1977-

1-25 : R.Nippara -- (St.18) 1977-1-25 : R.Irikawa -- (St.1) 1976-11-25,

1977-1-25 : R.Ôtanba -- (St.6) 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôsawa

-- (St.M) 1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F) 1976-autumn

: METOC-W --- R.Tama -- (St.31) 1980-10-26 : TMG-BEP --- R.Hirai -- (St.2)

1981-2-16 : R.Akikawa -- (St.26) 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P)

1980-7-21.

7. *Rhyacophila tacita* TSUDA (Fig.66)

Loc. & date : R.Tama -- St.18 (Hamura Dam) 1970-10-9.

SUPPLEMENT : METOC --- R.Taba -- (St.7) 1977-1-25 : R.Kukizawa -- (St.B)

1976-9-28 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) 1976-autumn,

1977-7-30 & 31 ; (St.6) 1977-9-11 : IIMURA --- R.Akikawa -- (St.1) 1974-8-23,

1974-10-22 ; (St.O) 1975-2-4 : MIYASHITA --- R.Tama -- (St.18) 1970-10-9.

8. *Rhyacophila kisoensis* TSUDA (Fig.66)

Loc. & date : R.Akikawa -- St.22 (Akikawa Br.) 1975-10-24 : R.Asakawa --

St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-

9-25 ; St.33 (Surisashi) 1976-7-16, 1976-11-15.

SUPPLEMENT : IIMURA --- R.Nippara -- (St.7) : R.Tama -- (St.1), (St.16),
(St.22) : R.Akikawa -- (St.O), (St.20) -- (Dates are omitted.) : METOC ---
R.Taba -- (St.7) 1977-1-25 : R.Kukizawa -- (St.B) 1977-1-25 : R.Tama --
(St.D) 1977-1-25 ; (St.4) 1976-9-28, 1977-1-25 ; (St.8) 1977-1*25 :
R.Irikawa -- (St.1) 1976-11-25, 1977-1-25 : R.Ôtanba -- (St.6) 1977-1-25 :
R.Ôsawa -- (St.M) 1977-1-25 : MIYASHITA --- R.Tama -- (St.18) 1970-10-9.

9. *Rhyacophila brevicephala* IWATA (Fig.67)

Loc. & date : R.Tama -- St.4 (Mansei Br.) 1969-7-23 : R.Asakawa -- St.22
(Kitsunozuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.33
(Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34
(Jadaki-guchi) 1976-8-5 ; St.35 (Shikishima Br.) 1971-12-6.

SUPPLEMENT : METOC --- R.Taba -- (St.7) 1976-11-25 : R.Tama -- (St.C), (St.8),
1976-11-25 : R.Irikawa -- (St.1) 1976-10-26, 1976-11-25 : R.Ôtanba -- (St.6)
1976-10-26, 1977-11-25 : TMG-BEP --- R.Hirai -- (St.2) 1980-12-8, 1981-2-16.

10. *Rhyacophila niwae* IWATA (Fig.66)

Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1971-12-6 : R.Akikawa -- St.23
(Ajiro Br.) 1971-12-6.

SUPPLEMENT : IDE --- R.Tama -- (St.2) 1974-2-2 ; (St.10) 1974-2-2 ; (St.15)
1974-2-2 : IIMURA --- R.Akikawa -- (St.1) 1974-5-31 ; (St.O) 1974-5-21 :
TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn : TSUDA --- R.Tama -- (St.15),
(St.18) 1973-Sept.

11. *Rhyacophila* sp. RA (Fig.67)

SUPPLEMENT : METOC --- R.Kukizawa -- (St.B) 1976-11-25 : R.Ôsawa -- (St.M)
1976-11-25 : TMG-BEP-T --- R.Nippara -- (St.E) 1977-7-30 ; (St.F) 1977-7-29.

12. *Rhyacophila* sp. RB (Fig.67)

SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn.

13. *Rhyacophila* sp. RC (Fig.67)

SUPPLEMENT : METOC --- R.Tama -- (St.8) 1976-10-26.

14. *Rhyacophila* sp. RD (Fig.68)

Loc. & date : R.Akikawa -- St.26 (Takatsuki Br.) 1975-11-11 : R.Nippara --
St.18 (Shôwa Br.) 1975-8-15.

SUPPLEMENT : IIMURA --- R.Nippara -- (St.18) : R.Tama -- (St.1), (St.14),
(St.16) : R.Akikawa -- (St.13), (St.20), (St.26) -- (Dates are omitted.).

15. *Rhyacophila* sp. RE

(Fig.68)

Loc. & date : R.Kosuge -- St.1 (a small stream), St.3 (a small stream)

1979-8-18 : R.Tama -- St.1 (Shōwa Br.) 1975-8-15 : R.Akikawa -- St.22

(Akikawa Br.) 1975-10-24 : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 :

R.Asakawa -- St.22 (Kitsunezuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-

28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi)

1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5.

SUPPLEMENT : IDE --- R.Nippara -- (St.7), (St.12) 1977-6-4 : R.Tama --

(St.2) 1977-6-4 ; (St.18) 1977-10-9 : IIMURA --- R.Nippara -- (St.7),

(St.18) : R.Tama -- (St.1) : R.Akikawa -- (St.1), (St.7), (St.0), (St.20),

(St.26) -- (Dates are omitted.) : METOC --- R.Kukizawa -- (St.B) 1976-9-

28 : R.Nippara -- (St.18) 1976-9-28 : R.Irikawa -- (St.1) 1976-9-28 :

R.Tama -- (St.D), (St.1) 1976-11-25 ; (St.4) 1976-9-28, 1976-10-26 ; (St.8)

1976-11-25 ; (St.17) 1976-9-28 : TMG-BEP-T --- R.Nippara -- (St.E) 1977-

7-30 ; (St.F), (St.G) 1976-autumn ; (St.F) 1976-7-29 & 31.

16. *Rhyacophila* sp. RH

(Fig.69)

Loc. & date : R.Kosuge -- St.5 (Campground) 1979-8-18 : R.Tama -- St.18

(Hamura Dam) 1970-10-9 : R.Asakawa -- St.2 (a small stream) 1979-3-12 ;

St.22 (Kitsunezuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7

; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-10-24, 1976

-7-16.

SUPPLEMENT : IDE --- R.Nippara -- (St.6), (St.7), (St.12) 1977-6-4 :

R.Tama -- (St.D) 1977-6-4 : IIMURA -- R.Nippara -- (St.7) 1975-2-5 :

R.Akikawa -- (St.0) 1975-2-4 ; (St.20) 1972-8-17, 1973-7-20 : METOC ---

R.Taba -- (St.7) 1977-1-25 : R.Kukizawa -- (St.B) 1976-9-28, 1976-11-25,

1977-1-25 : R.Irikawa -- (St.1) 1976-11-25.

17. *Rhyacophila* sp.

(Fig.70)

Loc. & date : R.Kosuge -- St.5 (Campground) 1979-8-18 : R.Tama -- St.1

(Shōwa Br.) 1969-7-24 ; St.6 (Kawai) 1959-summer ; St.10 (Yoroi Br.) 1975-

8-15, 1975-11-11 ; St.17 (Hamura Dam) 1969-7-24 ; St.21 (Haijima Br.) 1964

-5-31, 1975-11-11 : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Akikawa --

St.3 (Kazuma) 1969-7-22 ; St.6 (Kasuga Br.), St.10 (Ozawa), St.13 (Wada

Br.), St.16 (Gundō), St.18 (Hoshitake Br.), St.22 (Akikawa Br.) 1969-7-21

; St.23 (Ajiro Br.) 1969-7-23, 1975-5-28 ; St.26 (Takatsuki Br.) 1965-7-31

: R.Asakawa -- St.14 (a small stream) 1978-11-20 ; St.22 (Kitsunezuka)

1978-11-21 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.28 (Takaosanguchi) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24 ; St.34 (Jadaki-guchi) 1976-8-5 ; St.36 (Minase Br.) 1975-10-24 ; St.38 (Asakawa Br.) 1975-10-24.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.18') : R.Tama -- (St.2), (St.10), (St.15), (St.18), (St.19), (St.21), (St.22) : R.Ôtanba -- (St.5) : R.Hirai -- (St.2) : R.Akikawa -- (St.18), (St.25), (St.26) : R.Asakawa -- (St.35) : METOC --- R.Taba -- (St.7) 1976-10-26, 1976-11-25, 1977-1-25 : R.Kukizawa -- (St.B) 1976-10-26, 1976-11-25 : R.Tama -- (St.1) 1976-10-26, 1976-11-25 ; (St.4) 1976-9-28, 1977-1-25 ; (St.8), (St.15) 1976-10-26, 1976-11-25 ; (St.17) 1976-9-28 : R.Nippara -- (St.18) 1976-9-28, 1976-11-25 : R.Irikawa -- (St.1) 1976-9-28 : R.Ôtanba -- (St.6) 1977-1-25 : R.Ôsawa -- (St.M) 1976-10-26, 1977-1-25 : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21 : TSUDA --- R.Tama -- (St.1), (St.3), (St.18) 1973-Sept. : R.Akikawa -- (St.26) 1973-Sept. : KRIEP --- R.Taba -- (St.A) 1979-9-13 : R.Tama -- (St.15), (St.17) 1979-9-13.

Genus *Himalopsyche*

1. *Himalopsyche japonica* MORTON (Fig.69)

SUPPLEMENT : IDE --- R.Tama -- (St.2) 1973-8-21, 1974-2-2, 1978-8-17 ; (St.20) 1974-10-22 ; (St.21) 1974-10-21 : R.Hirai -- (St.2) 1974-10-22 : R.Akikawa -- (St.26) 1974-10-23.

SUBFAMILY GLOSSOSOMATINAE

Genus *Mystrophora*

1. *Mystrophora inops* TSUDA (Fig.71)

Loc. & date : R.Kosuge -- St.1 (a small stream), St.5 (Campground), St.7 (Kawakubo) 1979-8-18 : R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.18 (Shôwa Br.) 1959-summer, 1975-5-29, 1975-11-11 : R.Tama -- St.1 (Shôwa Br.) 1963-8-20, 1969-7-24 ; St.2 (Unazawa) 1959-summer ; St.5 (Kawai) 1963-8-21 ; St.10 (Yoroi Br.) 1969-7-24, 1971-12-6, 1975-5-28, 1975-8-15, 1975-11-11 ; St.12 (Jindai Br.) 1960-7-21 ; St.14 (Mannen Br.) 1963-8-25 ; St.15 (Chôfu Br.) 1969-7-23 ; St.16 (Tamagawa Br.) 1963-8-25, 1969-7-24 ; St.17 (Hamura Dam) 1969-7-24 ; St.18 (Hamura Dam) 1969-7-24, 1970-10-9, 1975-11-11 ; St.19 (Nagata Br.) 1969-7-24, 1975-8-14 ; St.20 (Tama Br.) 1959-summer ; St.21 (Haijima Br.) 1972-8-17, 1975-11-11 ; St.23 (Hino Br.) 1971-12-7 :

R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.5 (Minami-Akikawa Br.), St.6 (Kasuga Br.) 1969-7-21 : St.7 (Sasano) 1960-7-21 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.11 (Shirokura) 1960-7-21 ; St.12 (Kita-Akikawa Br.) 1969-7-21 ; St.13 (Wada Br.) 1965-7-30, 1969-7-21 ; St.14 (Ozu Br.) 1969-7-21 ; St.16 (Gundô) 1959-summer, 1965-7-30, 1969-7-21 ; St.17-18 (Ochiai Br.) 1960-7-21 ; St.18 (Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1960-7-21, 1969-7-21 ; St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1960-7-21, 1969-7-21, 1975-10-24 ; St.23 (Ajiro Br.) 1969-7-23 ; St.24 (Akiru Br.) 1960-7-21, 1965-7-31, 1969-7-23 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1969-7-23, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.17 (R.Daigo) , St.22 (Kitsunozuka) 1978-11-21 ; St.23 (Kawarajuku Br.) 1959-summer ; St.24 (Motoki Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.28 (Takaosan-guchi) 1969-7-22 ; St.29 (Kamikunugida Br.) 1969-7-22 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1969-7-22, 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5 ; St.35 (Shikishima Br.) 1971-12-6, 1972-8-17 ; St.40 (Hirayama Br.) 1975-10-24.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.J), (St.6), (St.7), (St.12), (St.15), (St.18) : R.Ôtanba -- (St.5) : R.Tama -- (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.25), (St.26), (St.27), (St.29), (St.31) : R.Hirai -- (St.2) : R.Akikawa -- (St.18), (St.26) : R.Asakawa -- (St.35) : IIMURA --- R.Nippara -- (St.7), (St.18) : R.Tama -- (St.1), (St.5), (St.14), (St.16), (St.21), (St.22) : R.Akikawa -- (St.1), (St.7), (St.0), (St.11), (St.13), (St.20), (St.26) : METOC --- R.Taba -- (St.7) : R.Kukizawa -- (St.B) : R.Tama -- (St.D), (St.1), (St.4), (St.8), (St.15), (St.17) : R.Nippara -- (St.18) : R.Irikawa -- (St.1) : R.Ôsawa -- (St.M) : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) : TMG-BEP --- R.Akikawa -- (St.26) : R.Asakawa -- (St.P) : TSUDA --- R.Tama -- (St.1), (St.3), (St.15) : R.Akikawa -- (St.26) : KRIEP -- R.Taba -- (St.A) : R.Tama -- (St.2), (St.15), (St.17) : HASHIGAMI --- R.Ôtanba -- (St.6) : R.Tama -- (St.5), (St.6), (St.15), (St.16) : MIYASHITA --- R.Tama -- (St.17), (St.18).

FAMILY HYDROPTILIDAE

Genus *Hydroptila*

1. *Hydroptila* sp. (Fig.72)
Loc. & date : R.Hirai -- St.2 (Tasai Br.) 2975-8-15, 1975-11-11, 1975-5-29
: R.Akikawa -- St.26 (Takatsuki Br.) 1975-8-14, 1975-11-11.
SUPPLEMENT : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-9-29, 1980-12-8,
1981-2-16 : R.Akikawa -- (St.26) 1980-9-29, 1981-2-16 : R.Asakawa -- (St.P)
1980-7-21.

FAMILY PHILOPOTAMIDAE

Genus *Chimarrha*

1. *Chimarrha* sp. (Fig.72)
SUPPLEMENT : METOC --- R.Ôsawa -- (St.M) 1976-9-28.

Genus *Dolophilodes*

1. *Dolophilodes* sp. (Fig.72)
SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) 1976-autumn.

FAMILY STENOPSYCHIDAE

Genus *Stenopsyche*

1. *Stenopsyche griseipennis* McLACHLAN (Fig.73)
Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Kawakubo) 1979-8-18 :
R.Nippara -- St.15 (Shiraishi Br.) 1969-7-24 ; St.16 (Meoto Br.) 1963-8-20
; St.18 (Shôwa Br.) 1975-8-15 : R.Ôtanba -- St.5 (Kitagawa Br.) 1969-7-23 :
R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1960-7-21, 1969-7-24, 1971-12-6,
1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 : R.Tama -- St.1 (Shôwa Br.)
1969-7-24, 1972-8-16 ; St.8 (Mitake Br.) 1969-7-23 ; St.10 (Yoroi Br.) 1969
-7-24, 1971-12-6, 1972-8-16, 1975-8-15, 1975-11-11 ; St.12 (Jindai Br.)
1960-7-25, 1969-7-23 ; St.14 (Mannen Br.) 1964-9-1 ; St.15 (Chôfu Br.) 1969
-7-23 ; St.16 (Tamagawa Br.) 1963-8-25, 1969-7-24 ; St.17 (Hamura Dam) 1960
-7-21, 1964-9-2, 1969-7-24, 1970-10-9, 1971-12-6, 1972-8-16, 1975-5-28 ;
St.18 (Hamura Dam) 1960-7-21, 1969-7-24, 1970-10-9, 1975-8-15, 1975-11-11 ;
St.19 (Nagata Br.) 1972-8-16, 1975-11-11 ; St.20 (Tama Br.) 1960-7-21,
1963-8-25, 1975-8-14 ; St.21 (Haijima Br.) 1960-7-21, 1963-8-25, 1964-5-31,
1965-7-31, 1969-8-11, 1970-10-9, 1971-12-7, 1972-8-17, 1975-5-28, 1975-11-11
; St.22 (Tama-Ôhashi Br.) 1960-7-20, 1963-8-25, 1964-5-31, 1969-8-11, 1971-
12-7, 1972-8-17, 1975-5-27, 1975-8-14 ; St.23 (Hino Br.) 1960-7-20, 1963-8-18,

1964-5-26, 1972-8-17 : R.Akikawa -- St.4 (Henbori) 1969-7-21 ; St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ; St.7 (Sasano) 1965-7-30 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.11 (Shirokura) 1960-7-21 ; St.12 (Kita-Akikawa Br.) 1965-7-30, 1969-7-21 ; St.13 (Wada Br.) 1965-7-30, 1969-7-21 ; St.14 (Ozu Br.) 1959-summer, 1965-7-30, 1969-7-21 ; St.16 (Gundô) 1960-7-21, 1965-7-30, 1969-7-21 ; St.17-18 (Ochiai Br.) 1960-7-21 ; St.18 (Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1969-7-21 ; St.20 (Sawado Br.) 1965-7-30, St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1965-7-30, 1969-7-21, 1975-10-24 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23, 1971-12-6, 1975-5-28 ; St.24 (Akiru Br.) 1960-7-21, 1965-7-31, 1969-7-23 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1965-7-31, 1969-7-23, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-14, 1975-11-11 ; R.Asakawa -- St.15 (R.Ozu - Hara) 1978-11-20 ; St.17 (R.Daigo), St.21 (Kawaino) 1978-11-21 ; St.23 (Kawarajuku Br.) 1959-summer ; St.25 (Kakuei Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1964-7-17, 1969-7-22 ; St.29 (Kami-Kunugida Br.) 1964-7-17, 1969-7-22 ; St.30 (Kobotoke Br.) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1969-7-22, 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5 ; St.35 (Shikishima Br.) 1964-7-24, 1969-7-22, 1971-12-6, 1972-8-17 ; St.36 (Minase Br.) 1975-10-24 ; St.38 (Asakawa Br.) 1972-8-17, 1975-10-24 ; St.41 (Takahata Br.) 1960-7-20.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.6), (St.7), (St.12), (St.18) : R.Tama -- (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23) : R.Ôtanba -- (St.5) : R.Hirai -- (St.2) : R.Akikawa -- (St.18), (St.26) : R.Asakawa -- (St.35) : IIMURA --- R.Nippara -- (St.7) : R.Tama -- (St.1), (St.5), (St.14), (St.16), (St.21), (St.22), (St.23) : R.Akikawa -- (St.1), (St.7), (St.0), (St.11), (St.20), (St.26) : METOC --- R.Taba -- (St.7) : R.Kukizawa -- (St.B) : R.Tama -- (St.D), (St.1), (St.4), (St.8), (St.15), (St.17) : R.Nippara -- (St.18) : R.Irikawa -- (St.1) : R.Ôsawa -- (St.M) : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.6) : TMG-BEP --- R.Hirai -- (St.2) : R.Akikawa -- (St.26) : R.Asakawa -- (St.P) : TSUDA --- R.Tama -- (St.1), (St.3), (St.15), (St.18) : KRIEP --- R.Tama -- (St.2), (St.15), (St.17) : HASHIGAMI --- R.Tama -- (St.4), (St.5), (St.6), (St.12), (St.15), (St.16), (St.21) : R.Ôtanba -- (St.6) : MIYASHITA --- R.Tama -- (St.17), (St.18), (St.21).

Genus *Parastenopsyche*

1. *Parastenopsyche sauteri* ULMER (Fig.73)

Loc. & date : R.Tama -- St.21 (Haijima Br.) 1970-10-9 : R.Akikawa -- St.6 (Kasuga Br.) 1965-7-29 ; St.8 (Tachibana Br.) 1965-7-29 ; St.16 (Gundō) 1969-7-21.

SUPPLEMENT : IIMURA --- R.Tama -- (St.21) 1973-10-26 : HASHIGAMI --- R.Tama -- (St.4) 1973-8-4 ; (St.5) 1973-8-11 : MIYASHITA --- R.Tama -- (St.21) 1970-10-9.

FAMILY POLYCENTROPIDAE

Genus *Polycentropus*

1. *Polycentropus* sp. PB (Fig.72)

SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn.

2. *Polycentropus* sp. PC (Fig.72)

SUPPLEMENT : IDE --- R.Tama -- (St.15) 1973-5-29 : R.Akikawa -- (St.26) 1973-5-29.

3. *Polycentropus* sp. (Fig.72)

SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1978-8-17.

Genus *Dipseudopsis*

1. *Dipseudopsis stellata* ULMER (Fig.78)

SUPPLEMENT : IDE --- R.Tama -- (St.21) 1977-10-9.

FAMILY PSYCHOMYIIDAE

Genus *Psychomyia*

1. *Psychomyia* sp. (Fig.74)

Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1971-12-6 ; St.18 (Hamura Dam) 1970-10-9 : R.Hirai -- St.2 (Tasai Br.) 1965-7-31, 1969-7-24, 1975-8-15, 1975-11-11 : R.Akikawa -- St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.17 (Teraoka) 1969-7-21 ; St.19 (Niitaka Br.) 1969-7-21 ; St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1969-7-21, 1975-8-14 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23 ; St.24 (Akiru Br.) 1969-7-23 ; St.26 (Takatsuki Br.) 1972-8-16, 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.29 (Kami-Kunugida Br.) 1969-7-22.

SUPPLEMENT : IIMURA --- R.Akikawa -- (St.26) 1972, 1973, 1974, 1975-spring : METOC --- R.Tama -- (St.17) 1977-1-25 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-9-29, 1980-12-8 : R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 ; MIYASHITA --- R.Tama -- (St.18) 1970-10-9.

Genus *Ecnomus*

1. *Ecnomus* sp. (Fig.74)

Loc. & date : R.Tama -- St.23 (Hino Br.) 1963-8-18.

FAMILY ARCTOPSYCHIDAE

Genus *Arctopsyche*

1. *Arctopsyche* sp. (Fig.74)

SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.E), (St.F) 1976-autumn.

FAMILY HYDROPSYCHIDAE

Genus *Macronema*

1. *Macronema radiatum* McLACHLAN (Fig.74)

SUPPLEMENT : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21 : R.Asakawa -- (St.P) 1980-7-21.

2. *Macronema* sp. (Fig.74)

SUPPLEMENT : IDE --- R.Tama -- (St.21) 1975-7-29 ; (St.23) 1975-7-30.

Genus *Hydropsychodes*

1. *Hydropsychodes brevilineata* IWATA (Fig.75)

Loc. & date : R.Tama -- St.18 (Hamura Dam) 1971-12-6, 1970-10-9, 1975-11-11 ; St.19 (Nagata Br.) 1975-11-11 ; St.21 (Haijima Br.) 1975-8-14, 1975-11-11 ; St.22 (Tama-Ōhashi Br.) 1971-12-7, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.), St.25 (Koremasa Br.) 1975-10-23 ; St.26 (Tamagawara Br.) 1975-8-13, 1975-10-23 ; St.30 (Tama-Suidō Br.) 1975-8-13 ; St.33 (Maruko Br.) 1975-10-22 : R.Hirai -- St.2 (Tasai Br.) 1969-7-24, 1971-12-6, 1972-8-16, 1975-8-15, 1975-11-11 : R.Akikawa -- St.22 (Akikawa Br.) 1975-10-24 ; St.26 (Takatsuki Br.) 1969-7-23, 1971-12-6, 1975-8-14, 1975-11-11 : R.Asakawa -- St.22 (Kitsunozuka) 1978-11-21 ; St.33 (Surisashi) 1975-10-24 ; St.35 (Shikishima Br.) 1971-12-7 ; St.38 (Asakawa Br.) 1975-10-24.

SUPPLEMENT : IDE --- R.Tama -- (St.1), (St.10) 1974-2-2 ; (St.22) 1978-8-17, 1979-1-5 ; (St.23), (St.24), (St.25), (St.26), (St.32) 1978-8-16, 1979-1-5 : R.Hirai -- (St.2) 1974-2-1 : R.Akikawa -- (St.18) 1974-2-1 ; (St.26) 1973-11-4, 1974-2-1 : R.Asakawa -- (St.35) 1974-2-1 ; (St.42) 1978-8-16, 1979-1-5 : R.Ōkuri -- (St.1) 1978-8-16, 1979-1-5 : IIMURA --- R.Tama -- (St.1), (St.14), (St.16), (St.21), (St.22) : R.Akikawa -- (St.20), (St.26) -- (Dates are omitted.) : METOC --- R.Kukizawa -- (St.B) 1976-9-28 : R.Tama -- (St.17) 1977-1-25 : METOC-W --- R.Tama --

(St.31) 1980-1-12, 1980-2-14, 1980-3-13, 1980-4-13, 1980-6-13, 1980-7-10, 1980-8-14, 1980-9-11, 1980-10-18, 1980-10-26, 1980-11-15 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1980-7-21, 1980-12-8, 1981-2-16 : R.Yaji -- (St.1) 1980-9-29, *1980-12-8 : TSUDA --- R.Tama -- (St.21), (St.22), (St.30) 1973-Sept. : KRIEP --- R.Tama -- (St.17) 1979-9-13 ; (St.26) 1979-8-9 : MIYASHITA --- R.Tama -- (St.18) 1970-10-9.

Genus *Hydropsyche*

1. *Hydropsyche echigoensis* TSUDA (Fig.76)
Loc. & date : R.Kosuge -- St.1 (a small stream) 1979-8-18.
SUPPLEMENT : METOC-W --- R.Tama -- (St.31) 1981-1-12.
2. *Hydropsyche nakaharai* TSUDA (Fig.76)
SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1973-8-21, 1974-2-2 : R.Tama -- (St.2) 1973-8-21, 1978-8-17 ; (St.10) 1973-8-21, 1978-8-17, 1979-1-6 ; (St.15) 1973-5-29, 1973-8-21, 1973-11-4, 1974-2-2, 1978-8-17, 1979-1-6 ; (St.18) 1975-7-29, 1976-8-19, 1977-10-9 ; (St.19) 1975-7-29 ; (St.20) 1975-7-29 ; (St.21) 1973-11-4, 1974-2-1, 1975-7-29, 1976-8-19, 1978-8-17, 1979-1-6 ; (St.22) 1973-8-20, 1974-2-1, 1975-7-29 & 30, 1978-8-17, 1979-1-5 ; (St.23) 1975-7-30, 1978-8-16, 1979-1-5 ; (St.25) 1973-8-19, 1973-10-27 ; (St.26) 1973-8-19, 1973-10-27 : R.Ôtanba -- (St.5) 1973-8-21, 1978-8-17 : R.Hirai -- (St.2) 1973-8-20, 1974-2-1, 1978-8-17, 1979-1-6 : R.Akikawa -- (St.18) 1973-8-21 ; (St.26) 1973-5-29, 1973-8-21, 1973-11-4, 1974-2-1, 1978-8-17, 1979-1-6 : R.Asakawa -- (St.35) 1973-8-20 : HISAI --- R.Asakawa -- (St.28) 1979-11-28.
3. *Hydropsyche gifuana* ULMER (Fig.76)
SUPPLEMENT : METOC --- R.Kukizawa -- (St.B) 1976-11-25 : R.Tama -- (St.D), (St.1) 1976-11-25 : R.Ôtanba -- (St.6) 1976-11-25 : TMG-BEP --- R.Hirai -- (St.2) 1980-9-29.
4. *Hydropsyche ulmeri* TSUDA (Fig.77)
Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.1 (Shôwa Br.) 1963-8-20, 1969-7-24, 1975-8-15 ; St.3 (Shiromaru) 1960-7-22 ; St.5 (Kawai junction) 1964-8-31 ; St.8 (Mitake Br.) 1963-6-24, 1964-8-31, 1969-7-23 ; St.9 (Ikusabata) 1963-8-21, 1964-8-31 : St.10 (Yoroi Br.) 1969-7-24, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 ;

St.12 (Jindai Br.) 1960-7-21, 1969-7-23 ; St.14 (Mannen Br.) 1964-9-1 ;
 St.15 (Chôfu Br.) 1969-7-23, St.16 (Tamagawa Br.) 1963-8-25, 1964-9-1, 1969
 -7-21 ; St.17 (Hamura Dam) 1960-7-21, 1964-9-2, 1969-7-24, 1971-12-6, 1972-
 8-16 ; St.18 (Hamura Dam) 1960-7-21, 1963-8-25, 1970-10-9, 1975-8-15, 1975-
 11-11 ; St.19 (Nagata Br.) 1969-7-24, 1975-8-14, 1975-11-11 ; St.20 (Tama
 Br.) 1960-7-21, 1963-8-25, 1975-8-14 ; St.21 (Haijima Br.) 1959-summer,
 1960-7-21, 1963-8-25, 1964-5-31, 1965-7-31, 1969-8-11, 1970-10-9, 1971-12-
 7, 1972-8-17, 1975-5-28, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.)
 1960-7-20, 1963-8-25, 1964-5-31, 1969-8-11, 1971-12-7, 1972-8-17, 1975-5-
 27, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1960-7-20, 1963-8-18, 1969-8-
 11, 1970-10-10, 1972-8-17, 1975-5-27, 1975-8-13, 1975-10-23 ; St.24 (Sekido
 Br.) 1960-7-20, 1969-8-11, 1975-5-27, 1975-8-13, 1975-10-23 ; St.25
 (Koremasa Br.) 1963-6-25, 1972-8-18, 1975-5-27, 1975-8-13, 1975-10-23 ; St.
 26 (Tamagawara Br.) 1960-7-20, 1963-7-1, 1975-10-23 ; St.30 (Tama-Suidô
 Br.) 1963-7-1, 1975-10-23, 1975-8-13 ; St.32 (Futago Br.) 1963-6-25 ; St.33
 (Maruko Br.) 1975-10-22 : R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ;
 St.15 (Shiraishi Br.) 1969-7-24 ; St.16 (Meoto Br. - upper stream) 1963-8-
 20 ; St.17 (Meoto Br. - lower stream) 1963-8-20 ; St.18 (Shôwa Br.) 1960-7
 -22, 1969-7-24, 1972-8-16, 1975-5-29, 1975-8-15, 1975-11-11 : R.Ôtanba --
 St.5 (Kitagawa Br.) 1963-6-15, 1969-7-23 ; St.6 (Taishô Br.) 1960-7-21 :
 R.Hirai -- St.2 (Tasai Br.) 1960-7-21, 1965-7-32, 1969-7-24, 1971-12-6,
 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.4 (Henbori),
 St.5 (Minami-Akikawa Br.) 1969-7-21 : St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ;
 St.7 (Sasano) 1960-7-21, 1965-7-30 ; St.8 (Tachibana Br.) 1965-7-29 ; St.10
 (Ozawa) 1965-7-30, 1969-7-21 ; St.11 (Shirokura) 1960-7-21 ; St.12 (Kita-
 Akikawa Br.) 1965-7-29, 1969-7-21 ; St.13 (Wada Br.) 1965-7-30, 1969-7-21 ;
 St.14 (Ozu Br.) 1965-7-30, 1969-7-21 ; St.16 (Gundô Br.) 1959-summer, 1965-
 7-30, 1969-7-21 ; St.17-18 (Ochiai Br.) 1960-7-21 ; St.18 (Hoshitake Br.)
 1969-7-21 : St.19 (Niitaka Br.) 1959-summer, 1960-7-21, 1969-7-21 ; St.20
 (Sawado Br.) 1965-7-30 ; St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.)
 1960-7-21, 1963-8-25, 1965-7-30, 1969-7-21, 1972-8-16, 1975-8-14, 1975-10-
 24 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23, 1971-12-6, 1975-5-27 ; St.24
 (Akiru Br.) 1959-summer, 1965-7-31, 1969-7-23 ; St.25 (Higashi-Akiru Br.)
 1965-7-31 ; St.26 (Takatsuki Br.) 1960-7-21, 1965-7-31, 1969-7-23, 1971-12-
 6, 1972-8-16, 1975-5-27, 1975-8-13, 1975-10-23 : R.Asakawa -- St.17 (R.Daigo),
 St.22 (Kitsunezuka) 1978-11-21 ; St.23 (Kawarajuku Br.) 1959-summer, 1963-

8-25 ; St.26 (Kakuei Br.) 1979-5-13 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1964-7-17, 1969-7-22 ; St.29 (Kamikunugida Br.) 1960-7-20; 1964-7-17 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1969-7-22, 1976-8-5 ; St.35 (Shikishima Br.) 1959-summer, 1964-7-24, 1969-7-22, 1971-12-6, 1972-8-17 ; St.36 (Minase Br.) 1959-summer, 1975-8-14 ; St.38 (Asakawa Br.) 1971-12-7, 1972-8-17, 1975-8-14, 1975-10-24 ; St.40 (Hirayama Br.) 1975-5-27, 1975-8-14, 1975-10-24 ; St.41 (Takahata Br.) 1960-7-20 ; St.42 (Arai Br.) 1975-8-13, 1975-10-23 : R.Yaji -- St.1 (Asahi Br.) 1960-7-20.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.1), (St.6), (St.7), (St.12), (St.15), (St.18) : R.Tama -- (St.D), (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.25), (St.26), (St.27), (St.29), (St.31) (St.32), (St.33) : R.Ôtanba -- (St.5) : R.Hirai -- (St.2) : R.Akikawa -- (St.18), (St.26) : R.Yaji -- (St.1) : R.Asakawa -- (St.35), (St.42) : R.Ôkuri -- (St.1) : IIMURA --- R.Nippara -- (St.7), (St.18) : R.Tama -- (St.1), (St.5), (St.14), (St.16), (St.21), (St.22), (St.23), (St.24) : R.Akikawa -- (st.1), (St.7), (St.0), (St.11), (St.13), (St.20), (St.26) : R.Asakawa -- (St.42) : METOC --- R.Taba -- (St.7) : R.Kukizawa -- (St.B) : R.Tama -- (St.D), (St.1), (St.4), (St.8), (St.15), (St.17) : R.Nippara -- (St.18) : R.Irikawa -- (St.1) : R.Ôtanba -- (St.6) : R.Ôsawa -- (St.M) : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) : TMG-BEP --- R.Akikawa -- (St.26) : R.Hirai -- (St.2) : R.Asakawa -- (St.P) : TSUDA --- R.Tama -- (St.1), (St.3), (St.15), (St.18) : HISAI --- R.Asakawa -- (St.28) : KRIEP --- R.Taba -- (St.A) : R.Tama -- (St.2), (St.15), (St.17), (St.23), (St.32) : HASHIGAMI --- R.Ôtanba -- (St.6) : R.Tama -- (St.4), (St.5), (St.6), (St.12), (St.15), (St.16), (St.21) : MIYASHITA --- R.Tama -- (St.18), (St.21), (St.23).

5. *Hydropsyche* sp. HA (Fig.78)

SUPPLEMENT : IIMURA --- R.Nippara -- (St.7) 1974-8-24, 1974-10-23, 1975-2-5 : R.Akikawa -- (St.1) 1974-8-23, 1974-10-22 : METOC --- R.Kukizawa -- (St.B) 1976-9-28, 1976-10-26, 1976-11-25.

Genus *Diplectrona*

1. *Diplectrona* sp. DB (Fig.78)
Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-12-7.
SUPPLEMENT : IDE --- R.Nippara -- (St.6) 1977-6-4 : IIMURA --- R.Unazawa -- (St.K) 1972-12-6.
2. *Diplectrona* sp. DC (Fig.78)
Loc. & date : R.Asakawa -- St.18 (Ninikuzawa), St.20 (a small stream) 1978-11-21.
SUPPLEMENT : IIMURA --- R.Akikawa -- (St.7) 1974-9-28 ; (St.20) 1974-3-5 : METOC --- R.Ôsawa -- (St.M) 1976-9-28 : R.Tama -- (St.4) 1976-11-25.

FAMILY CALAMOCERATIDAE

Genus *Rhabdoceras*

1. *Rhabdoceras japonicus* ULMER (Fig.78)
SUPPLEMENT : IDE --- R.Tama -- (St.18) 1977-10-9 ; (St.21) 1977-10-9.

FAMILY ODONTOCERIDAE

Genus *Perissoneura*

1. *Perissoneura paradoxa* McLACHLAN (Fig.79)
Loc. & date : R.Kosuge -- St.1 , St.3 (small streams) 1979-8-18 : R.Asakawa -- St.18 (Ninikuzawa), St.21 (Kawaino) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28 ; St.32 (Kogezawa junction) 1976-9-25.
SUPPLEMENT : IDE --- R.Ôtanba -- (St.5) 1973-8-21 : R.Tama -- (St.2) 1974-2-2 ; (St.10) 1973-8-21 ; (St.21) 1973-8-20 : R.Akikawa -- (St.26) 1973-8-21, 1978-8-17, 1979-1-6.

Genus *Psilotreta*

1. *Psilotreta kisoensis* IWATA (Fig.79)
Loc. & date : R.Asakawa -- St.14 (Iriyama) 1978-11-20 ; St.17 (R.Daigo), St.18 (Ninikuzawa), St.20 (a small stream), St.21 (Kawaino) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28.
SUPPLEMENT : IDE --- R.Tama -- (St.2) 1978-8-17 ; (St.10) 1974-2-2 ; (St.18) 1975-7-29 ; (St.21) 1974-2-1 : R.Hirai -- (St.2) 1974-10-22 : TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn.

FAMILY MOLANNIDAE

Genus *Molanna*

1. *Molanna falcata* ULMER (Fig.80)
 SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1973-8-21 : R.Tama -- (St.1) 1973-8-21 ; (St.10) 1973-8-21 ; (St.15) 1973-11-4, 1974-2-2 ; (St.18) 1974-10-24, 1975-7-29 ; (St.20) 1974-10-22, 1975-7-29 ; (St.21) 1973-5-29, 1973-8-20, 1973-11-4, 1974-2-1, 1975-7-29, 1978-8-17, 1979-1-6 ; (St.22) 1974-2-1, 1975-7-29, 1978-8-17, 1975-1-5 ; (St.23) 1973-10-27, 1975-7-28 ; (St.24) 1975-7-28, 1978-8-16 ; (St.26) 1974-1-3 ; (St.31) 1977-10-9 : R.Ôtanba -- (St.5) 1973-8-21 : R.Akikawa -- (St.18) 1973-8-21 ; (St.26) 1973-8-21, 1973-11-4, 1974-2-1, 1974-10-23 : R.Hirai -- (St.2) 1974-10-22 : R.Asakawa -- (St.35) 1978-8-16, 1979-1-6 ; (St.42) 1979-1-5.

FAMILY LEPTOCERIDAE

Genus *Leptocerus*

1. *Leptocerus tsudai* AKAGI (Fig.80)
 Loc. & date : R.Asakawa -- St.33 (Surisashi) 1976-11-15.
 SUPPLEMENT : IDE --- R.Nippara -- (St.7) 1977-6-4.
2. *Leptocerus* sp. (Fig.80)
 Loc. & date : R.Akikawa -- St.23 (Ajiro Br.) 1965-7-31.

Genus *Mystacides*

1. *Mystacides* sp. MA (Fig.81)
 SUPPLEMENT : IIMURA --- R.Tama -- (St.5) 1973-10-23.

Genus *Athripsodes*

1. *Athripsodes* sp. LC (Fig.81)
 Loc. & date : R.Asakawa -- St.21 (Kawaino) 1978-11-21 ; St.33 (Surisashi) 1976-7-16.

LEPTOCERIDAE Gen. et sp. indet. (Fig.81)

- Loc. & date : R.Tama -- St.1 (Shôwa Br.) 1975-5-29 : R.Akikawa -- St.23 (Ajiro Br.) 1965-7-31.
 SUPPLEMENT : IIMURA --- R.Nippara -- (St.7) 1974-3-1 : TMG-BEP --- R.Hirai -- (St.2) 1980-9-29 : R.Akikawa -- (St.26) 1980-12-8 : R.Asakawa -- (St.P) 1981-2-16.

FAMILY KITAGAMIIDAE

Genus *Limnocentropus*

1. *Limnocentropus insolitus* ULMER (Fig.82)
 Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1976-7-16.

FAMILY PHRYGANEIDAE

Genus *Neuronia*

1. *Neuronia (Phryganopsis) latipennis* BANKS (Fig.82)
Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Kawakubo) 1979-8-18 :
R.Asakawa -- St.25 (Kakuei Br.) 1979-3-13.
SUPPLEMENT : IDE --- R.Tama -- (St.21) 1974-2-1, 1974-10-21 ; (St.22) 1974
-2-1 ; (St.23) 1976-8-20 ; (St.24) 1978-8-16 ; (St.25) 1973-10-27, 1979-1-
5 ; (St.27) 1976-8-18 ; (St.29) 1976-8-18.
2. *Neuronia maxima* IWATA (Fig.82)
Loc. & date : R.Taba -- St.2 (Ichinose) 1977-4-26 ; St.4 (Kumakurazawa)
1977-4-26 ; St.8 (R.Goyama) 1977-4-25 : R.Irikawa -- St.1 (Debris barrier
- upper stream) 1977-5-10 : R.Asakawa -- St.31 (Hikage Br.) 1976-8-18.
3. *Neuronia (Oligostomis) fluvipes* MATSUMURA (Fig.82)
SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1978-8-17 : R.Tama -- (St.1)
1973-8-21 ; (St.2) 1978-8-17, 1979-1-6 ; (St.22) 1974-10-20 : R.Ôtanba --
(St.5) 1978-8-17, 1979-1-6 : R.Asakawa -- (St.35) 1978-8-16, 1979-1-6 :
TMG-BEP-T --- R.Nippara -- (St.E) 1976-autumn.

FAMILY LIMNOPHILIDAE

Genus *Apatania*

1. *Apatania* sp. AA (Fig.82)
SUPPLEMENT : IDE --- R.Tama -- (St.2) 1973-8-21, 1974-2-2 ; (St.15) 1973-
11-4.

Genus *Stenophylax*

1. *Stenophylax ondakensis* IWATA (Fig.83)
SUPPLEMENT : IDE --- R.Nippara -- (St.12) 1977-6-4 : R.Tama -- (St.1) 1973
-8-21, 1978-8-17, 1979-1-6 ; (St.2) 1974-2-2 : R.Asakawa -- (St.35) 1979-1-6.

Genus *Platyphylax*

1. *Platyphylax yokouchii* IWATA (Fig.83)
Loc. & date : R.Asakawa -- St.32 (Kogezawa junction) 1976-9-25.

Genus *Glyphotaelius*

1. *Glyphotaelius admorsus* McLACHLAN (Fig.83)
SUPPLEMENT : IDE --- R.Tama -- (St.10) 1979-1-6 : R.Hirai -- (St.2) 1979-1-6.

Genus *Astenophylax*

1. *Astenophylax grammicus* McLACHLAN (Fig.83)

SUPPLEMENT : IDE --- R.Tama -- (St.10), (St.21), (St.22) 1978-8-17 :
R.Hirai -- (St.2) 1978-8-17 : R.Asakawa -- (St.35) 1978-8-16.

LIMNOPHILINAE Gen. et sp. indet. (Fig.83)

Loc. & date : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Asakawa -- St.18
(Ninikuzawa) 1978-11-21.

SUPPLEMENT : IDE --- R.Tama -- (St.1) 1979-1-6.

FAMILY SERICOSTOMATIDAE

Genus *Goera*

1. *Goera japonica* BANKS (Fig.84)

Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.1 (Shōwa
Br.) 1972-8-16 ; St.10 (Yoroi Br.) 1975-8-15 : R.Hirai -- St.2 (Tasai Br.)
1965-7-31, 1969-7-24 : R.Akikawa -- St.4 (Henbori), St.5 (Minami-Akikawa Br.)
, St.10 (Ozawa), St.12 (Kita-Akikawa Br.), St.18 (Hoshitake Br.) 1969-7-21 ;
St.22 (Akikawa Br.) 1975-8-14 ; St.23 (Ajiro Br.), St.24 (Akiru Br.) 1969-7-
23 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1969-7-23,
1971-12-6, 1972-8-16, 1975-8-14 : R.Asakawa -- St.17 (R.Daigo) 1978-11-21 ;
St.24 (Motoki Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.26 (Higashi-Yamashita
Br.), St.28 (Takaosan-guchi), St.29 (Kamikunugida Br.) 1969-7-22 ; St.31
(Hikage Br.) 1976-10-28 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33
(Surisashi) 1975-8-14, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5.
SUPPLEMENT : IDE --- R.Tama -- (St.1) 1974-2-2, 1978-8-17, 1979-1-6 ; (St.2)
1973-8-21, 1974-2-2, 1978-8-17, 1979-1-6 ; (St.10) 1978-8-17, 1979-1-6 ;
(St.15) 1974-2-2, 1978-8-17, 1979-1-6 ; (St.18) 1974-10-24, 1975-7-29 ;
(St.21) 1974-2-1 : R.Ôtanba -- (St.5) 1973-8-21, 1978-8-17 : R.Hirai --
(St.2) 1973-8-20, 1974-2-1, 1974-10-22, 1978-8-17, 1979-1-6 : R.Akikawa --
(St.18) 1973-8-21 ; (St.26) 1973-8-21, 1973-11-4, 1974-2-1, 1979-1-6 :
R.Asakawa -- (St.35) 1974-2-1, 1978-8-16, 1979-1-6 ; (St.39) 1978-8-16 :
METOC --- R.Taba -- (St.7) 1977-1-25 : R.Tama -- (St.D) 1976-11-25 ; (St.1)
1976-9-28, 1976-10-26 ; (St.4) 1976-11-25 ; (St.8) 1976-10-26, 1977-1-25 ;
(St.15) 1977-1-25 ; (St.17) 1976-11-25, 1977-1-25 : R.Nippara -- (St.18)
1976-11-25 : R.Irikawa -- (St.1) 1976-9-28, 1976-10-26, 1977-1-25 : R.Ôsawa
-- (St.M) 1977-1-25 : TMG-BEP --- R.Hirai -- (St.2) 1981-2-16 : R.Akikawa --
(St.26) 1980-9-29, 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1980-7-21,

1980-9-29, 1981-2-16 : TSUDA --- R.Tama -- (St.18) 1973-Sept. : HASHIGAMI
--- R.Tama -- (St.6) 1973-8-13.

2. *Goera* sp. (Fig.84)

Loc. & date : R.Asakawa -- St.17 (R.Daigo) 1978-11-21.

SUPPLEMENT : TMG-BEP --- R.Hirai -- (St.2) 1980-9-29 : R.Akikawa -- (St.26)
1980-7-21 : R.Asakawa -- (St.P) 1980-9-29.

Genus *Brachycentrus*

1. *Brachycentrus* sp. (Fig.85)

SUPPLEMENT : IDE --- R.Ôtanba -- (St.5) 1979-1-6 : TMG-BEP-T --- R.Nippara
-- (St.F) 1976-autumn.

Genus *Micrasema*

1. *Micrasema quadriloba* MARTYNOV (Fig.85)

Loc. & date : R.Asakawa -- St.33 (Surisashi) 1975-10-24.

SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1979-1-6 : R.Tama -- (St.1), (St.2)
1978-8-17 : R.Ôtanba -- (St.5) 1974-2-2 : R.Akikawa -- (St.18) 1979-1-6.

2. *Micrasema* sp. MA (Fig.85)

SUPPLEMENT : IDE --- R.Nippara -- (St.12) 1977-6-4.

3. *Micrasema* sp. MB (Fig.85)

SUPPLEMENT : IDE --- R.Tama -- (St.1) 1974-2-2.

4. *Micrasema* sp. (Fig.85)

SUPPLEMENT : METOC --- R.Kukizawa -- (St.B) 1976-9-28 : TSUDA --- R.Tama --
(St.15) 1973-Sept..

Genus *Neoseverinia*

1. *Neoseverinia crassicornis* ULMER (Fig.86)

Loc. & date : R.Kosuge -- St.1, St.2 (small streams), St.6 (Wasabida) 1979-
8-18 : R.Asakawa -- St.32 (Hikage Br.) 1976-12-7.

SUPPLEMENT : IDE --- R.Nippara -- (St.7) 1977-6-4 : METOC --- R.Taba --
(St.7) 1976-11-25 : R.Kukizawa -- (St.B) 1976-11-25, 1977-1-25 : R.Tama --
(St.1) 1976-9-28, 1976-11-25 : R.Nippara -- (St.18) 1976-9-28, 1976-11-25 :
R.Ôsawa -- (St.M) 1976-11-25 : TMG-BEP-T --- R.Nippara -- (St.E), (St.F),
(St.G) 1976-autumn ; (St.F) 1977-7-31.

Genus *Dinarthrodes*

1. *Dinarthrodes japonica* TSUDA (Fig.86)

Loc. & date : R.Kosuge -- St.1 (a small stream), St.5 (Campground), St.7 (Kawakubo) 1979-8-18 ; R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.18 (Shōwa Br.) 1975-11-11 ; R.Tama -- St.1 (Shōwa Br.) 1975-8-15 ; St.4 (Mansei Br.) 1969-7-23 ; R.Akikawa -- St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ; St.19 (Niitaka Br.) 1960-7-21 ; St.23 (Ajiro Br.) 1975-5-28 ; St.26 (Takatsuki Br.) 1975-8-14 ; R.Asakawa -- St.2 (R.Yamairi), St.3, St.6 (small streams) 1979-3-12 ; St.15 (R.Ozu) 1978-11-20 ; St.17 (R.Daigo), St.21 (Kawaino), St.22 (Kitsunezuka) 1978-11-21 ; St.29 (Kamikunugida Br.) 1969-7-22 ; St.31 (Hikage Br.) 1976-10-28 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18.
SUPPLEMENT : IDE --- R.Nippara -- (St.6) 1977-6-4 ; R.Tama (St.2) 1973-8-21, 1974-2-2 ; (St.10) 1973-8-21 ; (St.15) 1974-2-2 ; R.Ôtanba -- (St.5) 1973-8-21, 1974-2-2 ; R.Hirai -- (St.2) 1973-8-20.

Genus *Gumaga*

1. *Gumaga okinawaensis* TSUDA (Fig.87)

Loc. & date : R.Hirai -- St.2 (Tasai Br.) 1971-12-6 ; R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.6 (Kasuga Br.) 1965-7-29 ; R.Asakawa -- St.22 (Kitsunezuka) 1978-11-21 ; St.24 (Motoki Br.) 1979-3-13 ; St.33 (Surisashi) 1976-11-15.
SUPPLEMENT : IDE --- R.Nippara -- (St.7) 1977-6-4.

2. *Gumaga* sp.

Loc. & date : R.Asakawa -- St.22 (Kitsunezuka) 1978-11-21.

Genus *UENOA*

1. *Uenoa tokunagai* IWATA (Fig.87)

Loc. & date : R.Asakawa -- St.17 (R.Daigo), St.21 (Kawaino) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1976-11-15.

SUPPLEMENT : IIMURA --- R.Nippara -- (St.7) 1974-8-24, 1974-10-23 ; R.Akikawa -- (St.1) 1974-5-31, 1974-10-22 ; (St.0) 1974-8-23, 1974-10-22 ; METOC --- R.Kukizawa -- (St.B) 1977-1-25.

ORDER COLEOPTERA
FAMILY HALIPLIDAE
Genus Haliplus

1. Haliplus sp. (Fig.88)
Loc. & date : R.Tama -- St.21 (Haijima Br.) 1970-10-9.
SUPPLEMENT : MIYASHITA --- R.Tama -- (St.21) 1970-10-9.

FAMILY DYTISCIDAE
Genus Platambus

1. Platambus sp. (Fig.88)
SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.E) 1976-autumn.

COLYMBETINAE Gen. et sp. indet. (Fig.88)
Loc. & date : R.Asakawa -- St.21 (Kawaino) 1978-11-21.

DYTISCIDAE Gen. et sp. indet. (Fig.88)
Loc. & date : R.Akikawa -- St.10 (Ozawa) 1969-7-21 : R.Asakawa -- St.3
(a small stream) 1979-3-12.
SUPPLEMENT : IDE --- R.Tama -- (St.20) 1974-10-22 ; (St.21) 1974-10-21 :
R.Hirai -- (St.2) 1974-10-22 : TMG-BEP --- R.Hirai -- (St.2) 1981-2-16.

FAMILY GYRINIDAE
Genus Orectochilus

1. Orectochilus sp. (Fig.88)
Loc. & date : R.Asakawa -- St.21 (Kawaino) 1978-11-21.

FAMILY HYDROPHILIDAE
Genus Hydrocycclus

1. Hydrocycclus sp. (Fig.88)
Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1969-7-24 ; St.17 (Hamura Dam)
1969-7-24 ; St.18 (Hamura Dam) 1969-7-24 ; St.21 (Haijima Br.) 1969-8-11,
1975-5-28, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1975-10-23 ; St.27
(Kamigawara Dam) 1969-8-11 ; St.30 (Tama-Suidô Br.) 1975-10-23, 1969-8-15 ;
St.33 (Maruko Br.) 1975-8-12 : R.Hirai -- St.2 (Tasai Br.) 1965-7-31, 1975-
5-28, 1975-8-15, 1975-11-11 : R.Asakawa -- St.38 (Asakawa Br.) 1975-10-24 ;
St.40 (Hirayama Br.) 1975-8-14, 1975-10-24.

HYDROPHILIDAE Gen. et sp. indet.

SUPPLEMENT : IIMURA --- R.Asakawa -- (St.42) 1974-8-23.

FAMILY PSEPHENIDAE

Genus *Psephenoides*

1. *Psephenoides japonicus* MASUDA (Fig.89)

SUPPLEMENT : TMG-BEP --- R.Akikawa -- (St.26) 1980-9-29, 1981-2-16.

2. *Psephenoides* sp. (Fig.89)

Loc. & date : R.Tama -- St.23 (Hino Br.) 1969-8-11 : R.Akikawa -- St.12 (Kita-Akikawa Br.) 1969-7-21 ; St.26 (Takatsuki Br.) 1975-8-14.

Genus *Mataeopsephenus*

1. *Mataeopsephenus japonicus* MATSUMURA (Fig.89)

Loc. & date : R.Tama -- St.1 (Shōwa Br.) 1972-8-16 ; St.9 (Ikusabata) 1964-8-31 ; St.15 (Chōfu Br.) 1969-7-23 ; St.18 (Hamura Dam), St.20 (Tama Br.) 1963-8-25, 1964-9-2, 1965-7-31 ; St.21 (Haijima Br.) 1959-summer, 1960-7-21, 1963-8-25, 1964-5-31, 1965-7-31, 1969-8-11, 1970-10-9, 1971-12-7, 1972-8-17, 1975-5-28, 1975-11-11 ; St.22 (Tama-Ōhashi Br.) 1963-8-25, 1964-5-31, 1969-8-11 ; St.23 (Hino Br.) 1963-8-18, 1964-5-26, 1969-8-11, 1970-10-10, 1971-12-7, 1975-10-23 ; St.24 (Sekido Br.) 1963-7-1, 1972-8-18 ; St.25 (Koremasa Br.) 1963-6-25 ; St.26 (Tamagawara Br.) 1963-7-1 ; St.30 (Tama-Suidō Br.) 1963-7-1 ; St.32 (Futago Br.) 1960-7-20 : R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1965-7-31, 1969-7-24, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.10 (Ozawa) 1965-7-30 ; St.11 (Shirokura) 1963-8-25 ; St.12 (Kita-Akikawa Br.) 1965-7-30 ; St.13 (Wada Br.) , St.14 (Ozu Br.) 1965-7-30 ; St.16 (Gundō) 1965-7-30, 1969-7-21 ; St.18 (Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1969-7-21 ; St.20 (Sawado Br.) 1965-7-30 ; St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1965-7-30, 1969-7-21 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23, 1971-12-6 ; St.24 (Akiru Br.) 1965-7-31, 1969-7-23 ; St.25 (Higashi-Akiru Br.) 1963-8-25, 1965-7-31 ; St.26 (Takatsuki Br.) 1965-7-31, 1969-7-23, 1971-12-6, 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.29 (Kamikunugida Br.) 1964-7-17 ; St.35 (Shikishima Br.) 1964-7-24 ; St.36 (Minase Br.) 1964-7-24.

SUPPLEMENT : IDE --- R.Tama -- (St.15) 1979-1-6 ; (St.19) 1974-10-24 ; (St.20) 1974-10-22, 1975-7-29 ; (St.21) 1973-8-20, 1974-10-20, 1975-7-29, 1979-1-6 ; (St.22) 1973-8-20, 1974-10-20, 1978-8-17 ; (St.23) 1973-10-27, 1976-8-20 ;

(St.29) 1977-10-9 : R.Hirai -- (St.2) 1973-8-20, 1974-2-1, 1974-10-22, 1978-8-17, 1979-1-6 : R.Akikawa -- (St.18) 1973-8-21, 1978-8-17 ; (St.26) 1973-5-29, 1973-8-21, 1973-10-27, 1974-2-1, 1974-10-23, 1979-1-6 : R.Asakawa -- (St.35) 1979-1-6 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : MIYASHITA --- R.Tama -- (St.21), (St.23) 1970-10-9 : METOC --- R.Tama -- (St.8) 1976-10-26.

Genus *Eubrianax*

1. *Eubrianax granicolis* LEWIS (Fig.90)

Loc. & date : R.Tama -- St.21 (Haijima Br.) 1975-8-14 ; St.23 (Hino Br.) 1975-10-23 : R.Akikawa -- St.26 (Takatsuki Br.) 1975-8-14 : R.Hirai -- St.2 (Tasai Br.) 1975-8-15, 1975-11-11.
SUPPLEMENT : TMG-BEP --- R.Hirai -- (St.2) 1980-9-29, 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-9-29, 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1980-9-29.

2. *Eubrianax pellucidus* LEWIS (Fig.90)

Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Asakawa -- St.14 (a small stream), St.15 (R.Ozu - Iriyama) 1978-11-20 ; St.17 (R.Daigo), St.18 (Ninikuzawa), St.20 (a small stream), St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21.

3. *Eubrianax* sp. (Fig.90)

Loc. & date : R.Tama -- St.17 (Hamura Dam) 1964-9-2 ; St.20 (Tama Br.) 1960-7-21, 1964-9-2 : R.Hirai -- St.2 (Tasai Br.) 1969-7-24 : R.Akikawa -- St.14 (Ozu Br.) 1969-7-21 ; St.16 (Gundō) 1969-7-21 ; St.19 (Niitaka Br.) 1969-7-21 : St.23 (Ajiro Br.) 1969-7-23 ; St.24 (Akiru Br.) 1969-7-23 ; St.26 (Takatsuki Br.) 1975-11-11 : R.Asakawa -- St.29 (Kamikunugida Br.) 1960-7-26 ; St.30 (Kobotoke Lodge) 1964-7-17.

PSEPHENIDAE Gen. et sp. indet. (Fig.90)

Loc. & date : R.Tama -- St.6 (Kawai junction) 1964-8-31 ; St.20 (Tama Br.) 1964-9-2 ; St.21 (Haijima Br.) 1964-5-31, 1965-7-31 : St.22 (Tama-Ōhashi Br.) 1964-5-31 ; St.25 (Koremasa Br.) 1963-6-25 ; St.26 (Tamagawara Br.) 1964-9-3 : R.Akikawa -- St.20 (Sawado Br.) 1965-7-30 ; St.23 (Ajiro Br.) 1965-7-31 ; St.24 (Akiru Br.) 1965-7-31 : R.Asakawa -- St.34 (Jadaki-guchi) 1976-8-5.
SUPPLEMENT : IIMURA --- R.Tama -- (St.21) 1973-10-26 ; (St.22) 1973-10-27 : R.Akikawa -- (St.20), (St.26) -- (Dates are omitted.) : TMG-BEP -- R.Akikawa -- (St.26) 1980-9-29, 1981-2-16.

FAMILY DRYOPIDAE

Genus *Helichus*

1. *Helichus* sp. HA (Fig.91)
Loc. & date : R.Asakawa -- St.32 (Kogezawa junction) 1976-9-25.
2. *Helichus* sp. HB (Fig.91)
Loc. & date : R.Akikawa -- St.8 (Tachibana Br.) 1965-7-29 : R.Asakawa --
St.31 (Hikage Br.) 1976-10-28.
3. *Helichus* sp. HC (Fig.91)
Loc. & date : R.Tama -- St.1 (Shōwa Br.) 1975-8-15.
4. *Helichus* sp. (Fig.91)
Loc. & date : R.Akikawa -- St.6 (Kasuga Br.) 1969-7-21 ; S7.7 (Sasano) 1965
-7-30 ; St.16 (Gundō) 1969-7-21 : R.Asakawa -- St.35 (Shikishima Br.) 1969-
7-22.
SUPPLEMENT : IIMURA --- R.Akikawa -- (St.11), (St.20), (St.26) -- (Dates are
omitted.) : HISAI --- R.Asakawa -- (St.28) 1979-11-28.

FAMILY ELMIDAE

Genus *Elmis*

1. *Elmis* sp. (Fig.92)
Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1975-11-11 ; St.25 (Koremasa Br.)
1975-10-23 : R.Hirai -- St.2 (Tasai Br.) 1975-8-15 : R.Akikawa -- St.22
(Akikawa Br.) 1975-8-14, 1975-10-24 ; St.23 (Ajiro Br.) 1975-5-28 ; St.26
(Takatsuki Br.) 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.32
(Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-10-24.
SUPPLEMENT : IDE --- R.Nippara -- (St.6), (St.7), (St.12) 1977-6-4 ; (St.18)
1978-8-17 : R.Tama -- (St.D) 1977-6-4 ; (St.2) 1973-8-21, 1974-2-2 ; (St.18)
1975-7-29, 1976-8-19 ; (St.20) 1974-10-23 ; (St.21) 1974-10-21 : R.Akikawa
-- (St.18) 1973-8-21 ; (St.26) 1973-5-29, 1973-8-21, 1973-11-4, 1974-2-1,
1974-10-23 : TMG-BEP --- R.Akikawa -- (St.26) 1980-9-29.

Genus *Stenelmis*

1. *Stenelmis* sp. (Fig.92)
Loc. & date : R.Akikawa -- St.26 (Takatsuki Br.) 1975-5-28 : R.Asakawa --
St.33 (Surisashi) 1975-5-28.

ELMIDAE Gen. et sp. indet. (Fig.92)

Loc. & date : R.Kosuge -- St.1 (a small stream), St.7 (Kawakubo) 1979-8-18
: R.Tama -- St.2 (Unazawa) 1959-summer ; St.5 (Kawai junction) 1964-8-31 ;
St.12 (Jindai Br.) 1960-7-21 ; St.20 (Tama Br.) 1960-7-21 : R.Ôtanba --
St.6 (Taishô Br.) 1960-7-21 : R.Hirai -- St.2 (Tasai Br.) 1965 7-31, 1969-
7-24, 1972-8-16 : R.Akikawa -- St.3, (Kazuma) 1969-7-22 ; St.4 (Henbori)
1969-7-21 ; St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-
7-29 ; St.7 (Sasano) 1960-7-21, 1965-7-30 ; St.8 (Tachibana Br.) 1965-7-29
; St.10 (Ozawa) 1969-7-21 ; St.11 (Shirokura) 1960-7-21 ; St.12 (Kita-
Akikawa Br.) 1969-7-21 ; St.13 (Wada Br.), St.17 (Teraoka), St.18 (Hoshitake
Br.), St.19 (Niitaka Br.) 1969-7-21 ; St.21 (Kowada Br.) 1963-6-24 ; St.22
(Akikawa Br.) 1969-7-21 ; St.23 (Ajiro Br.) 1969-7-23 ; St.26 (Takatsuki
Br.) 1965-7-31 : R.Asakawa -- St.8 (a small stream, Koashi) 1979-3-12 ;
St.21 (Kawaino), St.22 (Kitsunezuka) 1978-11-21 ; St.28 (Takaosan-guchi)
1969-7-22 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa
junction) 1976-9-25 ; St.33 (Surisashi) 1976-7-16 ; St.34 (Jadaki-guchi)
1976-8-5 ; St.35 (Shikishima Br.) 1969-7-22.

SUPPLEMENT : IIMURA --- R.Tama -- (St.1) 1974-3-7 ; (St.4) 1975-3-25 :
R.Akikawa -- (St.7) 1974-5-29 ; (St.11) 1974-5-29 ; (St.13) 1974-5-29 ;
(St.20) 1973-7-30, 1974-5-28 ; (St.26) 1974-5-28, 1974-10-1, 1976-2-27 :

METOC --- R.Taba -- (St.7) 1976-11-25, 1977-1-25 : R.Kukizawa -- (St.B)
1977-1-25 : R.Irikawa -- (St.1) 1976-10-26 : R.Ôsawa -- (St.M) 1977-1-25 :

TMG-BEP-T --- R.Nippara -- (St.E), (St.F) 1976-autumn ; (St.6) 1977-9-11 :

TMG-BEP --- R.Hirai -- (St.2) 1980-9-29 : R.Akikawa -- (St.26) 1980-7-21,
1980-9-29 : R.Asakawa -- (St.36) 1980-9-29.

FAMILY HELODIDAE

1. HELODIDAE Gen. et sp. indet. (Fig.92)

Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28.

SUPPLEMENT : IDE --- R.Nippara -- (St.7) 1977-6-4 : TMG-BEP-T --- R.Nippara
-- (St.F) 1976-autumn.

FAMILY CANTHARIDAE

Genus *Luciola*

1. *Luciola cruciata* MOTSCHULSKY (Fig.92)

Loc. & date : R.Asakawa -- St.30 (Kobotoke Lodge) 1964-7-17.

ORDER DIPTERA
FAMILY BLEPHAROCERIDAE

Genus *Bibiocephala*

1. *Bibiocephala bilobatoides* KITAKAMI (Fig.93)
SUPPLEMENT : IDE --- R.Tama -- (St.18) 1977-10-9.
2. *Bibiocephala japonica* ALEXANDER (Fig.93)
SUPPLEMENT : KRIEP --- R.Taba -- (St.A) 1979-9-13.

Genus *Philorus*

1. *Philorus kuyaensis* KITAKAMI (Fig.93)
Loc. & date : R.Akikawa -- St.5 (Minami-Akikawa Br.) 1969-7-21.
2. *Philorus* sp. (Fig.93)
SUPPLEMENT : IDE --- R.Akikawa -- (St.18) 1974-2-1.

Genus *Amika*

1. *Amika infuscata infuscata* MATSUMURA (Fig.93)
SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.F), (St.G) 1976-autumn.

BLEPHAROCERIDAE Gen. et sp. indet. (Fig.93)

Loc. & date : R.Kosuge -- St.5 (Campground) 1979-8-18 : R.Akikawa -- St.7 (Sasano) 1965-7-30.

SUPPLEMENT : IIMURA --- R.Akikawa -- (St.1), (St.7), (St.O), (St.11), (St.13), (St.20), (St.26) -- (Dates are omitted.) : METOC --- R.Kukizawa -- (St.B) 1977-1-25 : R.Tama -- (St.1) 1976-11-25 ; (St.4) 1977-1-25 ; (St.8) 1976-10-26, 1977-1-25.

FAMILY TIPULIDAE

Genus *Antocha*

1. *Antocha* sp. (Fig.94)
Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.1 (Shōwa Br.) 1959-summer, 1960-7-22, 1963-8-20, 1969-7-24, 1975-5-29, 1975-8-15, 1975-11-11 ; St.2 (Unazawa) 1959-summer ; St.3 (Shiromaru) 1960-7-22 ; St.3-4 (Hatonosu) 1964-5-3 ; St.4 (Mansei Br.) 1969-7-23 ; St.5 (Kawai junction) 1960-7-21, 1964-8-31 ; St.6 (Kawai junction-lower stream) 1963-6-15 ; St.7 (Umezawa Br.) 1963-6-24 ; St.8 (Mitake Br.) 1963-6-24, 1964-8-31, 1969-7-23 ; St.9 (Ikusabata) 1960-7-21, 1963-8-21 ; St.10 (Yoroi Br.) 1969-7-24, 1971-12-6, 1972-8-16, 1975-5-29, 1975-8-15,

1975-11-11 ; St.12 (Jindai Br.) 1960-7-21, 1969-7-23 ; St.13 (Wada Br.),
 St.14 (Mannen Br.) 1960-7-21, 1963-8-25 ; St.9 (Ikusabata) 1964-5-3, 1964-
 8-31 ; St.15 (Chôfu Br.) 1969-7-23 ; St.16 (Tamagawa Br.) 1959-summer, 1960-
 7-21, 1963-8-25, 1964-9-1, 1969-7-24 ; St.17 (Hamura Dam - upper stream)
 1960-7-21, 1972-8-16, 1975-5-28 ; St.18 (Hamura Dam - lower stream) 1959-
 summer, 1960-7-21, 1963-8-25, 1964-5-31, 1969-7-24, 1971-12-6, 1975-8-15,
 1975-11-11 ; St.19 (Nagata Br.) 1969-7-24, 1975-11-11 ; St.20 (Tama Br.)
 1959-summer, 1960-7-21, 1975-11-11 ; St.21 (Haijima Br.) 1959-summer, 1960-
 7-21, 1964-5-31, 1969-8-11, 1971-12-7, 1972-8-17, 1975-5-28, 1975-8-14,
 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1964-5-31, 1969-8-11, 1971-12-7, 1975-
 5-27, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1960-7-20, 1963-8-18, 1969-
 8-11, 1971-12-7, 1975-5-27, 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.)
 1975-7-27 ; St.25 (Koremasa Br.) 1960-7-20, 1975-5-27, 1975-8-13, 1975-10-
 23 ; St.26 (Tamagawara Br.) 1960-7-20 : R.Nippara -- St.G (Nippara Lodge),
 St.15 (Shiraishi Br.) 1969-7-24 ; St.16 (Meoto Br. - upper stream) 1963-8-
 25 ; St.17 (Meoto Br. - lower stream) 1963-8-25, 1964-8-31 ; St.18 (Shôwa
 Br.) 1959-summer, 1960-7-22, 1963-8-20, 1969-7-24, 1972-8-16, 1975-5-29,
 1975-8-15, 1975-11-11 : R.Ôtanba -- St.5 (Kitagawa Br.) 1963-6-15, 1969-7-
 23 ; St.6 (Taishô Br.) 1960-7-21, 1964-5-3 : R.Hirai -- St.2 (Tasai Br.)
 1959-summer, 1969-7-24, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15, 1975-
 11-11 : R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.4 (Henbori) 1969-7-21 ;
 St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-
 21 ; St.7 (Sasano) 1959-summer, 1960-7-21, 1963-8-25, 1965-7-30 ; St.10
 (Ozawa) 1965-7-30, 1969-7-21 ; St.11 (Shirokura) 1959-summer, 1960-7-21,
 1963-8-25 ; St.12 (Kita-Akikawa Br.) 1965-7-30, 1969-7-21 ; St.13 (Wada Br.)
 1965-7-30, 1969-7-21 ; St.14 (Ozu Br.) 1959-summer, 1965-7-30, 1969-7-21 ;
 St.16 (Gundô) 1959-summer, 1965-7-30 ; St.17 (Teraoka) 1959-summer, 1969-
 7-21 ; St.17-18 (Ochiai Br.) 1960-7-21 ; St.18 (Hoshitake Br.) 1969-7-21 ;
 St.19 (Niitaka Br.) 1959-summer, 1960-7-21, 1969-7-21 ; St.20 (Sawado Br.),
 St.21 (Kowada Br.) 1963-6-24, 1969-7-21 ; St.22 (Akikawa Br.) 1959-summer,
 1960-7-21, 1963-8-25, 1965-7-30, 1969-7-21, 1972-8-16, 1975-8-14, 1975-10-
 24 ; St.23 (Ajiro Br.) 1963-6-24, 1965-7-31, 1969-7-23, 1971-12-6, 1975-5-
 28 ; St.24 (Akiru Br.) 1960-7-21, 1965-7-31, 1969-7-23 ; St.25 (Higashi-
 Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1959-summer, 1965-7-31, 1969-
 7-23, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-14, 1975-11-11 : R.Yaji --
 St.1 (Asahi Br.) 1960-7-20 :

R.Asakawa -- St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.23 (Kawarajuku Br.) 1959-summer ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1963-8-25, 1964-7-17, 1969-7-22 ; St.29 (Kamikunugida Br.) 1959-summer, 1960-7-20, 1964-7-17, 1969-7-22 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1959-summer, 1960-7-20, 1964-7-17, 1969-7-22, 1976-8-5 ; St.35 (Shikishima Br.) 1959-summer, 1960-7-20, 1969-7-22, 1971-12-6, 1972-8-17 ; St.36 (Minase Br.) 1959-summer, 1975-10-24 ; St.38 (Asakawa Br.) 1972-8-17, 1975-8-14, 1975-10-24 ; St.40 (Hirayama Br.) 1975-10-24 ; St.42 (Arai Br.) 1975-5-27 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.J), (St.6), (St.7), (St.12), (St.15), (St.18) : R.Tama -- (St.2), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.25) : R.Hirai -- (St.2) : R.Akikawa -- (St.26) : METOC --- R.Taba -- (St.7) : R.Kukizawa -- (St.B) : R.Tama -- (St.D), (St.1), (St.4), (St.8), (St.15), (St.17) : R.Nippara -- (St.18) : R.Irikawa -- (St.1) : R.Ôtanba -- (St.6) : TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) : TMG-BEP --- R.Hirai -- (St.2) : R.Akikawa -- (St.26) : R.Asakawa -- (St.P), (St.41) : R.Yaji -- (St.1) : TSUDA --- R.Tama -- (St.1), (St.3), (St.15), (St.18) : R.Akikawa -- (St.26) : KRIEP --- R.Tama -- (St.2), (St.15), (St.17) : HASHIGAMI --- R.Ôtanba -- (St.6) : R.Tama -- (St.4), (St.5), (St.6), (St.12), (St.15), (St.16), (St.21) : MIYASHITA --- R.Tama -- (St.18).

Genus *Eriocera*

1. *Eriocera* sp. EA (Fig.95)
 Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25.
2. *Eriocera* sp. EB (Fig.95)
 Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.7 (Umezawa Br.) 1963-6-24 ; St.18 (Hamura Dam) 1975-11-11 ; St.23 (Hino Br.) 1975-5-27 ; R.Nippara -- St.16 (Meoto Br.) 1963-8-20 ; St.18 (Shôwa Br.) 1975-11-11 : R.Ôtanba -- St.6 (Taishô Br.) 1963-8-21 ; R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Akikawa -- St.22 (Akikawa Br.) 1975-10-24 : St.23 (Ajino Br.) 1975-5-28 : R.Asakawa -- St.17 (R.Daigo) 1978-11-21 ; St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ;

St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18.
SUPPLEMENT : METOC --- R.Tama -- (St.1) 1976-11-25 ; (St.4) 1976-10-26.

3. *Eriocera* sp. EC (Fig.95)

Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ;
St.32 (Kogezawa junction) 1976-9-25.

4. *Eriocera* sp. ED (Fig.96)

Loc. & date : R.Tama -- St.1 (Shōwa Br.) 1975-8-15 ; St.21 (Haijima Br.) 1975-11-11 ; R.Hirai -- St.2 (Tasai Br.) 1975-5-28 ; R.Akikawa -- St.22 (Akikawa Br.) 1975-8-14 ; St.26 (Takatsuki Br.) 1975-11-11 ; R.Asakawa -- St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18.

SUPPLEMENT : METOC --- R.Tama -- (St.D) 1976-9-28 ; TMG-BEP --- R.Akikawa -- (St.26) 1980-9-29, 1980-12-8, 1981-2-16.

5. *Eriocera* sp. (Fig.96)

Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 ; R.Tama -- St.15 (Chōfu Br.) 1969-7-23 ; R.Ōtanba -- St.6 (Taishō Br.) 1960-7-21 ; R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.4 (Henbori), St.5 (Minami-Akikawa Br.), St.6 (Kasuga Br.) 1969-7-21 ; St.10 (Ozawa), St.12 (Kita-Akikawa Br.), St.13 (Wada Br.), St.18 (Hoshitake Br.), St.19 (Niitaka Br.) 1969-7-21 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; R.Asakawa -- St.15 (R.Ozu - Iriyama) 1978-11-20 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.28 (Takaosan-guchi) 1963-8-25, 1969-7-22 ; St.29 (Kamikunugida Br.) 1969-7-22 ; St.33 (Surisashi) 1975-10-24.

SUPPLEMENT : IDE --- R.Nippara -- (St.7), (St.12), (St.18), (St.1) 1977-6-4 ; R.Tama -- (St.D) 1977-6-4 ; METOC --- R.Taba -- (St.7) 1976-11-25 ; R.Kukizawa -- (St.B) 1977-1-25 ; R.Tama -- (St.1) 1976-11-25 ; R.Ōtanba -- (St.6) 1977-1-25 ; TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) 1976-autumn ; HISAI --- R.Asakawa -- (St.28) 1979-11-28.

Genus *Erioptera*

1. *Erioptera* sp. (Fig.96)

Loc. & date : R.Nippara -- St.18 (Shōwa Br.) 1975-5-29, 1975-8-15, 1975-11-11 ; R.Asakawa -- St.33 (Surisashi) 1975-5-28.

SUPPLEMENT : KRIEP --- R.Taba -- (St.A) 1979-9-13 ; R.Tama -- (St.2), (St.17) 1979-9-13.

Genus *Tipula*

1. *Tipula* sp. TA (Fig.97)
Loc. & date : R.Kosuge -- St.1 (a small stream), St.2 (a small stream)
1979-8-18 : R.Asakawa -- St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-12-7.
SUPPLEMENT : METOC --- R.Tama -- (St.1) 1976-11-25.
2. *Tipula* sp. TB (Fig.97)
Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28.
SUPPLEMENT : TMG-BEP-T --- R.Nippara -- (St.F), (St.G) 1976-autumn.
3. *Tipula* sp. TC (Fig.97)
Loc. & date : R.Kosuge -- St.1 (a small stream), St.5 (Campground) 1979-8-18 : R.Tama -- St.10 (Yoroi Br.) 1975-8-15 ; St.22 (Tama-Ôhashi Br.) 1975-11-11 : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Asakawa -- St.2 (Kayakukodani), St.4 (Ryokô Stone Quarry First Work) 1979-3-12 ; St.8 (a small stream - Koashi), St.12 (Mikami Br.) 1979-3-13 ; St.17 (R.Daigo) 1978-11-21 ; St.19 (R.Ange) 1979-11-21.
4. *Tipula* sp. (Fig.97)
Loc. & date : R.Tama -- St.4 (Mansei Br.), St.8 (Mitake Br.) 1969-7-23 ; St.10 (Yoroi Br.) 1969-7-24, 1971-12-6 : R.Nippara -- St.15 (Shiraishi Br.) 1969-7-24 : R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.23 (Ajiro Br.) 1975-5-28 ; St.24 (Akiru Br.) 1969-7-23 : R.Asakawa -- St.18 (Ninikuzawa) 1978-11-21 ; St.26 (Higashi-Yamashita Br.), St.28 (Takaosan-guchi) 1969-7-22 ; St.35 (Shikishima Br.) 1964-7-24.
SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.6), (St.15), (St.18) : R.Tama -- (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.21), (St.22), (St.24) : R.Ôtanba -- (St.5) : R.Hirai -- (St.2) : R.Akikawa -- (St.18), (St.26) : R.Asakawa -- (St.35) : METOC --- R.Taba -- (St.7) : R.Tama -- (St.D), (St.1) : R.Nippara -- (St.18) : R.Irikawa -- (St.1) : R.Ôtanba -- (St.6) : R.Ôsawa -- (St.M) : HISAI --- R.Asakawa -- (St.28).

Genus *Holorusia*

1. *Holorusia* sp. HA (Fig.98)
SUPPLEMENT : METOC --- R.Taba -- (St.7) 1976-11-25 : TMG-BEP-T --- R.Nippara -- (St.F) 1976-autumn.

Genus *Pedicia*

1. *Pedicia* sp. PA (Fig.98)
Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28, 1976-12-7.
2. *Pedicia* sp. (Fig.98)
Loc. & date : R.Asakawa -- St.33 (Surisashi) 1975-5-28.

TIPULIDAE Gen. et sp. indet. (Fig.98)

Loc. & date : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Akikawa -- St.11 (Shirokura) 1960-7-21 : R.Asakawa -- St.18 (Ninikuzawa) 1978-11-21 ; St.29 (Kamikunugida Br.) 1960-7-20 ; St.31 (Hikage Br.) 1976-12-7.

SUPPLEMENT : (Dates are omitted.) IIMURA --- R.Nippara -- (St.7), (St.18) : R.Tama -- (St.5), (St.14), (St.16), (St.21), (St.22), (St.23), (St.24) : R.Akikawa -- (St.1), (St.7), (St.0), (St.11), (St.13), (St.20), (St.26) : METOC --- R.Taba -- (St.7) : TMG-BEP --- R.Akikawa -- (St.26) : HISAI --- R.Asakawa -- (St.28).

FAMILY PTYCHOPTERIDAE

Genus *Ptychoptera*

1. *Ptychoptera* sp. (Fig.98)
SUPPLEMENT : HASHIGAMI --- R.Tama -- (St.5) 1973-8-11.

FAMILY PSYCHODIDAE

Genus *Psychoda*

1. *Psychoda alternata* SAY (Fig.99)
Loc. & date : R.Nippara -- St.18 (Shōwa Br.) 1969-7-24, 1975-5-29, 1975-8-15 : R.Tama -- St.1 (Shōwa Br.) 1975-5-29, 1975-8-15 ; St.6 (Kawai Dam) 1964-5-3 ; St.8 (Mitake Br.) 1964-8-31 ; St.19 (Nagata Br.) 1969-7-24, 1972-8-16, 1975-5-28, 1975-11-11 ; St.20 (Tama Br.) 1975-8-14 ; St.22 (Tama-Ōhashi Br.) 1975-5-27 ; St.23 (Hino Br.) 1975-5-27 ; St.24 (Sekido Br.) 1975-5-27, 1975-10-23 ; St.25 (Koremasa Br.) 1975-5-27 ; St.30 (Tama-Suidō Br.) 1975-5-26 ; St.33 (Maruko Br.) 1975-5-26, 1975-8-12, 1975-10-22 ; St.36 (Rokugō Br.) 1971-12-14 ; St.37 (Taishi Br.) 1975-8-12 : R.Akikawa -- St.16 (Gundō) 1965-7-30 ; St.22 (Akikawa Br.) 1969-7-21 ; St.23 (Ajiro Br.) 1965-7-31, 1975-5-28 : R.Asakawa -- St.8 (a small stream - Koashi) 1979-3-12 ; St.10 (a small stream -Oyashiki) 1979-3-13 ; St.33 (Surisashi) 1975-5-28, 1975-10-24, 1976-7-16, 1976-11-15 ; St.36 (Minase Br.) 1975-5-28, 1975-8-14, 1975-10-24 ; St.38 (Asakawa Br.) 1972-8-17, 1975-10-24 ; St.40

(Hirayama Br.) 1975-5-27, 1975-10-24 ; St.42 (Arai Br.) 1972-8-17, 1975-5-27.
SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1973-8-21, 1977-6-4, 1978-8-17 ;
R.Tama -- (St.2) 1974-2-2 ; (St.15) 1978-8-17 ; (St.19) 1973-5-29, 1973-8-20,
1974-2-1, 1974-10-24, 1976-8-19, 1977-10-11 ; (St.20) 1974-10-22, 1975-7-29 ;
(St.21) 1973-5-29, 1974-10-20 ; (St.25) 1976-8-19 ; (St.26) 1974-1-31 ;
(St.31) 1977-10-11 ; (St.32) 1973-5-30, 1977-10-11 ; (St.33) 1977-10-12 ;
(St.37) 1973-10-27 : R.Hirai -- (St.2) 1974-10-22 : R.Yaji -- (St.1) 1973-8-
20, 1978-8-16, 1979-1-5 : R.Asakawa -- (St.35) 1973-8-20, 1978-8-16 ; (St.42)
1973-5-29 : R.Ôkuri -- (St.1) 1973-8-19, 1978-8-16 : METOC --- R.Tama --
(St.D) 1976-9-28 ; (St.1) 1976-9-28, 1976-11-25, 1977-1-25 : R.Nippara --
(St.18) 1976-9-28, 1977-1-25 : METOC-W --- R.Tama -- (St.31) 1979-1-12, 2-14,
3-13, 4-13, 5-19, 9-11, 10-18, 12-14 : TMG-BEP --- R.Yaji -- (St.1) 1980-7-
21, 1980-9-29 : R.Asakawa -- (St.36) 1980-7-21, 1980-9-29, 1980-12-8 ;
(St.41) 1980-7-21, 1980-9-29, 1981-2-16 : TSUDA --- R.Tama -- (St.18) 1973-
Sept. : MIYASHITA --- R.Tama -- (St.33) 1970-10-18.

Genus *Pericoma*

1. *Pericoma* sp. (Fig.99)

SUPPLEMENT : METOC --- R.Ôsawa -- (St.M) 1977-1-25.

Genus *Telmatodcopus*

1. *Telmatoscopus albipunctatus* WILLISTONE (Fig.99)

Loc. & date : R.Tama -- St.19 (Nagata Br.) 1975-11-11 ; St.30 (Tama-Suidô
Br.) 1975-10-23 ; St.33 (Maruko Br.) 1975-8-12, 1975-10-22 : R.Asakawa --
St.36 (Minase Br.) 1975-5-28.

SUPPLEMENT : TMG-BEP --- R.Yaji -- (St.1) 1980-9-29, 1980-12-8 : R.Asakawa
-- (St.36) 1980-9-29 : MIYASHITA --- R.Tama -- (St.33) 1970-10-18.

PSYCHODIDAE Gen. et sp. indet. (Fig.99)

Loc. & date : R.Tama -- St.3 (Shiromaru) 1960-7-22.

SUPPLEMENT : IIMURA --- R.Nippara -- (St.18) : R.Tama -- (St.1), (St.5),
(St.19), (St.22), (St.23).

FAMILY DIXIDAE

Genus *Dixa*

1. *Dixa* sp. (Fig.100)

Loc. & date : R.Kosuge -- St.2 (a small stream), St.5 (Campground) 1979-8-
18 : R.Asakawa -- St.8 (a small stream - Koashi) 1979-3-12.

DIXIDAE Gen. et sp. indet. (Fig.100)

Loc. & date : R.Tama -- St.5 (Kawai junction) 1964-8-31 ; St.23 (Hino Br.) 1964-9-2 ; St.24 (Sekido Br.) 1964-5-26 : R.Asakawa -- St.8 (a small stream - Koashi) 1979-3-12.

FAMILY SIMULIIDAE

Genus *Simulium*

1. *Simulium* sp. (Fig.101)

Loc. & date : R.Kosuge -- St.2 (a small stream), St.5 (Campground) 1979-8-18 : R.Tama -- St.1 (Shōwa Br.) 1975-5-29 ; St.6 (Kawai junction) 1964-5-3, 1964-8-31 ; St.9 (Ikusabata) 1960-7-21 ; St.12 (Jindai Br.) 1960-7-21 ; St.14 (Mannen Br.) 1960-7-21 ; St.16 (Tamagawa Br.) 1960-7-21 ; St.24 (Sekido Br.) 1960-7-20 ; St.32 (Futago Br.) 1960-7-20 : R.Ôtanba -- St.6 (Taishō Br.) 1960-7-21 : R.Hirai -- St.2 (Tasai Br.) 1971-12-6 : R.Akikawa -- St.6 (Kasuga Br.) 1965-7-29 ; St.7 (Sasano) 1960-7-21, 1965-7-30 ; St.10 (Ozawa) 1965-7-30 ; St.11 (Shirokura) 1960-7-21 ; St.16 (Gundō) 1965-7-30 ; St.22 (Akikawa Br.) 1960-7-21, 1975-10-24 ; St.23 (Ajiro Br.) 1975-5-28 : R.Asakawa -- St.6 (a small stream) 1979-3-12 ; St.8 (a small stream - Koashi) 1979-3-12 ; St.18 (Ninikuzawa), St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.25 (Kakuei Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.27 (Umenoki Br.) 1964-7-17 ; St.29 (Kamikunugida Br.) 1969-7-22 ; St.30 (Kobotoko Lodge) 1964-7-17, 1976-10-28 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.35 (Shikishima Br.) 1972-8-17.

SUPPLEMENT : IDE --- R.Tama -- (St.2) 1973-8-21, 1974-2-2, 1978-8-17 : R.Ôtanba -- (St.5) 1973-8-21, 1978-8-17, 1979-1-6 : R.Hirai -- (St.2) 1974-10-22 : R.Akikawa -- (St.18) 1973-8-21, 1974-2-1 ; (St.26) 1973-11-4 : R.Asakawa -- (St.35) 1973-8-20 : TMG-BEP --- R.Asakawa -- (St.P) 1980-9-29, 1980-12-8.

SIMULIIDAE Gen. et sp. indet.

SUPPLEMENT : IIMURA --- R.Tama -- (St.5) : R.Nippara -- (St.7) : R.Akikawa -- (St.20), (St.26) -- (Dates are omitted.) : METOC --- R.Taba -- (St.7) 1976-11-25, 1977-1-25 : R.Tama -- (St.4) 1976-9-28 : R.Ôtanba -- (St.6) 1976-9-28 : TMG-BEP-T --- R.Nippara -- (St.E) 1977-7-30 ; (St.F) 1976-autumn.

FAMILY CERATOPOGONIDAE

Genus *Culicoides*

1. *Culicoides* sp. (Fig.102)
Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.12 (Jindai Br.) 1960-7-21 : R.Nippara -- St.18 (Showa Br.) 1975-5-29 :
R.Hirai -- St.2 (Tasai Br.) 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.23 (Ajiro Br.) 1975-5-28 ; St.26 (Takatsuki Br.) 1975-5-28 : R.Asakawa -- St.7 (Nakai Br.) 1979-3-12 ; St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16 ; St.35 (Shikishima Br.) 1972-8-17.
SUPPLEMENT : TMG-BEP --- R.Akikawa -- (St.26) 1980-7-21 : R.Asakawa -- (St.P) 1981-2-16.

FAMILY STRATIOMYIIDAE

Genus *Stratiomyia*

1. *Stratiomyia* sp. (Fig.102)
SUPPLEMENT : MIYASHITA --- R.Tama -- (St.23-24) 1970-10-10.

FAMILY RHAGIONIDAE

Genus *Atherix*

1. *Atherix* (*Heterosuragina*) *morimotoi* NAGATOMI (Fig.103)
Loc. & date : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28 ; St.40 (Hirayama Br.) 1975-10-24.
2. *Atherix* (*Atherix*) *ibis japonica* NAGATOMI (Fig.103)
Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Nippara -- St.15 (Shiraishi Br.) 1969-7-24 ; St.17 (Meoto Br.) 1963-8-20 ; St.18 (Shōwa Br.) 1963-8-20, 1969-7-24, 1975-8-15 : R.Tama -- St.7 (Umezawa Br.) 1963-6-24 ; St.10 (Yoroi Br.) 1975-11-11 : R.Akikawa -- St.4 (Henbori), St.5 (Minami-Akikawa Br.), St.6 (Kasuga Br.) 1969-7-21 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.12 (Kita-Akikawa Br.) 1969-7-21 ; St.17 (Teraoka) 1969-7-21 : R.Asakawa -- St.36 (Minase Br.) 1971-12-7.
SUPPLEMENT : METOC --- R.Kukizawa -- (St.B) 1977-1-25 : R.Tama -- (St.D) 1977-1-25 : TMG-BEP-T --- R.Nippara -- (St.G) 1976-autumn : TSUDA --- R.Tama -- (St.1), (St.22) 1973-Sept.

3. *Atherix (Suragina) satsumana* MATSUMURA (Fig.103)

Loc. & date : R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.15 (Shiraishi Br.) 1969-7-24 ; St.18 (Shōwa Br.) 1975-5-29 ; R.Hirai -- St.2 (Tasai Br.) 1971-12-6 ; R.Akikawa -- St.6 (Kasuga Br.) 1969-7-21 ; St.8 (Tachibana Br.) 1965-7-29 ; St.10 (Ozawa) 1969-7-21.

4. *Atherix (Suragina) kodamai* NAGATOMI (Fig.103)

Loc. & date : R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.18 (Shōwa Br.) 1959-summer ; R.Hirai -- St.2 (Tasai Br.) 1959-summer ; R.Tama -- St.1 (Shōwa Br.) 1969-7-24 ; St.4 (Mansei Br.) 1969-7-23 ; St.8 (Mitake Br.) 1963-6-24 ; St.10 (Yoroi Br.) 1969-7-24, 1975-8-15, 1975-11-11 ; St.15 (Chōfu Br.) 1969-7-23 ; St.16 (Tamagawa Br.) 1969-7-24, St.17 (Hamura Dam) 1972-8-16 ; R.Akikawa -- St.4 (Henbori), St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ; St.7 (Sasano) 1965-7-30 ; St.8 (Tachibana Br.) 1965-7-29 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.11 (Shirokura) 1959-summer ; St.12 (Kita-Akikawa Br.) 1965-7-30, 1969-7-21 ; St.13 (Wada Br.) 1965-7-30, 1969-7-21 ; St.14 (Ozu Br.) 1965-7-30, 1969-7-21 ; St.16 (Gundō) 1959-summer, 1965-7-30 ; St.18 (Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.), St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.) 1965-7-30, 1975-8-14 ; St.23 (Ajiro Br.) 1969-7-23, 1975-5-28 ; St.26 (Takatsuki Br.) 1969-7-23 ; R.Asakawa -- St.10 (a small stream - Oyashiki) 1979-3-13 ; St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosanguchi) 1964-7-17, 1969-7-22 ; St.29 (Kamikunugida Br.) 1959-summer, 1963-8-25, 1964-7-17, 1969-7-22 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1976-7-16 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.35 (Shikishima Br.) 1964-7-24, 1972-8-17.

SUPPLEMENT : METOC --- R.Nippara -- (St.18) 1976-9-28, 1976-11-25 ; R.Tama -- (St.4) 1977-1-25 ; TMG-BEP-T --- R.Nippara -- (St.E), (St.F), (St.G) 1976-autumn ; (St.6) 1977-9-11 ; TMG-BEP --- R.Hirai -- (St.2) 1980-7-21 ; R.Akikawa -- (St.26) 1980-7-21.

5. *Atherix* sp. (Fig.103)

Loc. & date : R.Nippara -- St.G (Nippara Lodge) 1975-5-29 ; St.16 (Meoto Br.) 1963-8-20 ; St.18 (Shōwa Br.) 1959-summer ; R.Tama -- St.2 (Unazawa) 1959-summer ; St.6 (Kawai junction) 1963-6-15, 1964-5-3 ; St.8 (Mitake Br.) 1964-5-3, 1974-8-31 ; St.10 (Yoroi Br.) 1975-5-28, 1975-8-15, 1975-11-11 ; St.18 (Hamura Dam) 1959-summer ; R.Ôtanba -- St.5 (Kitagawa Br.) 1963-6-15 ;

St.6 (Taishō Br.) 1963-6-15 : R.Hirai -- St.2 (Tasai Br.) 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.6 (Kasuga Br.) 1965-7-29 ; St.7 (Sasano) 1963-6-24 ; St.11 (Shirokura) 1960-7-21 ; St.22 (Akikawa Br.) 1959-summer : R.Asakawa -- St.29 (Kamikunugida Br.) 1963-8-25 ; St.31 (Hikage Br.) 1976-12-7 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.J), (St.6), (St.7), (St.12), (St.15), (St.18) : R.Ôtanba -- (St.5) : R.Tama -- (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.25), (St.26), (St.27), (St.29) : R.Hirai -- (St.2) : R.Akikawa -- (St.18), (St.26) : R.Yaji -- (St.1) : R.Asakawa -- (St.35), (St.39), (St.42) : KRIEP --- R.Tama -- (St.2) : HASHIGAMI --- R.Tama -- (St.5), (St.12), (St.15), (St.16).

RHAGIONIDAE Gen. et sp. indet. (Fig.103)

Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1975-5-28, 1975-8-15, 1975-11-11 ; St.21 (Haijima Br.) 1975-5-27, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1975-5-27, 1975-8-14, 1975-11-11 : R.Hirai -- St.2 (Tasai Br.) 1975-5-28, 1975-8-15, 1975-11-11 : R.Akikawa -- St.26 (Takatsuki Br.) 1975-5-28, 1975-8-14, 1975-11-11 : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28 ; St.33 (Surisashi) 1975-5-28, 1975-8-14, 1975-10-24, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18.

SUPPLEMENT : (Dates are omitted.) IIMURA --- R.Nippara -- (St.7), (St.18) : R.Tama -- (St.1), (St.21) : R.Akikawa -- (St.1), (St.7), (St.11), (St.13), (St.20), (St.26) : METOC --- R.Tama -- (St.1) ; TMG-BEP --- R.Hirai -- (St.2) : R.Akikawa -- (St.26).

FAMILY SYRPHIDAE

Genus Eristalis

1. Eristalis sp. (Fig.100)

Loc. & date : R.Tama -- St.33 (Maruko Br.) 1975-8-12 ; St.36 (Rokugō Br.) 1971-12-14 : R.Asakawa -- St.33 (Surisashi) 1976-11-15.

SUPPLEMENT : METOC --- R.Tama -- (St.15) 1977-1-25.

SYRPHIDAE Gen. et sp. indet.

SUPPLEMENT : IIMURA --- R.Nippara -- (St.18) 1974-3-7 : R.Tama -- (St.22) 1974-2-27 ; (St.23) 1974-5-25.

ORDER HYMENOPTERA
FAMILY AGRIOTYPIDAE
Genus *Agriotypus*

1. *Agriotypus gracilis* WATERSTON (Fig.93)
Loc. & date : R.Asakawa -- St.15 (R.Ozu - Iriyama) 1978-11-20.

PHYLUM ARTHROPODA
CLASS ARACHNIDA
ORDER ACARINA
HYDRACHNELLAE

1. HYDRACHNELLAE Fam.; Gen. et sp. indet. (Fig.104)
Loc. & date : R.Kosuge -- St.1 (a small stream), St.2 (a small stream),
St.4 (a small stream) 1979-8-18 ; R.Nippara -- St.16 (Meoto Br. - upper
stream) 1969-8-20 ; St.17 (Meoto Br. - lower stream) 1963-8-20, 1964-5-3 ;
St.18 (Shōwa Br.) 1959-summer, 1960-7-22, 1969-7-24, 1975-5-29, 1975-8-15,
1975-11-11 ; R.Tama -- St.1 (Shōwa Br.) 1960-7-22, 1963-8-20, 1969-7-24,
1975-5-29, 1975-8-15, 1975-11-11 ; St.2 (Unazawa) 1959-summer ; St.3
(Shiromaru) 1960-7-22 ; St.3-4 (Hatonosu) 1964-5-3 ; St.4 (Mansei Br.) 1969-
7-23 ; St.5 (Kawai junction - upper stream) 1959-summer, 1960-7-21, 1963-
8-21, 1964-8-31 ; St.6 (Kawai junction - lower stream) 1963-6-15, 1964-8-31 ;
St.7 (Umezawa Br.) 1963-6-24 ; St.8 (Mitake Br.) 1963-6-24, 1964-8-31 ; St.9
(Ikusabata) 1960-7-21, 1963-8-21, 1964-8-31 ; St.10 (Yoroi Br.) 1969-7-24,
1975-5-28, 1975-8-15, 1975-11-11 ; St.12 (Jindai Br.) 1960-7-21 ; St.14
(Mannen Br.) 1960-7-21, 1963-8-25 ; St.15 (Chōfu Br.) 1969-7-23 ; St.16
(Tamagawa Br.) 1963-8-25, 1964-9-1, 1969-7-24 ; St.17 (Hamura Dam - upper
stream) 1960-7-21, 1969-7-24 ; St.18 (Hamura Dam - lower stream) 1963-6-24,
1964-9-2, 1969-7-24, 1975-8-15, 1975-11-11 ; St.20 (Tama Br.) 1960-7-21 ;
St.21 (Haijima Br.) 1959-summer, 1963-8-25, 1964-5-31, 1965-7-31, 1975-8-14
; St.22 (Tama-Ōhashi Br.) 1960-7-20, 1969-8-11, 1975-5-27 ; St.23 (Hino Br.)
1975-5-27, 1975-8-13 ; St.24 (Sekido Br.) 1964-5-26 ; St.25 (Koremasa Br.)
1975-10-23 ; St.30 (Tama-Suidō Br.) 1960-7-20, 1975-5-26, 1975-10-23 ; St.32
(Futago Br.) 1960-7-20 ; St.33 (Maruko Br.) 1975-5-26, 1975-10-22 ;

R.Ôtanba -- St.5 (Kitagawa Br.) 1963-6-15, 1969-7-23 ; St.6 (Taishô Br.) 1960-7-21, 1963-6-15, 1963-8-21, 1964-5-3 : R.Hirai -- St.2 (Tasai Br.) 1959-summer, 1960-7-21, 1965-7-31, 1969-7-24, 1971-12-6, 1975-11-11 :

R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.4 (Henbori), St.5 (Minami-Akikawa Br.) 1969-7-21 ; St.6 (Kasuga Br.) 1965-7-29, 1969-7-21 ; St.7 (Sasano) 1959-summer, 1960-7-21, 1963-8-25, 1965-7-30 ; St.8 (Tachibana Br.) 1965-7-29 ; St.10 (Ozawa) 1965-7-30, 1969-7-21 ; St.11 (Shirokura) 1960-7-21, 1963-8-25 ; St.12 (Kita-Akikawa Br.) 1965-7-30, 1969-7-21 ; St.13 (Wada Br.) 1965-7-30, 1969-7-21 ; St.14 (Ozu Br.) 1965-7-30 ; St.16 (Gundô) 1965-7-30, 1969-7-21 ; St.17-18 (Ochiai Br.) 1960-7-21 ; St.18 (Hoshitake Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1959-summer, 1960-7-21, 1969-7-21 ; St.20 (Sawado Br.) 1965-7-30 ; St.21 (Kowada Br.) 1963-6-24, 1969-7-21 ; St.22 (Akikawa Br.) 1959-summer, 1960-7-20, 1965-7-30, 1969-7-21, 1972-8-16, 1975-8-14 ; St.23 (Ajiro Br.) 1965-7-31, 1969-7-23, 1975-5-28 ; St.24 (Akiru Br.) 1959-summer, 1960-7-21, 1965-7-31, 1969-7-23 ; St.25 (Higashi-Akiru Br.) 1965-7-31 ; St.26 (Takatsuki Br.) 1960-7-20, 1965-7-31, 1969-7-23, 1972-8-16, 1975-5-28, 1975-11-11 : R.Asakawa -- St.17 (R.Daigo), St.18 (Ninikuzawa), St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.23 (Kawarajuku Br.) 1959-summer ; St.24 (Motoki Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1960-7-20, 1964-7-17, 1969-7-22 ; St.29 (Kamikunugida Br.) 1959-summer, 1960-7-20, 1963-8-25, 1964-7-17, 1969-7-22 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.33 (Surisashi) 1975-5-28, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1969-7-22, 1976-8-5 ; St.35 (Shikishima Br.) 1960-7-20, 1969-7-22 ; St.36 (Minase Br.) 1975-10-24 ; St.39 (Ôwada Br.) 1960-7-20 ; St.40 (Hirayama Br.) 1975-5-27.

SUPPLEMENT : METOC --- R.Tama -- (St.D) 1976-9-28, 1976-10-26, 1977-1-25 ; (St.1) 1976-11-25 ; (St.4) 1976-9-28 ; (St.8) 1976-10-26 ; (St.17) 1976-10-26, 1976-11-25, 1977-1-25 : R.Irikawa -- (St.1) 1976-11-25 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 ; (St.36) 1980-9-29 : HASHIGAMI --- R.Tama -- (St.6) 1973-8-13.

CLASS CRUSTACEA

ORDER CLADOCERA

FAMILY SIDIDAE

1. SIDIDAE Gen. et sp. indet. (Fig.105)

Loc. & date : R.Tama -- St.19 (Nagata Br.) 1975-11-11 ; St.30 (Tama-Suidô Br.) 1975-10-23 ; St.33 (Maruko Br.) 1975-8-12.

FAMILY DAPHNIIDAE

1. DAPHNIIDAE Gen. et sp. indet. (Fig.105)

Loc. & date : R.Tama -- St.3 (Shiromaru) 1960-7-22 ; St.3-4 (Hatonosu) 1964-5-3 ; St.5 (Kawai junction - upper stream) 1960-7-21 ; St.18 (Hamura Dam - lower stream) 1964-5-31 ; St.22 (Tama-Ôhashi Br.) 1975-5-27 ; St.23 (Hino Br.) 1975-5-27 ; St.24 (Sekido Br.) 1963-7-1 ; St.25 (Koremasa Br.) 1975-5-27, 1960-7-20 ; St.30 (Tama-Suidô Br.) 1963-7-1, 1975-5-26 ; St.32 (Futago Br.) 1963-6-25 ; St.33 (Maruko Br.) 1975-5-26, 1975-10-22 ; St.34 (Tamagawa-Ôhashi Br.) 1975-5-26 ; R.Asakawa -- St.24 (Motoki Br.) 1979-3-13 ; St.25 (Kakuei Br.) 1979-3-13 ; St.29 (Kamikunugida Br.) 1963-8-25 ; St.40 (Hirayama Br.) 1975-5-27 ; R.Ôkuri -- St.1 (Asahi Br.) 1963-8-25.

FAMILY MOINIIDAE

1. MOINIIDAE Gen. et sp. indet. (Fig.105)

Loc. & date : R.Tama -- St.22 (Tama-Ôhashi Br.) 1975-11-11.

CLADOCERA Fam., Gen. et sp. indet. (Fig.105)

Loc. & date : R.Tama -- St.3-4 (Hatonosu) 1964-5-3 ; St.18 (Hamura Dam - lower stream) 1964-5-31, 1964-9-2 ; St.22 (Tama-Ôhashi Br.) 1975-5-27 ; St.23 (Hino Br.) 1975-5-27 ; St.25 (Koremasa Br.) 1975-5-27 ; St.30 (Tama-Suidô Br.) 1975-5-26 ; St.33 (Maruko Br.) 1975-5-26, 1975-10-22 ; St.34 (Tamagawa-Ôhashi Br.) 1975-5-26 ; R.Asakawa -- St.40 (Hirayama Br.) 1975-5-27.

SUBCLASS OSTRACODA

ORDER PODOCOPA

1. PODOCOPA Fam., Gen. et sp. indet. (Fig.106)

Loc. & date : R.Kosuge -- St.1 (a small stream), St.5 (Campground), St.7 (Kawakubo) 1979-8-18 ; R.Tama -- St.6 (Kawai junction - lower stream) 1964-8-31 ; St.8 (Mitake Br.) 1964-8-31 ; St.16 (Tamagawa Br.) 1964-9-1 ; St.21 (Haijima Br.) 1964-5-31, 1975-11-11 ; St.24 (Sekido Br.) 1963-7-1 ;

St.30 (Tama-Suidô Br.) 1964-9-3 ; St.32 (Futago Br.) 1975-8-12 ; St.33 (Maruko Br.) 1963-6-24, 1975-10-22 : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Akikawa -- St.26 (Takatsuki Br.) 1965-7-31 : R.Asakawa -- St.8 (a small stream - Koashi) 1979-3-12 ; St.10 (a small stream - Oyashiki) 1979-3-13 ; St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.24 (Motoki Br.) 1979-3-13 ; St.27 (Umenoki Br.), St.29 (Kamikunugida Br.) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.33 (Surisashi) 1975-5-28, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5 ; St.38 (Asakawa Br.) 1964-7-24.

SUPPLEMENT : METOC --- R.Taba -- (St.7) 1976-11-25.

SUBCLASS COPEPODA

ORDER CALANOIDA

FAMILY DIAPTOMIDAE

1. DIAPTOMIDAE Gen. et sp. indet. (Fig.107)

Loc. & date : R.Tama -- St.25 (Koremasa Br.) 1964-9-3.

ORDER CYCLOPOIDA

FAMILY CYCLOPIDAE

1. CYCLOPIDAE Gen. et sp. indet. (Fig.107)

Loc. & date : R.Nippara -- St.18 (Shôwa Br.) 1975-5-29 : R.Tama -- St.1 (Shôwa Br.) 1975-5-29 ; St.3 (Shiromaru) 1960-7-22, 1963-8-21 ; St.8 (Mitake Br.) 1963-6-24, 1964-8-31 ; St.9 (Ikusabata) 1964-8-31 ; St.10 (Yoroi Br.) 1975-5-28, 1975-11-11 ; St.15 (Chôfu Br.) 1963-6-24 ; St.18 (Hamura-Dam - lower stream) 1963-6-24, 1963-8-25, 1964-5-31 ; St.19 (Nagata Br.) 1975-5-28 ; St.20 (Tama Br.) 1965-7-31 ; St.21 (Haijima Br.) 1975-5-28, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1975-5-27 : St.23 (Hino Br.) 1975-5-27 ; St.24 (Sekido Br.) 1963-7-1, 1964-5-26, 1975-5-27, 1975-8-13, 1975-10-23 : St.25 (Koremasa Br.) 1960-7-20, 1964-9-3, 1975-5-27 ; St.26 (Tamagawara Br.) 1963-6-25, 1963-7-1, 1964-9-3 ; St.30 (Tama-Suido Br.) 1963-7-1, 1964-9-3, 1975-5-26, 1975-10-23 ; St.32 (Futago Br.) 1960-7-20, 1963-6-25, 1975-5-26, 1975-8-12, 1975-10-22 ; St.33 (Maruko Br.) 1960-7-20, 1963-6-25, 1975-5-26, 1975-8-12, 1975-10-22 ; St.34 (Tamagawa-Ôhashi Br.) 1975-5-26 ; St.35 (Hirama Br.) 1963-6-24 : R.Hirai -- St.2 (Tasai Br.) 1971-12-6, 1975-5-28, 1975-11-11 : R.Akikawa -- St.22 (Akikawa Br.) 1965-7-30 ; St.26 (Takatsuki Br.)

1975-11-11 : R.Asakawa -- St.3 , St.8 (small streams) 1979-3-12 ; St.11 (Oyashiki) 1979-3-13 ; St.14 (a small stream) 1978-11-20 ; St.21 (Kawaino) 1978-11-21 ; St.24 (Motoki Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1960-7-20 ; St.29 (Kamikunugida Br.) 1963-8-25 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31 (Hikage Br.) 1976-10-28 ; St.33 (Surisashi) 1975-5-28, 1975-10-24 ; St.34 (Jadaki-guchi) 1976-8-5 ; St.35 (Shikishima Br.) 1960-7-20 ; St.36 (Minase Br.) 1975-5-28, 1975-8-14, 1975-10-24 ; St.39 (Ôwada Br.) 1960-7-20, 1963-8-25 ; St.40 (Hirayama Br.) 1975-5-27, 1975-10-24 ; St.42 (Arai Br.) 1975-10-23 ; R.Ôkuri -- St.1 (Asahi Br.) 1969-8-11.

SUPPLEMENT : METOC --- R.Tama -- (St.8) 1976-10-26.

ORDER HARPACTICOIDA

1. HARPACTICOIDA Fam., Gen. et sp. indet. (Fig.108)

Loc. & date : R.Kosuge -- St.2 (a small stream) 1979-8-18 : R.Tama -- St.3 (Shiromaru) 1960-7-22 ; St.3-4 (Hatonosu) 1964-5-3 ; St.5 (Kawai junction - upper stream), St.6 (Kawai junction - lower stream) 1964-8-31 ; St.8 (Mitake Br.), St.9 (Ikusabata) 1964-5-3 ; St.12 (Jindai Br.) 1964-5-3 ; St.21 (Haijima Br.) 1964-5-31 : R.Ôtanba -- St.6 (Taishô Br.) 1964-5-3 : R.Asakawa -- St.8 (a small stream) 1979-3-12 ; St.21 (Kawaino) 1978-11-21 ; St.27 (Umenoki Br.) 1964-7-17 ; St.28 (Takaosan-guchi) 1959-summer, 1964-7-17 ; St.29 (Kamikunugida Br.) 1964-7-17 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.35 (Shikishima Br.) 1960-7-20.

SUBCLASS BRANCHIURA

ORDER BRANCHIURA

FAMILY ARGULIDAE

1. *Argulus japonicus* THIELE (Fig.108)

Loc. & date : R.Tama -- St.31 (Shukugawara Dam - lower stream) 1979-7-10, 1979-9-11 : R.Akikawa -- St.13 (Wada Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1960-7-21.

SUBCLASS CIRRIPIEDIA

ORDER THORACICA

FAMILY BALANIDAE

1. *Balanus* sp.

Loc. & date : R.Tama -- St.37 (Taishi Br.) 1975-8-12.

SUBCLASS MALACOSTRACA

ORDER CUMACEA

1. *Cumacea* sp.

Loc. & date : R.Tama -- St.37 (Taishi Br.) 1975-8-12.

ORDER ISOPODA

SUBORDER ASELLOTA

FAMILY ASELLIDAE

1. *Asellus hilgendorffii* BOVALIUS (Fig.109)

Loc. & date : R.Tama -- St.10 (Yoroi Br.) 1975-5-28 ; St.17 (Hamura Dam - upper stream) 1972-8-16 ; St.18 (Hamura Dam - lower stream) 1969-7-24, 1970-10-9 ; St.19 (Nagata Br.) 1975-8-14, 1975-11-11 ; St.20 (Tama Br.) 1975-8-14 ; St.21 (Haijima Br.) 1975-5-28, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1971-12-7, 1975-5-27 ; St.23 (Hino Br.) 1975-5-27, 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.) 1963-7-1, 1964-5-26, 1969-8-11, 1971-12-8, 1972-8-18, 1975-5-27, 1975-8-13 ; St.25 (Koremasa Br.) 1964-9-3, 1972-8-18, 1975-5-27, 1975-8-13, 1975-10-23 ; St.26 (Tamagawara Br.) 1964-9-3, 1969-8-11, 1971-12-8, 1975-5-27, 1975-8-13, 1975-10-23 ; St.27 (Kamigawara Dam - upper stream) 1969-8-11, 1970-10-18 ; St.28 (Kamigawara Dam - lower stream) 1969-8-11, 1970-10-18 ; St.29 (Shimofuda) 1969-8-15 ; St.30 (Tama-Suidô Br.) 1963-7-1, 1969-8-15, 1972-8-18, 1975-5-26, 1975-8-13, 1975-10-23 ; St.31 (Shukugawara Dam - lower stream) 1969-8-15 ; St.32 (Futago Br.) 1963-6-25, 1969-8-15, 1970-10-16, 1975-5-26, 1975-8-12, 1975-10-22 ; St.33 (Maruko Br.) 1963-6-24, 1969-8-15, 1971-12-14, 1975-5-26, 1975-8-12, 1975-10-22 : R.Nippara -- St.18 (Shôwa Br.) 1975-5-29 : R.Hirai -- St.2 (Tasai Br.) 1971-12-6, 1972-8-16, 1975-5-28, 1975-11-11 : R.Akikawa -- St.22 (Akikawa Br.) 1969-7-21 : R.Asakawa -- St.10 (a small stream - Oyashiki), St.11 (Oyashiki) 1979-3-12 ; St.24 (Motoki Br.), St.25 (Kakuei Br.) 1979-3-13 ; St.28 (Takaosan-guchi) 1964-7-17 ; St.29 (Kamikunugida Br.) 1963-8-25 ; St.31 (Hikage Br.) 1976-12-7 ; St.33 (Surisashi) 1975-10-24 : St.34 (Jadaki-guchi) 1976-8-5 ; St.35 (Shikishima Br.) 1964-7-24, 1969-7-22, 1972-8-17 ; St.36 (Minase Br.) 1975-5-28, 1975-8-14, 1975-10-24 ; St.38 (Asakawa Br.) 1969-7-22, 1972-8-17, 1975-8-14, 1975-10-24 ; St.39 (Ôwada Br.) 1969-7-22 ; St.40 (Hirayama Br.) 1975-5-27, 1975-8-14, 1975-10-24 ; St.41 (Takahata Br.) 1963-8-25, 1964-7-24 ; St.42 (Arai Br.) 1972-8-17, 1975-5-27, 1975-8-13, 1975-10-23.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Tama -- (St.2), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.25), (St.26), (St.27), (St.29), (St.31), (St.32), (St.33) : R.Hirai -- (St.2) : R.Yaji, -- (St.1) : R.Asakawa -- (St.35), (St.39), (St.42) : R.Ôkuri -- (St.1) : IIMURA --- R.Nippara -- (St.18) : R.Tama -- (St.19), (St.21), (St.22), (St.23), (St.24) : R.Akikawa -- (St.26) : R.Asakawa -- (St.42) : METOC --- R.R.Nippara -- (St.18) : METOC-W --- R.Tama -- (St.31) : TMG-BEP --- R.Hirai -- (St.2) : R.Akikawa -- (St.26) : R.Yaji -- (St.1) : R.Asakawa -- (St.P), (St.36), (St.41) : (St.41) : TSUDA --- R.Tama -- (St.23), (St.24), (St.25), (St.26), (St.30), (St.32), (St.33) : HISAI --- R.Asakawa -- (St.28) : KRIEP --- R.Tama -- (St.23), (St.26), (St.31), (St.32) : MIYASHITA --- R.Tama -- (St.18), (St.27), (St.28), (St.32).

FAMILY PARASELLIDAE

1. *Mackinia japonica* MATSUMOTO (Fig.110)

Loc. & date : R.Tama -- St.1 (Shôwa Br.) 1975-5-29, 1975-11-11 : R.Asakawa -- St.31 (Hikage Br.) 1976-8-18 ; St.34 (Jadaki-guchi) 1976-8-5.

ORDER AMPHIPODA

SUBORDER GAMMARIDEA

FAMILY GAMMARIDAE

1. *Gammarus* (*Rivulogammarus*) *nipponensis* UENO (Fig.110)

Loc. & date : R.Asakawa -- St.28 (Takaosan-guchi) 1969-7-22.

2. *Gammarus* sp.

SUPPLEMENT : HASHIGAMI --- R.Tama -- (St.21) 1973-8-25.

3. *Pseudocrangonyx* sp. (Fig.110)

Loc. & date : R.Tama -- St.1 (Shôwa Br.) 1975-5-29 ; St.2 (Unazawa) 1959-summer ; St.16 (Tamagawa Br.) 1964-9-1 ; St.18 (Hamura Dam - lower stream) 1964-9-2 : R.Asakawa -- St.15 (R.Ozu - Iriyama) 1978-11-20 ; St.25 (Kakuei Br.) 1979-3-13 ; St.26 (Higashi-Yamashita Br.) 1969-7-22 ; St.32 (Kogezawa junction) 1976-9-25 ; St.34 (Jadaki-guchi) 1976-8-5.

SUPPLEMENT : METOC --- R.Nippara -- (St.18) 1976-11-25 : R.Ôsawa -- (St.M) 1976-11-25.

FAMILY COROPHIIDAE

1. *Corophium* sp.

Loc. & date : R.Tama -- St.37 (Taishi Br.) 1975-5-26, 1975-8-12, 1975-10-22.

ORDER DECAPODA
SUBORDER NATANTIA
FAMILY ATYIDAE

1. *Paratya* sp..

SUPPLEMENT : IDE --- R.Tama -- (St.19) 1973-8-21 : R.Hirai -- (St.2) 1973-8-21 : METOC-W --- R.Tama -- (St.31) 1979-7-10, 1979-9-11.

FAMILY PALAEMONIDAE

1. *Palaemon* (*Palaemon*) *paucidens* De HAAN

Loc. & date : R.Tama -- St.26 (Tamagawara Br.) 1969-8-11.

SUPPLEMENT : TSUDA --- R.Tama -- (St.1) 1973-Sept.

SUBORDER REPTANTIA

FAMILY POTAMOBIIDAE

1. *Procambarus clarkii* (GIRARD) (Fig.111)

Loc. & date : R.Tama -- St.22 (Tama-Ôhashi Br.) 1969-8-11 ; St.24 (Sekido Br.) 1963-7-1, 1970-10-10 ; St.25 (Koremasa Br.) 1963-6-25 ; St.29 (Shimofuda) 1969-8-15 : R.Asakawa -- St.41 (Takahata Br.) 1964-7-24 ; St.42 (Arai Br.) 1975-10-23.

FAMILY POTAMONIDAE

1. *Potamon* (*Geothelphusa*) *dehaanii* (WHITE) (Fig.111)

Loc. & date : R.Kosuge -- St.2, St.4 (small streams), St.6 (Wasabida) 1979-8-18 : R.Asakawa -- St.3, St.6 (small streams) 1979-3-12 ; St.14 (a small stream - R.Ozu), St.15 (R.Ozu) 1978-11-20 ; St.17 (R.Daigo), St.18 (Ninikuzawa), St.19 (R.Ange), St.20 (a small stream), St.22 (Kitsunozuka) 1978-11-21 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25.

SUPPLEMENT : IDE --- R.Ôtanba -- (St.5) 1973-8-21 : METOC --- R.Kukizawa -- (St.B) 1976-10-26 : R.Irikawa -- (St.1) 1976-10-26, 1976-11-25 : R.Ôsawa -- (St.M) 1976-11-25 : R.Hisai --- R.Asakawa -- (St.28) 1979-11-28.

FAMILY GRAPSIDAE

1. *Sisarma* (*Holometopus*) *haematocheir* (De HAAN)

Loc. & date : R.Tama -- St.34 (Tamagawa-Ôhashi Br.) 1975-8-12.

FAMILY OCYPODIDAE

1. *Ilyoplax pusillus* (De HAAN)

Loc. & date : R.Tama -- St.37 (Taishi Br.) 1975-8-12.

PHYLUM TARDIGRADA

1. TARDIGRADA Fam., Gen. et sp. indet.

Loc. & date : R.Tama -- St.3-4 (Hatonosu) 1964-5-3 ; St.24 (Sekido Br.)
1963-7-1, 1964-5-26 ; St.26 (Tamagawara Br.) 1963-6-25 ; St.33 (Maruko Br.)
1975-5-26.

PHYLUM ANNELIDA

CLASS POLYCHAETA

1. *Neanthes japonica* (IZUKA)

Loc. & date : R.Tama -- St.34 (Tamagawa-Ôhashi Br.) 1975-8-12, 1975-10-22 ;
St.37 (Taishi Br.) 1963-6-24, 1975-8-12, 1975-10-22.

2. *Neanthes succinea* (FREY et LEUCKART)

Loc. & date : R.Tama -- St.36 (Rokugô Br.) 1975-8-12 ; St.37 (Taishi Br.)
1975-8-12, 1975-10-22.

3. *Neanthes* sp.

Loc. & date : R.Tama -- St.37 (Taishi Br.) 1975-5-26.

4. *Prionospio japonicus* OKUDA

Loc. & date : R.Tama -- St.36 (Rokugô Br.) 1975-10-22.

5. NEREIDAE Gen. et sp. indet.

Loc. & date : R.Tama -- St.36 (Rokugô Br.) 1963-6-24 ; St.37 (Taishi Br.)
1963-6-24, 1969-8-15.

6. SPIONIDAE Gen. et sp. indet.

Loc. & date : R.Tama -- St.36 (Rokugô Br.) 1975-8-12 ; St.37 (Taishi Br.)
1975-8-12.

7. POLYCHAETA Fam., Gen. et sp. indet.

Loc. & date : R.Tama -- St.36 (Rokugô Br.) 1972-8-18 ; St.37 (Taishi Br.)
1971-12-14, 1972-8-18.

SUPPLEMENT : IDE --- R.Tama -- (St.36) 1978-8-16 ; (St.37) 1973-5-30, 1973-
8-19, 1973-10-27, 1974-1-31, 1979-1-5.

CLASS OLIGOCHAETA

FAMILY NAIDIDAE

1. *Nais* sp.

Loc. & date : R.Kosuge -- St.1, St.2 (small streams), St.5 (Campground), St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.16 (Tamagawa Br.) 1960-7-21 ; St.24 (Sekido Br.) 1964-5-26 ; St.30 (Tama-Suidô Br.) 1964-9-3 ; St.33 (Maruko Br.) 1960-7-20 : R.Hirai -- St.2 (Tasai Br.) 1971-12-6 : R.Akikawa -- St.7 (Sasano)_H 1960-7-21 : R.Asakawa -- St.3 (a small stream), St.7 (Nakai Br.), St.8 (a small stream - Koashi), St.9 (R.Yamairi - Koashi) 1979-3-12 ; St.10 (a small stream - Oyashiki), St.11 (R.Yamairi - Oyashiki), St.24 (Motoki Br.) 1979-3-13.

SUPPLEMENT : (Dates are omitted.) TMG-BEP --- R.Hirai -- (St.2) : R.Akikawa -- (St.26) : R.Yaji -- (St.1) : R.Asakawa -- (St.P), (St.36), (St.41).

2. *Stylaria lacustris* LINNE

Loc. & date : R.Tama -- St.24 (Sekido Br.) 1963-7-1 ; St.30 (Tama-Suidô Br.) 1963-7-1, 1975-10-23 ; St.33 (Maruko Br.) 1963-6-24.

3. *Pristina longiseta* EHERENBERG

Loc. & date : R.Tama -- St.22 (Tama-Ôhashi Br.) 1975-11-11 ; St.30 (Tama-Suidô Br.) 1975-10-23 : R.Asakawa -- St.36 (Minase Br.) 1975-10-24.

NAIDIDAE Gen. et sp. indet.

SUPPLEMENT : METOC --- R.Taba -- (St.7) 1976-11-25 : R.Tama -- (St.1), (St.4), (St.8), (St.15) 1976-11-25 ; (St.17) 1976-10-26, 1976-11-25 : R.Nippara -- (St.18) 1976-11-25 : R.Ôtanba -- (St.6) 1976-11-25 : R.Ôsawa -- (St.M) 1976-11-25 : METOC-W --- R.Tama -- (St.31) -- (Dates are omitted.).

FAMILY TUBIFICIDAE

1. *Tubifex* sp.

(Fig.112)

Loc. & date : R.Nippara -- St.18 (Shôwa Br.) 1975-11-11 : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Akikawa -- St.22 (Akikawa Br.) 1975-10-24 ; St.26 (Takatsuki Br.) 1975-11-11 : R.Asakawa -- St.33 (Surisashi) 1975-10-22 ; St.36 (Minase Br.) 1975-10-22 ; St.38 (Asakawa Br.) 1975-10-24 ; St.40 (Hirayama Br.) 1975-10-24 ; St.42 (Arai Br.) 1975-10-23.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.G), (St.H), (St.I), (St.J), (St.7), (St.12), (St.15), (St.18) : R.Tama -- (St.D), (St.1), (St.2), (St.10), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.25), (St.26), (St.27), (St.29), (St.31), (St.32), (St.33),

(St.34), (St.37) : R.Ôtanba -- (St.5) : R.Hirai -- (St.2) : R.Akikawa --
(St.26) : R.Yaji -- (St.1) : R.Asakawa -- (St.35), (St.36), (St.39), (St.42)
: R.Okuri -- (St.1) : TSUDA --- R.Tama -- (St.Ī), (St.3), (St.15), (St.21),
(St.22), (St.24), (St.31), (St.33), (St.34), (St.36) : TMG-BEP --- R.Hirai
-- (St.2) : R.Yaji -- (St.1) : R.Asakawa -- (St.P), (St.36), (St.41).

2. *Branchiura sowerbyi* BEDDARD (Fig.112)

Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.25
(Koremasa Br.) 1975-5-27 ; St.26 (Tamagawara Br.) 1975-5-27 ; St.30 (Tama-
Suidô Br.) 1969-8-15, 1975-5-26, 1975-10-23 ; St.32 (Futago Br.) 1963-6-25,
1975-10-22 ; St.33 (Maruko Br.) 1975-10-22 ; St.35 (Hirayama Br.) 1963-6-
24 : R.Asakawa -- St.39 (Ôwada Br.) 1964-7-24 ; St.40 (Hirayama Br.) 1975-
8-14, 1975-10-24.

SUPPLEMENT : METOC-W --- R.Tama -- (St.31) 1979-4-13, 1979-5-19, 1979-6-13,
1979-7-10, 1979-8-14, 1979-10-18, 1979-10-26, 1979-11-15 : TMG-BEP ---
R.Yaji -- (St.1) 1980-7-21, 1980-9-29 : R.Asakawa -- (St.41) 1980-7-21,
1981-2-16 : MIYASHITA --- R.Tama -- (St.24) 1970-10-10 ; (St.28), (St.31)
1970-10-18.

3. *Limnodrilus* sp.

SUPPLEMENT : IDE --- R.Tama -- (St.20) 1974-10-23 ; (St.34) 1978-8-16, 1979
-1-5.

TUBIFICIDAE Gen. et sp. indet.

Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.19
(Nagata Br.) 1971-12-6 ; St.25 (Koremasa Br.) 1971-12-8 ; St.26 (Tamagawara
Br.) 1963-6-25 ; St.30 (Tama-Suidô Br.) 1963-7-1, 1969-8-15 ; St.31 (Shuku-
gawara Dam - lower stream) 1969-8-15 ; St.32 (Futago Br.) 1969-8-15 ; St.33
(Maruko Br.) 1963-6-24, 1969-8-15, 1971-12-14, 1972-8-18 ; St.34 (Tamagawa-
Ôhashi Br.) 1963-6-24, 1969-8-15, 1971-12-14, 1972-8-18 ; St.35 (Hirama
Br.) 1963-6-24 ; St.36 (Rokugô Br.) 1963-6-24, 1971-12-14, 1972-8-18 ;
St.37 (Taishi Br.) 1963-6-24 : R.Asakawa -- St.6 (a small stream) 1979-3-12
; St.25 (Kakuei Br.) 1979-3-13 ; St.39 (Ôwada Br.) 1964-7-24.

SUPPLEMENT : (Dates are omitted.) METOC --- R.Taba -- (St.7) : R.Kukizawa
-- (St.B) : R.Tama -- (St.1), (St.4), (St.8), (St.15), (St.17), (St.D) :
R.Nippara -- (St.18) : R.Irikawa -- (St.1) : R.Ôtanba -- (St.6) : R.Ôsawa --
(St.M) : METOC-W --- R.Tama -- (St.31) : TMG-BEP --- R.Hirai -- (St.2) :
R.Yaji -- (St.1) : R.Asakawa -- (St.P), (St.36), (St.41) : KRIEP --- R.Taba
-- (St.A) : R.Tama -- (St.2), (St.15), (St.17), (St.23), (St.26), (St.31),
(St.32), (St.33), (St.34) : MIYASHITA --- R.Tama -- (St.21), (St.23), (St.27),
(St.28), (St.31), (St.32), (St.33).

R.Yaji -- (St.1) : R.Asakawa -- (St.P), (St.36), (St.41) : KRIEP --- R.Taba -- (St.A) : R.Tama -- (St.2), (St.15), (St.17), (St.23), (St.26), (St.31), (St.32), (St.33), (St.34) : MIYASHITA --- R.Tama -- (St.21), (St.23), (St.27), (St.28), (St.31), (St.32), (St.33).

FAMILY LUMBRICIDAE

1. *Eisenia foetida* (SAVIGNY)

SUPPLEMENT : TSUDA --- R.Tama -- (St.19) 1973-Sept. : KRIEP --- R.Tama -- (St.15) 1979-9-13.

OLIGOCHAETA Fam., Gen. et sp. indet.

Localities : R.Kosuge -- (St.5), (St.7) : R.Tama -- (St.1), (St.3), (St.4), (St.6), (St.8), (St.9), (St.10), (St.12), (St.14), (St.15), (St.16), (St.17), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.25), (St.26), (St.27), (St.29), (St.30), (St.31), (St.32), (St.33), (St.34), (St.36), (St.37) : R.Nippara -- (St.10), (St.15), (St.17), (St.18) : R.Ôtanba -- (St.5), (St.6) : R.Hirai -- (St.2) : R.Akikawa -- (St.4), (St.6), (St.7), (St.13), (St.14), (St.16), (St.17), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.26) : R.Asakawa --- (St.21), (St.22), (St.25), (St.28), (St.29), (St.31), (St.32), (St.33), (St.34), (St.35), (St.36), (St.38), (St.40), (St.42) : R.Ôkuri -- (St.1) : TMG-BEP -- R.Hirai -- (St.2) : R.Yaji -- (St.1) : R.Asakawa -- (St.P), (St.41) : HISAI -- R.Asakawa -- (St.28) : MIYASHITA --- R.Tama -- (St.17), (St.18), (St.24), (St.31).

CLASS HIRUDINEA

ORDER RHYNCHOBDELLIDA

FAMILY GLOSSIPHONIIDAE

1. *Glossiphonia weberi* lata OKA (Fig.113)

Loc. & date : R.Tama -- St.21 (Haijima Br.) 1975-5-28 ; St.23 (Hino Br.) 1963-8-18, 1975-8-13 ; St.24 (Sekido Br.) 1963-7-1, 1964-5-26, 1975-8-13 ; St.30 (Tama-Suidô Br.) 1963-7-1 ; St.31 (Shukugawara Dam - lower stream) 1969-8-15 ; St.32 (Futago Br.) 1975-8-12 ; St.33 (Maruko Br.) 1975-10-22 : R.Asakawa -- St.36 (Minase Br.), St.38 (Asakawa Br.), St.40 (Hirayama Br.) 1975-10-24 ; St.42 (Arai Br.) 1975-8-13.

SUPPLEMENT : METOC-W --- R.Tama -- (St.31) 1979-1-12, 1979-2-14, 1979-3-13, 1979-4-13, 1979-5-19, 1979-6-13, 1979-7-10, 1979-8-14, 1979-9-11, 1979-10-18, 1979-10-26, 1979-11-15 : TSUDA --- R.Tama --- (St.23) (St.25), (St.26), (St.30) 1973-Sept. : KRIEP --- R.Taba -- (St.A) : R.Tama -- (St.23) 1979-9-13 : MIYASHITA --- R.Tama -- (St.23) 1970-10-10 ; (St.28), (St.31) 1970-10-18 ; (St.32) 1970-10-16 ; (St.33) 1970-10-18.

2. *Glossiphonia complanata* (LINNAEUS) (Fig.113)

SUPPLEMENT : (Dates are omitted.) IIMURA --- R.Tama -- (St.21), (St.22), (St.23), (St.24) : R.Asakawa -- (St.42).

3. *Glossiphonia* sp. (Fig.113)

Loc. & date : R.Tama -- St.23 (Hino Br.) 1975-10-23 ; St.25 (Koremasa Br.) 1975-10-23 ; St.26 (Tamagawara Br.) 1975-10-23 ; St.33 (Maruko Br.) 1975-10-22 : R.Asakawa -- St.38 (Asakawa Br.) 1975-10-24 ; St.40 (Hirayama Br.) 1975-10-24 ; St.42 (Arai Br.) 1975-10-23.

SUPPLEMENT : IDE --- R.Tama -- (St.21) 1974-10-20 ; (St.22) 1975-7-30, 1979-1-5 ; (St.23) 1973-10-27, 1974-2-3, 1975-7-28, 1979-1-5 ; (St.24) 1975-7-28, 1976-8-19 ; (St.25) 1973-8-19, 1973-10-27, 1976-8-19, 1979-1-5 ; (St.26) 1973-10-27, 1976-8-18, 1979-1-5 ; (St.27) 1976-8-18 ; (St.29) 1976-8-18, 1977-10-9 ; (St.31) 1977-10-9 ; (St.32) 1973-8-19, 1973-10-27, 1974-1-31, 1979-1-5 ; (St.33) 1977-10-12, 1979-1-5 ; (St.34) 1979-1-5 : R.Yaji -- (St.1) 1979-1-5 : R.Asakawa -- (St.42) 1973-10-27 : R.Ôkuri -- (St.1) 1979-1-5.

ORDER PHARYNGOBDELLIDA

FAMILY ERPOBDELLIDAE

1. *Erpobdella lineata* (O.F.MULLER) (Fig.114)

Loc. & date : R.Nippara -- St.18 (Shôwa Br.) 1972-8-16, 1975-8-15 : R.Tama -- St.16 (Tamagawa Br.) 1969-7-24 ; St.17 (Hamura Dam - upper stream) 1969-7-24, 1970-10-9, 1972-8-16 ; St.18 (Hamura Dam - lower stream) 1963-6-24, 1963-8-25, 1964-9-2, 1969-7-24, 1970-10-9, 1975-8-15, 1975-11-11 ; St.20 (Tama Br.) 1965-7-31, 1975-11-11 ; St.21 (Haijima Br.) 1969-8-11, 1970-10-9, 1971-12-7, 1972-8-17, 1972-8-17, 1975-5-28, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1969-8-11, 1972-8-17, 1975-8-14, 1975-11-11 : St.23 (Hino Br.) 1969-8-11, 1970-10-10, 1971-12-7, 1972-8-17, 1975-8-13, 1975-10-23, 1963-6-25, 1963-9-18, 1964-5-26 ; St.24 (Sekido Br.) 1963-7-1, 1964-5-26, 1969-8-11, 1970-10-10, 1971-12-8, 1972-8-18, 1975-5-27, 1975-8-13,

1975-10-23 : St.25 (Koremasa Br.) 1963-6-25, 1964-9-3, 1969-8-11, 1972-8-18, 1975-5-27, 1975-8-13, 1975-10-23 ; St.26 (Tamagawara Br.) 1960-7-20, 1963-6-25, 1964-9-3, 1969-8-11, 1971-12-8, 1972-8-18, 1975-8-13, 1975-10-23 ; St.27 (Kamigawara Dam - upper stream) 1969-8-11 ; St.28 (Kamigawara Dam - lower stream) 1969-8-11, 1970-10-18 ; St.29 (Shimofuda) 1969-8-15 ; St.30 (Tama-Suidō Br.) 1960-7-20, 1963-7-1, 1969-8-15, 1972-8-18, 1975-8-13, 1975-10-23 ; St.31 (Shukugawara Dam - lower stream) 1969-8-15, 1970-10-18 ; St.32 (Futago Br.) 1960-7-20, 1963-6-25, 1969-8-15, 1970-10-16, 1971-12-14, 1972-8-18, 1975-5-26, 1975-8-12, 1975-10-22 ; St.33 (Maruko Br.) 1960-7-20, 1963-6-24, 1969-8-15, 1970-10-16, 1971-12-14, 1972-8-18, 1975-5-26, 1975-8-12, 1975-10-22 : R.Hirai -- St.2 (Tasai Br.) 1969-7-24, 1971-12-6, 1972-8-16, 1975-5-28, 1975-8-15 : R.Akikawa -- St.19 (Niitaka Br.) 1969-7-21 ; St.23 (Ajiro Br.) 1969-7-23 ; St.26 (Takatsuki Br.) 1971-12-6 : R.Asakawa -- St.10 (a small stream - Oyashiki) 1979-3-12 ; St.24 (Motoki Br.) 1979-3-13 ; St.28 (Takaosan-guchi) 1963-8-25 ; St.29 (Kamikunugida Br.) 1960-7-20, 1969-7-22 ; St.33 (Surisashi) 1975-10-24 ; St.34 (Jadaki-guchi) 1969-7-22 ; St.35 (Shikishima Br.) 1960-7-20, 1969-7-22, 1971-12-6, 1972-8-17 ; St.36 (Minase Br.) 1964-7-24, 1969-7-22, 1972-8-17, 1975-5-28, 1975-8-14, 1975-10-24 ; St.38 (Asakawa Br.) 1964-7-24, 1969-7-22, 1971-12-7, 1972-8-17, 1975-8-14, 1975-10-24 ; St.39 (Ōwada Br.) 1960-7-20, 1963-8-25, 1969-7-22 ; St.40 (Hirayama Br.) 1969-7-22, 1971-12-7, 1972-8-17, 1975-5-27, 1975-5-27, 1975-8-14, 1975-10-24 ; St.41 (Takahata Br.) 1963-8-25, 1964-7-24 ; St.42 (Arai Br.) 1969-7-22, 1970-10-10, 1971-12-7, 1972-8-17, 1975-5-27, 1975-8-13, 1975-10-23 : R.Yaji -- St.1 (Asahi Br.) 1960-7-20 : R.Ōkuri -- St.1 1969-8-11.

SUPPLEMENT : (Dates are omitted.) IIMURA --- R.Tama -- (St.21), (St.22), (St.23), (St.24) : R.Akikawa -- (St.26) : R.Asakawa -- (St.42) : METOC-W --- R.Tama -- (St.31) 1979-1-12, 1979-2-14, 1979-3-13, 1979-4-13, 1979-5-19, 1979-6-13, 1979-7-10, 1979-8-14, 1979-9-11, 1979-10-18, 1979-10-26, 1979-11-15 : METOC-BEP --- R.Hirai -- (St.2) : R.Akikawa -- (St.26) : R.Yaji -- (St.1) : R.Asakawa -- (St.P), (St.36), (St.41) : TSUDA --- R.Tama -- (St.21), (St.23), (St.24), (St.25), (St.26), (St.30), (St.32) : MIYASHITA --- R.Tama -- (St.17), (St.18), (St.21), (St.23), (St.24), (St.28), (St.31), (St.32), (St.33).

2. *Erpobdella octoculata* (LINNAEUS)

Loc. & date : R.Tama -- St.24 (Sekido Br.) 1970-10-10.

3. *Erpobdella* sp.

Loc. & date : R.Kosuge -- St.5 (Campground), St.7 (Kawakubo) 1979-8-18 :
R.Nippara -- St.18 (Shōwa Br.) 1975-8-15 : R.Tama -- St.18 (Hamura Dam -
lower stream) 1964-5-31, 1964-9-2, 1975-8-15, 1975-11-11 ; St.20 (Tama Br.)
1965-7-31, 1975-11-11 ; St.21 (Haijima Br.) 1971-12-7, 1975-5-28, 1975-8-
14, 1975-11-11 ; St.22 (Tama-Ōhashi Br.) 1975-8-14, 1975-11-11 ; St.23 (Hino
Br.) 1964-5-26, 1964-9-2, 1971-12-7, 1975-8-13, 1975-10-23 ; St.24 (Sekido
Br.) 1964-5-26, 1971-12-8, 1975-5-27, 1975-8-13, 1975-10-23 ; St.25 (Koremasa
Br.) 1964-9-3, 1975-5-27, 1975-8-13, 1975-10-23 ; St.26 (Tamagawara Br.)
1964-9-3, 1971-12-8, 1975-8-13, 1975-10-23 ; St.30 (Tama-Suidō Br.) 1975-8-
13, 1975-10-23 ; St.32 (Futago Br.) 1971-12-14, 1975-5-26, 1975-8-12, 1975-
10-22 ; St.33 (Maruko Br.) 1971-12-14, 1975-5-26, 1975-8-12, 1975-10-22 :
R.Hirai -- St.2 (Tasai Br.) 1971-12-6, 1975-5-28, 1975-8-15 : R.Akikawa --
St.26 (Takatsuki Br.) 1971-12-6 : R.Asakawa -- St.10 (a small stream -
Oyashiki) 1979-3-13 ; St.24 (Motoki Br.) 1979-3-13 ; St.31 (Hikage Br.) 1976
-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi) 1975-10-24,
1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-18 ; St.35 (Shijishima
Br.) 1971-12-6 ; St.36 (Minase Br.) 1964-7-24, 1975-5-28, 1975-8-14, 1975-10-
24 ; St.38 (Asakawa Br.) 1964-7-24, 1971-12-7, 1975-8-14, 1975-10-24 ; St.40
(Hirayama Br.) 1971-12-7, 1975-5-27, 1975-8-14, 1975-10-24 ; St.41 (Takahata
Br.) 1964-7-24 ; St.42 (Arai Br.) 1971-12-7, 1975-5-27, 1975-8-13, 1975-10-23.
SUPPLEMENT : (Dates are omitted.) IDE --- R.Tama -- (St.2), (St.10), (St.15),
(St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.25), (St.
26), (St.27), (St.29), (St.30), (St.31), (St.32), (St.33) : R.Ōtanba -- (St.5)
: R.Hirai -- (St.2) : R.Yaji -- (St.1) : R.Asakawa -- (St.35), (St.36), (St.
39), (St.42) : R.Ōkuri -- (St.1) : HISAI --- R.Asakawa -- (St.28) : HASHIGAMI
--- R.Ōtanba -- (St.6).

HIRUDINEA Fam., Gen. et sp. indet.

Loc. & date : R.Kosuge -- St.3 (a small stream), St.6 (Wasabida) 1979-8-18 :
R.Tama -- St.20 (Tama Br.) 1975-11-11 ; St.24 (Sekido Br.) 1975-10-23 ; St.30
(Tama-Suidō Br.) 1975-10-23 ; St.32 (Futago Br.) 1975-10-22 ; St.33 (Maruko
Br.) 1975-10-22 : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Asakawa -- St.21
(Kawaino), St.22 (Kitsunezuka) 1978-11-21 ; St.25 (Kakuei Br.) 1979-3-13 ;
St.29 (Kamikunugida Br.) 1964-7-17 ; St.30 (Kobotoke Lodge) 1964-7-17 ; St.31
(Hikage Br.) 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Suri-
sashi) 1975-8-14, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5 ;

St.36 (Minase Br.) 1975-10-24 ; St.40 (Hirayama Br.) 1975-10-24.
SUPPLEMENT : METOC --- R.Tama -- (St.8) 1976-10-26 ; (St.17) 1976-9-28, 1976-10-26, 1976-11-25, 1977-1-25 : R.Ôtanba -- (St.6) 1976-10-26 : METOC-W --- R.Tama -- (St.31) 1979-1-12, 1979-2-14, 1979-3-13, 1979-4-13, 1979-5-19, 1979-6-13, 1979-7-10, 1979-8-14, 1979-9-11, 1979-10-18, 1979-10-26, 1979-12-14 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980-9-29, 1980-12-8, 1981-2-16 : R.Yaji -- (St.1) 1980-7-21, 1980-12-8 : R.Asakawa -- (St.P) 1980-7-21, 1980-12-8 ; (St.36) 1980-7-21, 1980-9-29 ; (St.41) 1980-9-29, 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-12-8.

PHYLUM NEMATHELMINTHES

CLASS NEMATODA

1. NEMATODA Fam., Gen. et sp. indet.

Loc. & date : R.Kosuge -- St.5 (Campground) 1979-8-18 : R.Nippara -- St.18 (Shôwa Br.) 1975-5-29 : R.Tama -- St.1 (Shôwa Br.) 1975-5-29 ; St.10 (Yoroi Br.) 1975-5-28, 1975-8-15, 1975-11-11 ; St.17 (Hamura Dam - upper stream) 1975-5-28 ; St.19 (Nagata Br.) 1975-5-28, 1975-11-11 ; St.20 (Tama Br.) 1975-11-11 ; St.21 (Haijima Br.) 1969-8-11, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1975-8-14 ; St.23 (Hino Br.) 1975-10-23 ; St.24 (Sekido Br.) 1975-5-27, 1975-8-13 ; St.25 (Koremasa Br.) 1975-5-27, 1975-10-23 ; St.26 (Tama-gawara Br.) 1975-10-23 ; St.30 (Tama-Suidô Br.) 1963-7-1, 1975-5-26, 1975-10-23 ; St.32 (Futago Br.) 1971-12-14 ; St.33 (Maruko Br.) 1975-5-26, 1975-10-22 ; St.36 (Rokugô Br.) 1975-8-12 ; St.37 (Taishi Br.) 1975-5-26, 1975-8-12 : R.Hirai -- St.2 (Tasai Br.) 1975-5-28, 1975-11-11 : R.Akikawa -- St.11 (Shiro-kura) 1960-7-21 ; St.23 (Ajiro Br.) 1975-5-28 ; St.26 (Takatsuki Br.) 1975-11-11 : R.Asakawa -- St.8 (small stream - Koashi) 1979-3-12 ; St.21 (Kawaino) 1978-11-21 ; St.29 (Kamikunugida Br.) 1960-7-20 ; St.31 (Hikage Br.) 1976-12-7 ; St.33 (Surisashi) 1975-5-28, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5 ; St.35 (Shikishima Br.) 1960-7-20, 1971-12-7 ; St.36 (Minase Br.) 1975-5-28, 1975-8-14, 1975-10-24 ; St.40 (Hirayama Br.) 1975-5-27, 1975-10-24 ; St.42 (Arai Br.) 1975-10-23.

SUPPLEMENT : TMG-BEP --- R.Hirai -- (St.2) 1980-9-29, 1980-12-8, 1981-2-16 : R.Akikawa -- (St.26) 1980-9-29, 1980-12-8, 1981-2-16 : R.Asakawa -- (St.P) 1980-12-8, 1981-2-16 ; (St.36) 1980-12-8, 1981-2-16 ; (St.41) 1980-9-29, 1980-12-8, 1981-2-16.

CLASS GORDIOIDEA

1. GORDIOIDEA Fam., Gen. et sp. indet.

Loc. & date : R.Asakawa -- St.17 (R.Daigo) 1978-11-21.

SUPPLEMENT : METOC --- R.Tama -- (St.17) 1976-10-26.

PHYLUM MOLLUSCA

CLASS GASTROPODA

ORDER CAENOGASTROPODA

FAMILY VIVIPARIDAE

1. VIVIPARIDAE Gen. et sp. indet.

SUPPLEMENT : TMG-BEP --- R.Akikawa -- (St.26) 1980-9-29.

FAMILY HYDROBIIDAE

1. HYDROBIIDAE Gen. et sp. indet.

Loc. & date : R.Tama -- St.15 (Chôfu Br.) 1969-7-23 ; St.16 (Tamagawa Br.)
1964-9-1 ; St.33 (Maruko Br.) 1975-10-22.

FAMILY ASSIMINEIDAE

1. *Assiminea lutea japonica* v.MARTENS

Loc. & date : R.Tama -- St.36 (Rokugô Br.) 1975-10-22; St.37 (Taishi Br.)
1975-8-12.

FAMILY FAIRBANKIIDAE

1. *Fluviocingula nipponica* KURODA et HABE

Loc. & date : R.Tama -- St.37 (Taishi Br.) 1975-8-12.

FAMILY PLEUROCERIDAE

1. *Semisulcospira libertina* (GOULD) (Fig.115)

Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.1 (Shôwa
Br.) 1972-8-16 ; St.5 (Kawai junction - upper stream) 1964-8-31 ; St.6
(Kawai junction - lower stream) 1964-8-31 ; St.18 (Hamura Dam - lower stream)
1964-9-2 ; St.21 (Haijima Br.) 1969-8-11 ; St.22 (Tama-Ôhashi Br.) 1969-8-
11 ; St.26 (Tamagawara Br.) 1963-6-25 ; St.30 (Tama-Suidô Br.) 1963-7-1 :
R.Ôtanba -- St.5 (Kitagawa Br.) 1969-7-23 : R.Hirai -- St.2 (Tasai Br.) 1965-
7-31, 1969-7-24, 1971-12-6 : R.Akikawa -- St.12 (Kita-Akikawa Br.) 1969-7-21
; St.14 (Ozu Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1969-7-21 ;

St.22 (Akikawa Br.) 1969-7-21 : R.Asakawa -- St.10 (a small stream - Oya-shiki) 1979-3-13 ; St.28 (Takaosan-guchi) 1969-7-22 ; St.29 (Kamikunugida Br.) 1964-7-17 ; St.30 (Kobotoke Lodge) 1964-7-17.

SUPPLEMENT : TSUDA --- R.Tama -- (St.18) 1973-Sept.

2. *Semisulcospira bensoni* (PHILIPPI) uncert.

SUPPLEMENT : IDE --- R.Ôtanba -- (St.5) 1973-8-21 : R.Hirai -- (St.2) 1973-8-20.

3. *Semisulcospira* sp.

SUPPLEMENT : IDE --- R.Tama -- (St.21) 1974-10-20 : R.Hirai -- (St.2) 1974-10-22.

ORDER PLUMONATA

FAMILY LYMNAEIDAE

1. *Radix auricularia japonica* JAY (Fig.116)

Loc. & date : R.Tama -- St.16 (Tamagawa Br.) 1969-7-24 ; St.17 (Hamura Dam - upper stream) 1969-7-24 ; St.18 (Hamura Dam - lower stream) 1969-7-24, 1970-10-9 ; St.20 (Tama Br.) 1965-7-31 ; St.21 (Haijima Br.) 1969-8-11 ; St.22 (Tama-Ôhashi Br.) 1969-8-11 ; St.23 (Hino Br.) 1969-8-11 ; St.26 (Tamagawara Br.) 1963-6-25, 1969-8-11 ; St.27 (Kamigawara Dam - upper stream) 1969-8-11 ; St.28 (Kamigawara Dam - lower stream) 1969-8-11, 1970-10-18 ; St.29 (Shimofuda) 1969-8-15 ; St.30 (Tama-Suidô Br.) 1963-7-1 ; St.31 (Shukugawara Dam - lower stream) 1969-8-15 ; St.32 (Futago Br.) 1970-10-16 ; St.32-33 (Daisan-Keihin High Way) 1969-8-15 : R.Hirai -- St.2 (Tasai Br.) 1965-7-31 :

R.Akikawa -- St.24 (Akiru Br.) 1969-7-23 : R.Asakawa -- St.36 (Minase Br.) 1972-8-17, 1975-8-14, 1975-10-24 ; St.38 (Asakawa Br.) 1969-7-22.

SUPPLEMENT : IIMURA --- (Dates are omitted.) --- R.Nippara -- (St.18) :

R.Tama -- (St.1), (St.16), (St.19), (St.21), (St.22), (St.23), (St.24) :

R.Asakawa -- (St.42) : METOC --- R.Irikawa -- (St.1) 1976-9-28 : MIYASHITA --- R.Tama -- (St.18) 1970-10-9 ; (St.28) 1970-10-18 ; (St.32) 1970-10-16.

2. *Radix* sp.

SUPPLEMENT : IDE --- R.Nippara -- (St.18) 1974-2-2 : R.Tama -- (St.2) 1973-8-21, 1974-2-2 ; (St.15) 1973-11-4 ; (St.19) 1973-11-4 ; (St.23) 1973-10-27, 1976-8-20 ; (St.25) 1973-8-19, 1973-10-27 : R.Hirai -- (St.2) 1973-8-20 : R.Akikawa -- (St.18) 1974-2-1 : R.Asakawa -- (St.35) 1973-8-20, 1974-2-1.

3. *Austropeplea oillula* (GOULD) (Fig.116)

Loc. & date : R.Nippara -- St.15 (Shiraishi Br.) 1969-7-24 ; St.17 (Meoto Br.- lower stream) 1963-8-20 ; St.18 (Shōwa Br.) 1960-7-22, 1972-8-16 ; R.Tama -- St.1 (Shōwa Br.) 1963-6-24, 1963-8-20 ; St.3 (Shiromaru) 1963-8-21 ; St.3-4 (Hatonosu) 1964-5-3 ; St.4 (Mansei Br.) 1969-7-23 ; St.5 (Kawai) 1963-6-15, 1963-8-21, 1964-8-31 ; St.6 (Kawai junction - lower stream) 1963-6-15 ; St.9 (Ikusabata) 1963-8-21 ; St.14 (Mannen Br.) 1963-8-25 ; St.16. (Tamagawa Br.) 1960-7-21, 1963-8-25, 1964-9-1 ; St.18 (Hamura Dam - lower stream) 1963-6-24, 1964-9-2 ; St.20 (Tama Br.) 1963-8-25 ; St.21 (Haijima Br.) 1963-8-25 ; St.23 (Hino Br.) 1963-6-25, 1963-8-18, 1964-5-26 ; St.24 (Sekido Br.) 1963-7-1, 1964-5-26 ; St.25 (Koremasa Br.) 1960-7-20, 1963-6-25, 1964-9-3 ; St.26 (Tamagawara Br.) 1960-7-20, 1963-6-25 ; St.30 (Tama-Suidō Br.) 1963-7-1 ; St.32 (Futago Br.) 1960-7-20, 1963-6-25, 1971-12-14 ; St.33 (Maruko Br.) 1963-6-24, 1971-12-14, 1972-8-18, 1975-8-12 ; R.Ôtanba -- St.5 (Kitagawa Br.) 1969-7-23 ; R.Yaji -- St.1 (Asahi Br.) 1960-7-29 ; R.Akikawa -- St.19 (Niitaka Br.) 1969-7-21 ; St.21 (Kowada Br.) 1963-6-24 ; St.22 (Akikawa Br.) 1963-8-25 ; R.Asakawa -- St.25 (Kakuei Br.) 1979-3-13 ; St.29 (Kamikunugida Br.) 1964-7-17, 1969-7-22 ; St.33 (Surisashi) 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5 ; St.35 (Shikishima Br.) 1960-7-20, 1964-7-24, 1969-7-22 ; St.36 (Minase Br.) 1964-7-24, 1972-8-17 ; St.38 (Asakawa Br.) 1964-7-24 ; St.39 (Ôwada Br.) 1960-7-20, 1963-8-25, 1964-7-24 ; St.41 (Takahata Br.) 1963-8-25, 1964-7-24.

SUPPLEMENT : METOC --- R.Tama -- (St.1) 1976-11-25 ; R.Irikawa -- (St.1) 1976-10-26, 1977-1-26.

4. *Fossaria truncatula* (MULLER) (Fig.116)

Loc. & date : R.Tama -- St.15 (Chōfu Br.) 1969-7-23 ; R.Ôtanba -- St.5 (Kitagawa Br.) 1969-7-23.

5. *Lymnaea* sp. (Fig.116)

Loc. & date : R.Tama -- St.20 (Tama Br.) 1965-7-31 ; R.Hirai -- St.2 (Tasai Br.) 1965-7-31.

SUPPLEMENT : TSUDA --- (*Lymnaea japonica*)--- R.Tama -- (St.22) 1973-Sept. ; R.Akikawa -- (St.26) 1973-Sept.

FAMILY PHYSIDAE

1. *Physa acuta* DRAPARNAUD (Fig.115)

Loc. & date : R.Nippara -- St.18 (Shōwa Br.) 1972-8-16, 1975-8-15 : R.Tama -- St.15 (Chōfu Br.) 1969-7-23 ; St.16 (Tamagawara Br.) 1969-7-24 ; St.17 (Hamura Dam - upper stream) 1969-7-24 ; St.18 (Hamura Dam - lower stream) 1969-7-24 ; St.19 (Nagata Br.) 1969-7-24, 1975-8-14, 1975-11-11 ; St.20 (Tama Br.) 1975-8-14, 1975-11-11 ; St.21 (Haijima Br.) 1970-10-9, 1975-5-28, 1975-8-14, 1975-11-11 ; St.22 (Tama-Ōhashi Br.) 1969-8-11, 1972-8-17, 1975-5-27, 1975-8-14, 1975-11-11 ; St.23 (Hino Br.) 1969-8-11, 1972-8-17, 1975-5-27, 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.) 1971-12-8, 1975-5-27, 1975-8-13, 1975-10-23 ; St.25 (Koremasa Br.) 1969-8-11, 1972-8-18, 1975-5-27, 1975-8-13, 1975-10-23 ; St.26 (Tamagawara Br.) 1969-8-11, 1972-8-18, 1975-5-27, 1975-10-23 ; St.27 (Kamigawara Dam - upper stream) 1969-8-11 ; St.28 (Kamigawara Dam - lower stream) 1970-10-18 ; St.30 (Tama-Suidō Br.) 1969-8-15 ; St.31 (Shukugawara Dam - lower stream) 1969-8-15, 1970-10-18 ; St.32 (Futago Br.) 1969-8-15, 1970-10-16 ; St.32-33 (Daisan Keihin High Way) 1970-10-18 ; St.33 (Maruko Br.) 1969-8-15, 1971-12-14, 1972-8-18, 1975-8-15, 1975-10-22 ; St.36 (Rokugō Br.) 1971-12-14, 1975-10-22 : R.Hirai -- St.2 (Tasai Br.) 1971-12-6, 1975-5-28, 1975-11-11 : R.Akikawa -- St.4 (Henbori) 1969-7-21 ; St.23 (Ajiro Br.) 1969-7-23 ; St.26 (Takatsuki Br.) 1969-7-23 : R.Asakawa -- St.11 (R.Yamairi - Oyashiki) 1979-3-13 ; St.25 (Kakuei Br.) 1979-3-13 ; St.29 (Kamukunugida Br.) 1969-7-22 ; St.31 (Hikage Br.) 1976-10-28, 1976-12-7 ; St.33 (Surisashi) 1976-7-16, 1976-11-15, 1975-10-24 ; St.34 (Jadaki-guchi) 1969-7-22, 1976-8-5 ; St.35 (Shikishima Br.) 1969-7-22 ; St.36 (Minase Br.) 1972-8-17, 1975-5-28, 1975-8-14, 1975-10-24 ; St.38 (Asakawa Br.) 1972-8-17, 1975-8-14, 1975-10-24 ; St.39 (Ōwada Br.) 1969-7-22 ; St.40 (Hirayama Br.) 1975-5-27, 1975-8-14, 1975-10-24 ; St.42 (Arai Br.) 1971-12-7, 1972-8-17, 1975-5-27, 1975-8-13, 1975-10-23.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.18) : R.Tama -- (St.2), (St.15), (St.18), (St.19), (St.20), (St.21), (St.22), (St.23), (St.24), (St.25), (St.26), (St.27), (St.31), (St.32), (St.33) : R.Yaji -- (St.1) : R.Asakawa -- (St.35), (St.36), (St.39), (St.42) : R.Ōkuri -- (St.1) : METOC --- R.Nippara -- (St.18) : R.Tama -- (St.1) : TSUDA --- R.Tama -- (St.18), (St.19), (St.23), (St.25), (St.31), (St.32), (St.33), (St.34), (St.36) : R.Akikawa -- (St.26) : HASHIGAMI --- R.Tama -- (St.19) : MIYASHITA --- R.Tama -- (St.21), (St.28), (St.31), (St.32), (St.33).

FAMILY PLANORBIIDAE

1. *Gyraulus convexiusculus spirillus* (GOULD) (Fig.117)
 Loc. & date : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Tama -- St.23 (Hino Br.) 1969-8-11 ; St.26 (Tamagawara Br.) 1969-8-11 ; St.27 (Kamigawara Dam - upper stream) 1969-8-11 ; St.29 (Shimofuda) 1969-8-15 ; St.30 (Tama-Suidô Br.) 1969-8-15 ; St.31-32 (Tomei High Way) 1969-8-15 ; St.32 (Futago Br.) 1969-8-15 : R.Asakawa -- St.24 (Motoki Br.) 1979-3-13 ; St.35 (Shikishima Br.) 1960-7-20.
2. *Gyraulus chinensis* (DUNKER) (Fig.117)
 SUPPLEMENT : IIMURA --- (*Gyraulus chinensis spirillus*) --- R.Asakawa -- (St.42) 1972-summer, 1973-summer, 1974-summer.
3. *Gyraulus* sp. (Fig.117)
 SUPPLEMENT : IDE --- R.Yaji -- (St.1) 1975-1-5 : R.Asakawa -- (St.35) 1978-8-16, 1979-1-6.
4. *Polypylis hemisphaerula* (BENSON)
 SUPPLEMENT : TSUDA --- R.Tama -- (St.34) 1973-Sept.

PLANORBIIDAE sp. (Fig.117)

- Loc. & date : R.Tama -- St.18 (Hamura Dam - lower stream) 1975-11-11 : R.Hirai -- St.2 (Tasai Br.) 1975-11-11 : R.Asakawa -- St.31 (Hikage Br.) 1976-10-28 ; St.33 (Surisashi) 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-guchi) 1976-8-5 ; St.40 (Hirayama Br.) 1975-10-24.
 SUPPLEMENT : METOC --- R.Tama -- (St.1) 1976-9-28 : R.Ôsawa -- (St.M) 1976-11-25.

FAMILY FERRISSIDAE

1. *Pettanculus nipponicus* (KURODA) (Fig.117)
 Loc. & date : R.Tama -- St.23 (Hino Br.) 1975-8-13, 1975-10-23 ; St.24 (Sekido Br.) 1964-5-26, 1975-8-13 ; St.25 (Koremasa Br.) 1960-7-20 ; St.26 (Tamagawara Br.) 1963-6-25, 1971-12-8 ; St.30 (Tama-Suidô Br.) 1963-7-1 ; St.33 (Maruko Br.) 1975-8-12, 1975-10-22 : R.Hirai -- St.2 (Tasai Br.) 1969-7-24, 1975-11-11 : R.Asakawa -- St.29 (Kamikunugida Br.) 1969-7-22 ; St.36 (Minase Br.) 1969-7-22 ; St.38 (Asakawa Br.) 1975-10-24 ; St.40 (Hirayama Br.) 1975-8-14, 1975-10-24 ; St.42 (Arai Br.) 1972-8-17, 1975-8-13.
 SUPPLEMENT : IDE --- (*Ferrissia nipponica*) --- R.Tama -- (St.21) 1973-11-4 ; (St.23) 1973-8-20, 1973-10-27, 1975-7-30, 1976-8-20, 1979-1-5 ; (St.24) 1976-8-19 ; (St.25) 1973-8-19, 1973-10-27, 1976-8-19 ; (St.26) 1976-8-18,

1979-1-5 ; (St.27) 1976-8-18 ; (St.29) 1976-8-18 ; (St.31) 1977-10-11 ;
(St.32) 1973-8-19, 1973-10-27 : R.Hirai -- (St.2) 1979-1-6 : R.Yaji -- (St.1)
1973-8-20, 1974-2-1, 1979-1-5 : R.Asakawa -- (St.36) 1973-8-20 : IIMURA ---
R.Tama -- (St.22) 1973-10-27 : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21, 1980
-9-29, 1981-2-16 : R.Akikawa -- (St.26) 1980-9-29 : R.Yaji -- (St.1) 1980-
7-21, 1980-9-29 : R.Asakawa -- (St.P) 1980-7-21.

GASTROPODA Ord., Fam., Gen. et sp. indet.

Loc. & date : R.Tama -- St.1 (Shōwa Br.) 1969-7-24, 1975-11-11 ; St.3 (Shiro-
maru) 1960-7-22 ; St.5 (Kawai junction - upper stream) 1963-6-15, 1963-8-21 ;
St.14 (Mannen Br.) 1963-8-25 ; St.26 (Tamagawara Br.) 1964-9-3 ; St.30 (Tama-
Suidō Br.) 1963-7-1, 1964-9-3 : R.Akikawa -- St.5 (Minami-Akikawa Br.) 1969-
7-21 ; St.7 (Sasano) 1963-8-25 : R.Yaji -- St.1 (Asahi Br.) 1963-8-25.

SUPPLEMENT : METOC --- R.Ôtanba -- (St.L) 1976-11-25.

CLASS PELECYPODA

ORDER HETERODONTA

FAMILY CORBICULIDAE

1. *Corbicula (Corbicula) leana* PRIME

Loc. & date : R.Tama -- St.24 (Sekido Br.) 1963-7-1 ; St.26 (Tamagawara Br.)
1963-6-25.

SUPPLEMENT : TMG-BEP --- R.Hirai -- (St.2) 1980-9-29, 1981-2-16.

2. *Corbicula* sp.

SUPPLEMENT : IDE --- R.Tama -- (St.21) 1974-10-20.

FAMILY SPHAERIIDAE

1. *Sphaerium (Musculium) lucustre japonicum* (WESTERLUND)

Loc. & date : R.Tama -- St.26 (Tamagawara Br.) 1963-6-25 ; St.30 (Tama-Suidō
Br.) 1963-7-1 : R.Asakawa -- St.10 (a small stream - Oyashiki) 1979-3-13 ;
St.33 (Surisashi) 1976-7-16 ; St.34 (Jadaki-guchi) 1976-8-5.

SUPPLEMENT : IDE --- R.Tama -- (St.22) 1973-8-20 : R.Hirai -- (St.2) 1974-2-
1, 1978-8-17.

2. *Sphaerium* sp.

SUPPLEMENT : TMG-BEP --- R.Hirai -- (St.2) 1980-7-21.

3. *Pisidium japonicum* PILSBRY et HIRASE

Loc. & date : R.Tama -- St.22 (Tama-Ôhashi Br.) 1969-8-11.

PELECYPODA Ord., Fam., Gen. et sp. indet.

Loc. & date : R.Tama -- St.21 (Haijima Br.) 1971-12-7 : R.Kosuge -- St.7 (Kawakubo) 1979-8-18 : R.Hirai -- St.2 (Tasai Br.) 1975-11-11.
SUPPLEMENT : TNG-BEP -- R.Hirai -- (St.2) 1980-12-8, 1981-2-16.

PHYLUM TENTACULATA

CLASS BRYOZOA

ORDER PHYLACTOLAEMATA

FAMILY PLUMATELLIDAE

1. *Plumatella emarginata* ALLMAN (Fig.119)

Loc. & date : R.Tama -- St.15 (Chôfu Br.) 1969-7-23 ; St.20 (Tama Br.) 1965-7-31 ; St.21 (Haijima Br.) 1975-5-28, 1975-8-14, 1985-11-11 ; St.22 (Tama-Ôhashi Br.) 1975-8-14 ; St.30 (Tama-Suidô Br.) 1963-7-1 : R.Akikawa -- St.4 (Henbôri) 1969-7-21 ; St.12 (Kita-Akikawa Br.) 1969-7-21 ; St.19 (Niitaka Br.) 1969-7-21 ; St.21 (Kowada Br.) 1969-7-21 : R.Asakawa -- St.41 (Takahata Br.) 1964-7-24.

2. *Plumatella* sp.

SUPPLEMENT : TSUDA --- R.Tama -- (St.23), (St.24) 1973-Sept.

PHYLUM PLATYHELMINTHES

CLASS TURBELLARIA

ORDER TRICLADIDA

FAMILY PLANARIIDAE

1. *Dugesia japonica* ICHIKAWA et KAWAKATSU (Fig.118)

(*Dugesia gonocephala* : *Euplanaria gonocephala*)

Loc. & date : R.Kosuge -- St.1, St.3, St.4 (small streams), St.5 (Campground), St.7 (Kawakubo) 1979-8-18 : R.Taba -- St.1 (Ochiai), St.2 (Ichinose), St.4 (Kumakurazawa) 1977-4-26 ; St.5 (a small stream - Kamanosawa), St.6 (Kamanosawa Br.), St.7 (Takahata) 1977-4-25 : R.Nippara -- St.1, St.2 (small streams) 1979-5-9 ; St.6 (Nippara limestone cave - upper stream), St.7 (Uodome Br.) 1979-5-9 ; St.6 (Nippara Lodge) 1975-5-29 ; St.12 (Hosokura Br.) 1979-5-9 ; St.15 (Hiraishi Br.) 1969-7-24 ; St.18 (Shôwa Br.) 1969-7-24, 1975-5-29 : R.Ôtanba -- St.5 (Kitagawa Br.) 1969-7-23 : R.Tama -- St.1 (Shôwa Br.) 1963-8-20, 1969-7-24, 1975-5-29, 1975-8-15 ; St.4 (Mansei Br.) 1969-7-23 ; St.7 (Umezawa Br.) 1963-6-24 ; St.8 (Mitake Br.) 1963-6-24, 1964-5-3, 1969-7-23 ;

St.10 (Yoroi Br.) 1969-7-24, 1975-5-28 ; St.12 (Jindai Br.) 1969-7-23 ;
 St.13 (Wada Br.) 1964-5-3 ; St.16 (Tamagawa Br.) 1969-7-24 ; St.17 (Hamura
 Dam - upper stream) 1969-7-24, 1975-5-28 ; St.18 (Hamura Dam - lower stream)
 1969-7-24, 1970-10-9, 1975-11-11 ; St.21 (Haijima Br.) 1964-5-31, 1970-10
 -9, 1975-11-11 ; St.22 (Tama-Ôhashi Br.) 1969-8-11 ; St.23 (Hino Br.) 1975-
 10-23 : R.Hirai -- St.2 (Tasai Br.) 1965-7-31, 1971-12-6, 1972-8-16, 1975-
 8-15, 1975-11-11 : R.Akikawa -- St.3 (Kazuma) 1969-7-22 ; St.4 (Henbori)
 1969-7-21 ; St.5 (Minami-Akikawa Br.), St.6 (Kasuga Br.), St.10 (Ozawa),
 St.13 (Wada Br.), St.14 (Ozu Br.), St.16 (Gundô), St.18 (Hoshitake Br.),
 St.19 (Niitaka Br.), St.21 (Kowada Br.) 1969-7-21 ; St.22 (Akikawa Br.)
 1965-7-30, 1969-7-21 ; St.23 (Ajiro Br.) 1969-7-23, 1971-12-6, 1975-5-28 ;
 St.24 (Akiru Br.) 1969-7-23 ; St.26 (Takatsuki Br.) 1969-7-23, 1971-12-6,
 1972-8-16, 1975-8-14, 1975-11-11 : R.Asakawa -- St.3, St.6 (small streams)
 1979-3-12 ; St.14 (a small stream), St.15 (R.Ozu - Iriyama) 1978-11-20 ;
 St.17 (R.Daigo), St.18 (Ninikuzawa), St.19 (R.Ange), St.20 (a small stream),
 St.21 (Kawaino), St.22 (Kitsunozuka) 1978-11-21 ; St.25 (Kakuei Br.) 1979-
 3-13 ; St.26 (Higashi-Yamashita Br.), St.28 (Takaosan-guchi) 1969-7-22 ;
 St.29 (Kamikunugida Br.) 1960-7-20, 1969-7-22 ; St.31 (Hikage Br.) 1976-10-
 28, 1976-12-7 ; St.32 (Kogezawa junction) 1976-9-25 ; St.33 (Surisashi)
 1975-5-28, 1975-8-14, 1975-10-24, 1976-7-16, 1976-11-15 ; St.34 (Jadaki-
 guchi) 1969-7-22, 1976-8-5 ; St.35 (Shikishima Br.) 1964-7-24, 1972-8-17 ;
 St.38 (Asakawa Br.) 1975-10-24.

SUPPLEMENT : (Dates are omitted.) IDE --- R.Nippara -- (St.18) : R.Tama --
 (St.1), (St.2), (St.10), (St.15), (St.21) : R.Ôtanba -- (St.5) : R.Hirai --
 (St.2) : R.Akikawa -- (St.18), (St.26) : R.Asakawa -- (St.35) : METOC ---
 R.Taba -- (St.7) : R.Kukizawa -- (St.B) : R.Tama -- (St.D), (St.1), (St.4),
 (St.15), (St.17) : R.Nippara -- (St.18) : R.Irikawa -- (St.1) : R.Ôtanba --
 (St.6) : R.Ôsawa -- (St.M) : TMG-BEP --- R.Hirai -- (St.2) : R.Akikawa --
 (St.26) : R.Asakawa -- (St.P) : TSUDA --- R.Tama -- (St.1), (St.3), (St.15)
 : HISAI --- R.Asakawa -- (St.28).

2. *Dugesia* sp.

SUPPLEMENT : (Dates are omitted.) IIMURA --- R.Nippara -- (St.18) : R.Tama
 -- (St.1), (St.5), (St.14), (St.16), (St.21).

3. *Phagocata* sp.

SUPPLEMENT : IDE --- R.Tama -- (St.21) 1974-10-21.

PLANARIIDAE Gen. et sp. indet.

SUPPLEMENT : (Dates are omitted.) IIMURA --- R.Akikawa -- (St.1), (St.0),
(St.11), (St.13), (St.20), (St.26).

PHYLUM COELENTERATA
CLASS HYDROZOA
ORDER HYDROIDA
FAMILY HYDRIDAE

1. *Hydra* sp.

Loc. & date : R.Kosuge -- St.1 (a small stream) 1979-8-18 : R.Tama -- St.24
(Sekido Br.) 1963-7-1, 1964-5-26, 1975-8-13 ; St.30 (Tama-Suidô Br.) 1963-
7-1 : R.Asakawa -- St.25 (Kakuei Br.) 1979-3-13 ; St.33 (Surisashi) 1976-7-
16, 1976-11-15 ; St.35 (Shikishima Br.) 1969-7-22.

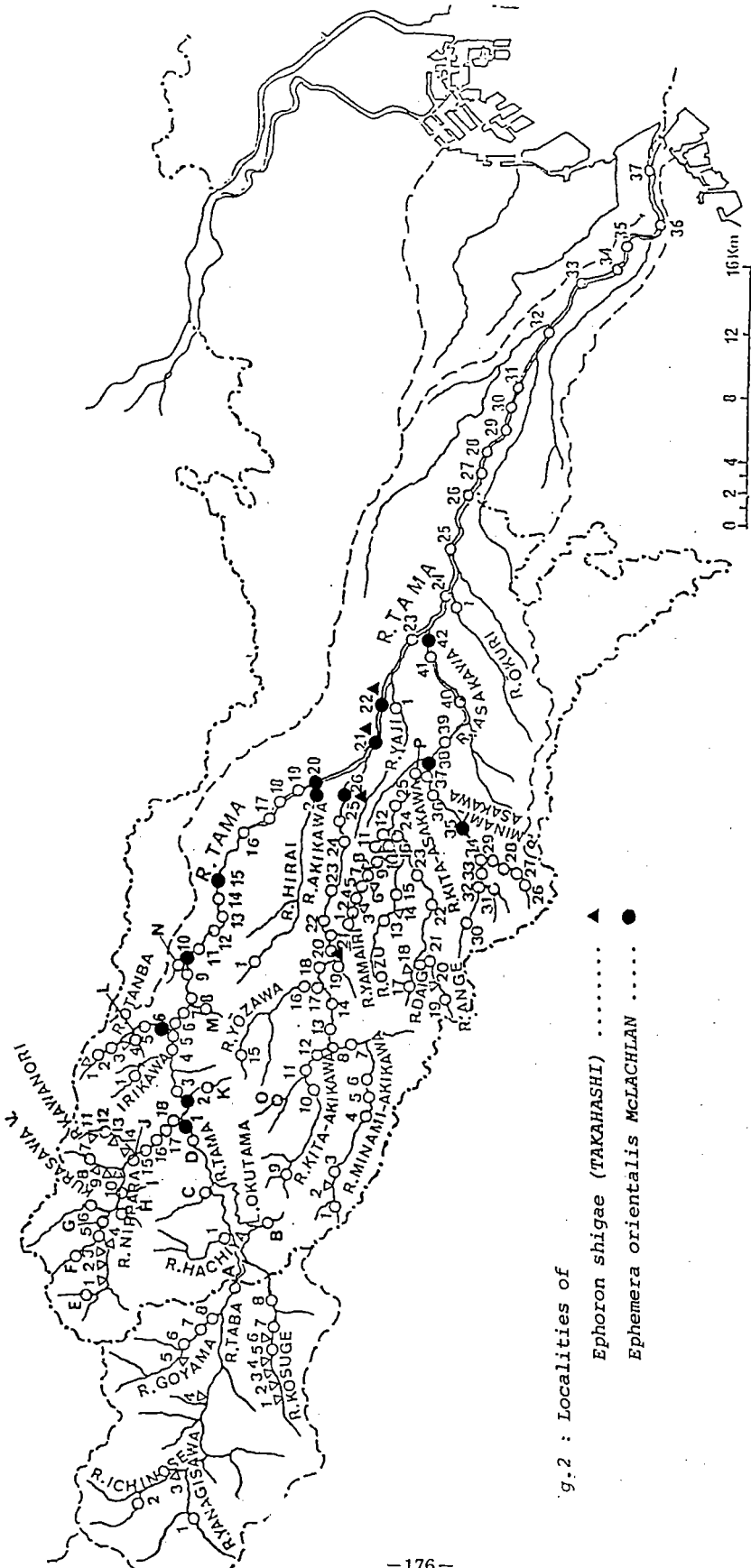
PHYLUM PORIFERA
CLASS DEMOSPONGIAE
ORDER HAPLOSCLERINA
FAMILY SPONGILLIDAE

1. *Ephydatia* sp.

(Fig.119)

Loc. & date : R.Tama -- St.30 (Tama-Suidô Br.) 1963-7-1.

採集地点图



g.2 : Localities of

- Ephoron shigae (TAKAHASHI) ▲
- Ephemera orientalis McLACHLAN ●

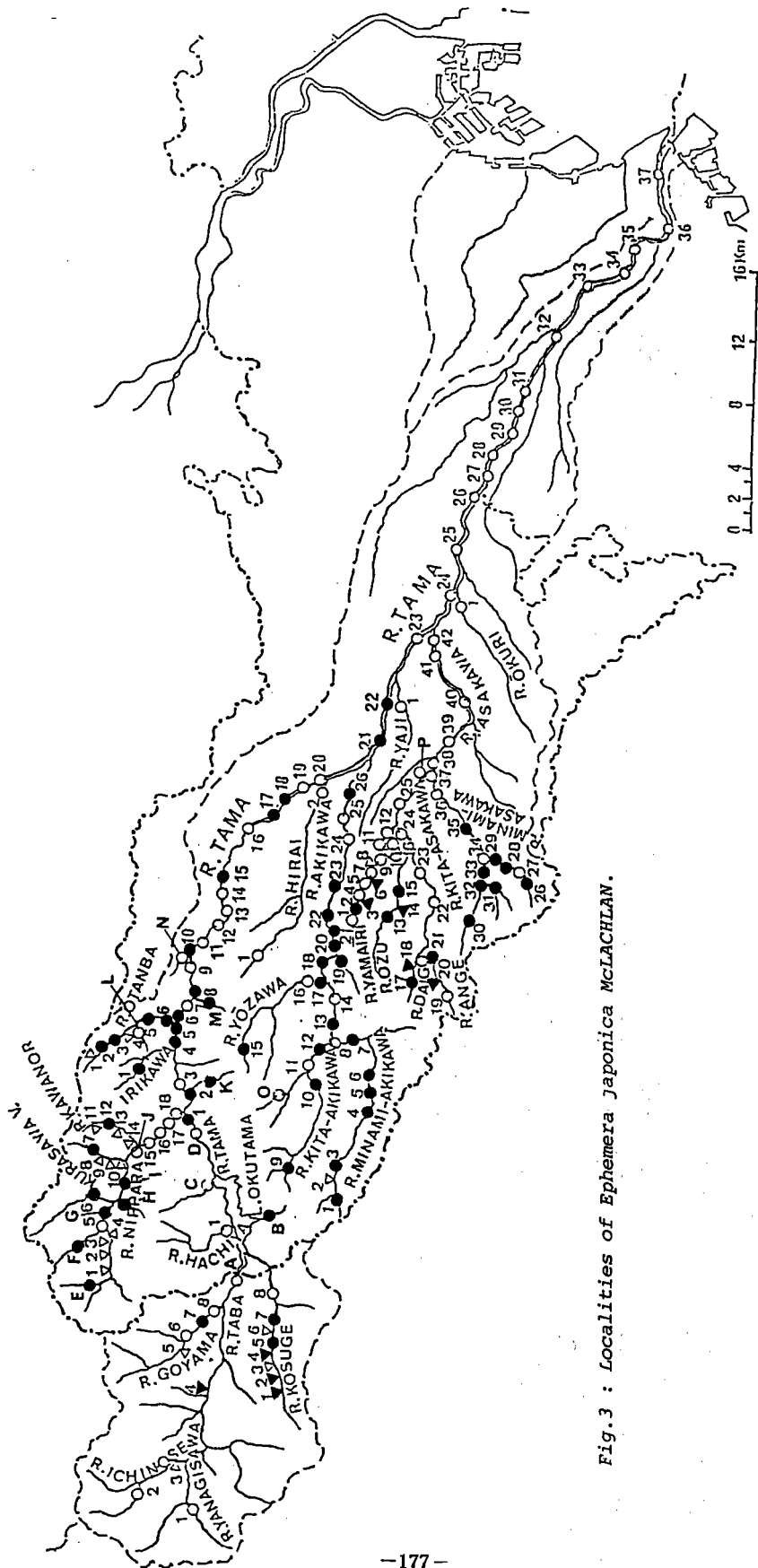


Fig. 3 : Localities of *Ephemera japonica* McLACHLAN.

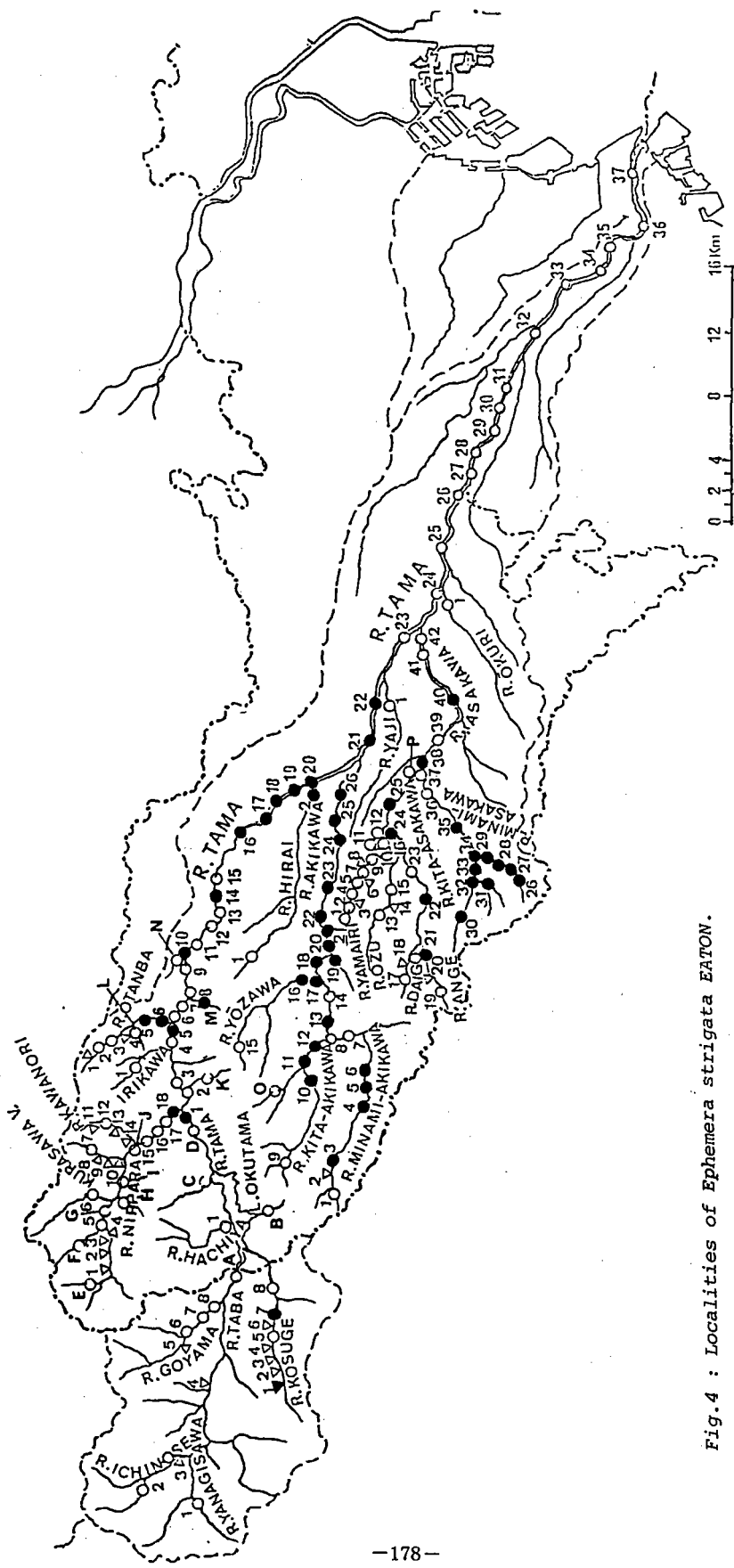


Fig. 4 : Localities of *Ephemera strigata* Eaton.

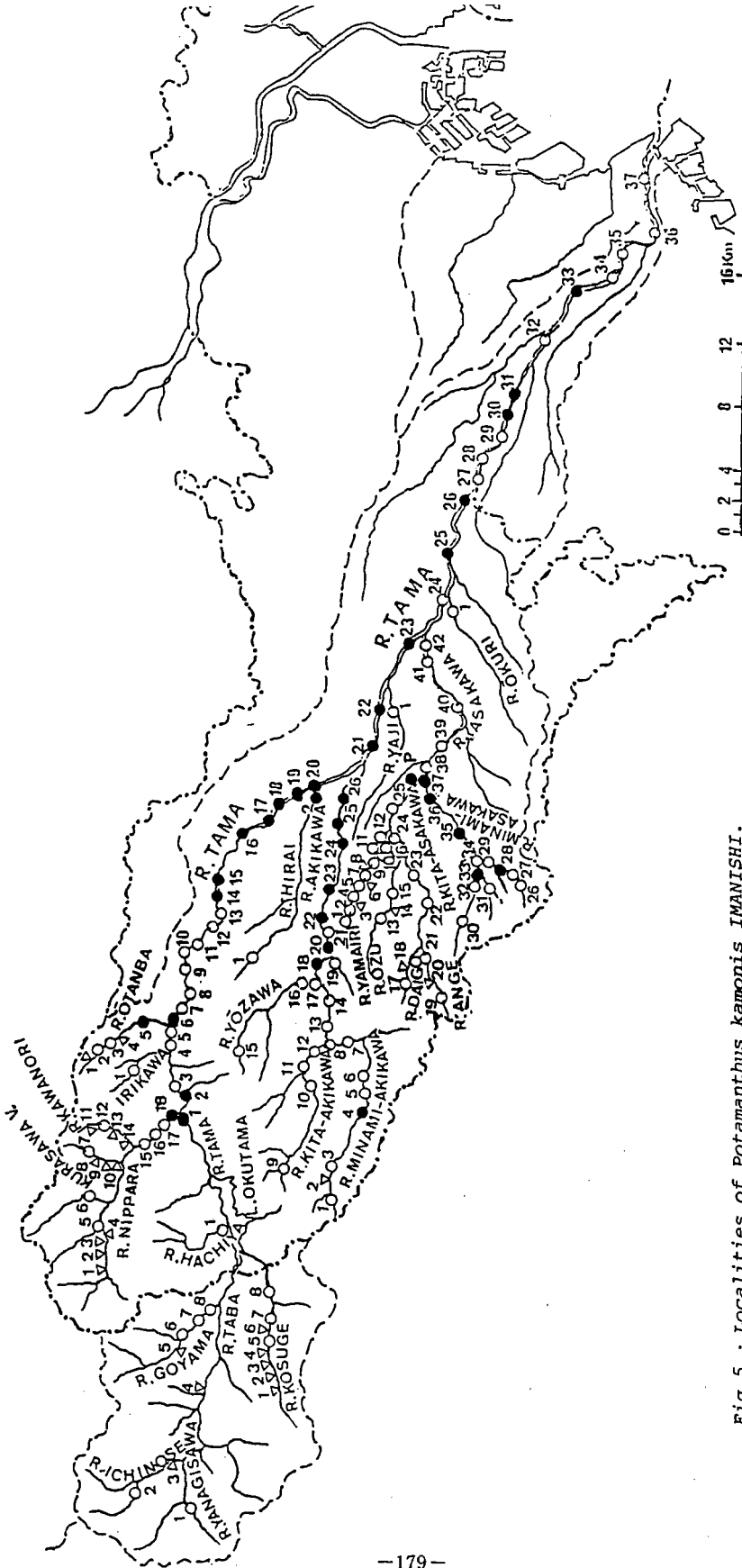


Fig. 5 : Localities of *Potamanthus kamoni* IMANISHI.

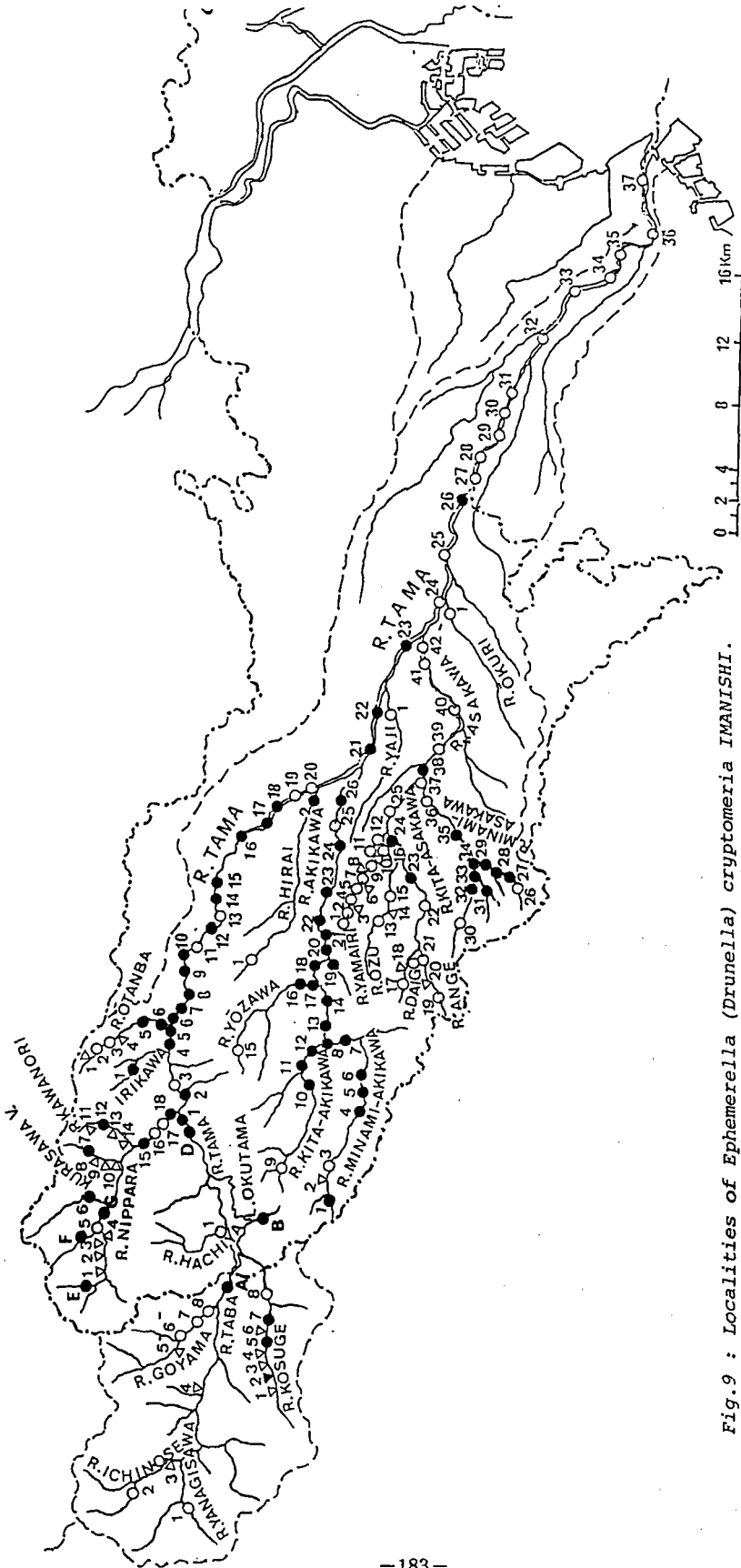


Fig.9 : Localities of *Ephemerella (Drunella) cryptomeria* IMANISHI.

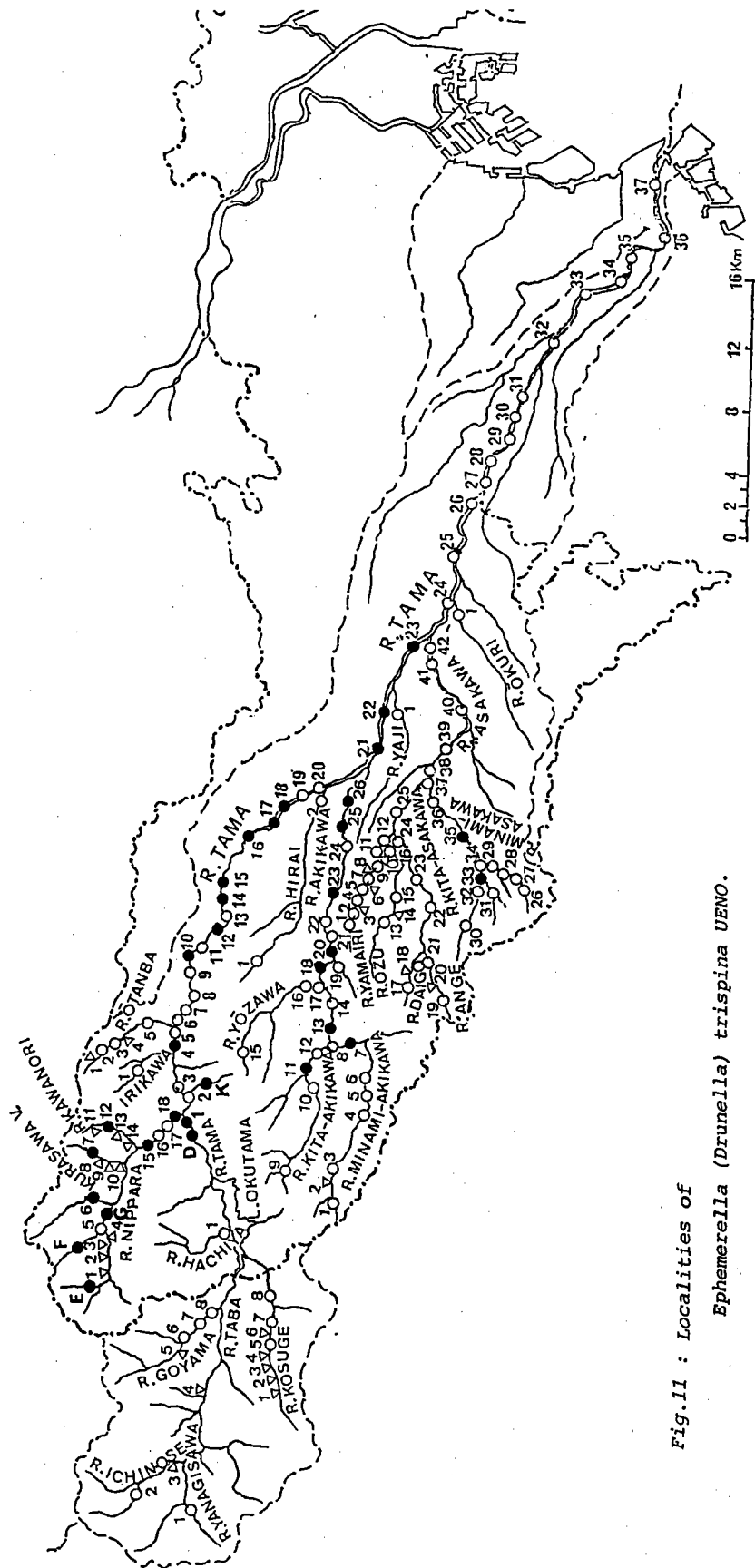


Fig.11 : Localities of *Ephemera (Drunella) trispina* UENO.

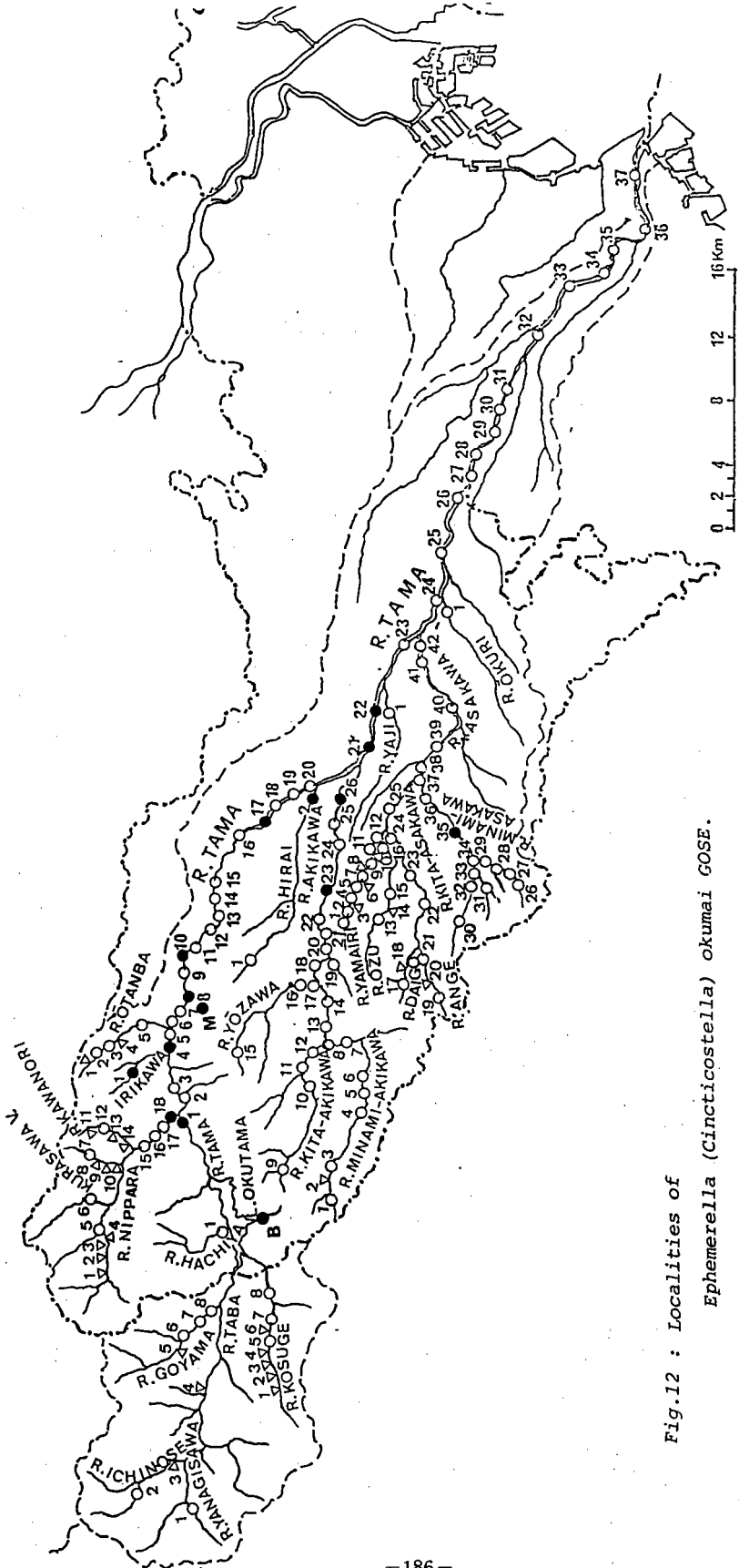


Fig.12 : Localities of
Ephemerella (Cincticostella) okumai GOSE.

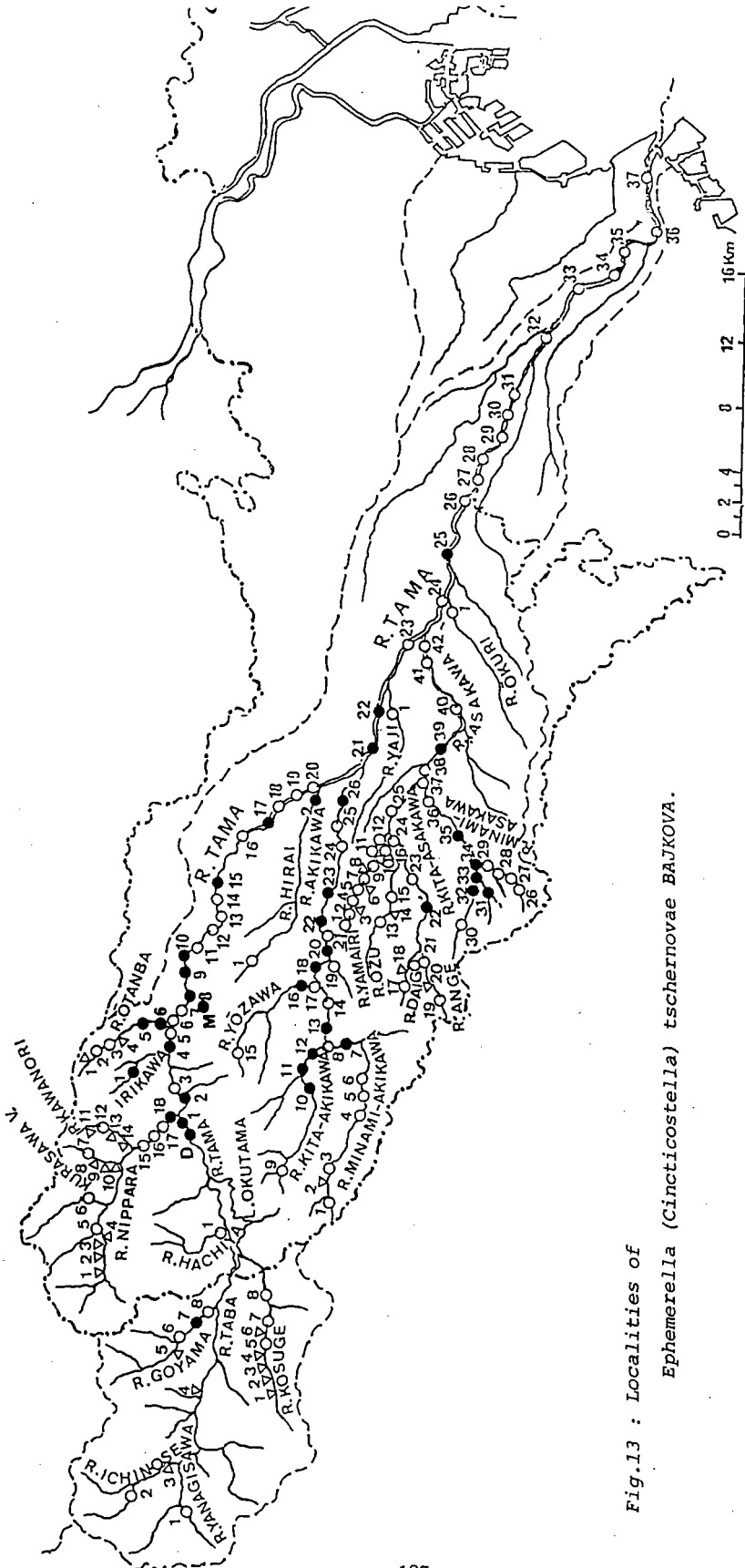


Fig.13 : Localities of
Ephemerella (Cincticostella) tschernovae BAJKOVA.

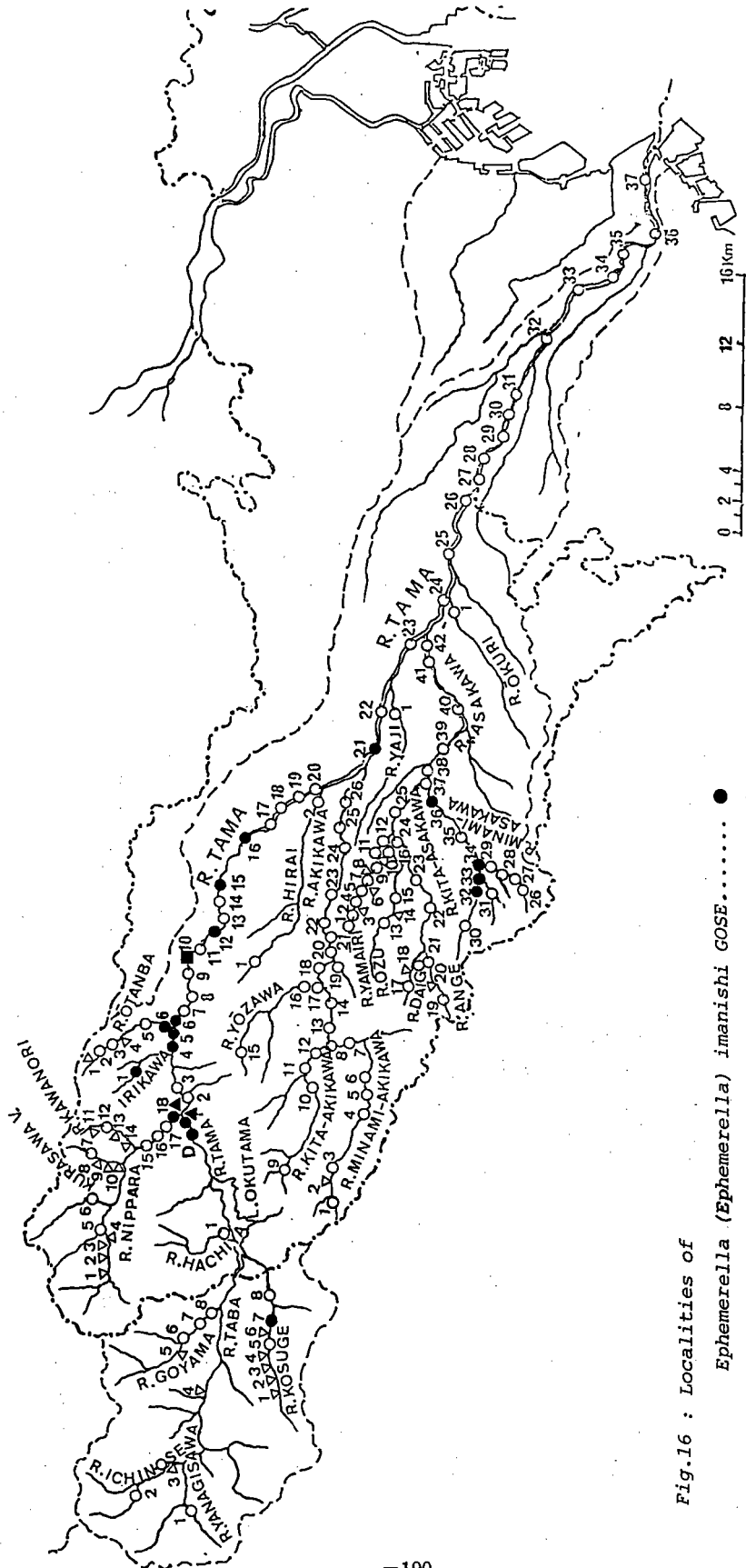


Fig.16 : Localities of

- Ephemerella (*Ephemerella*) *imanishi* GOSE..... ●
- Ephemerella (*Acerella*) *longicaudata* UENO ▲
- Ephemerella (*Ephemerella*) *cornutus* GOSE ■

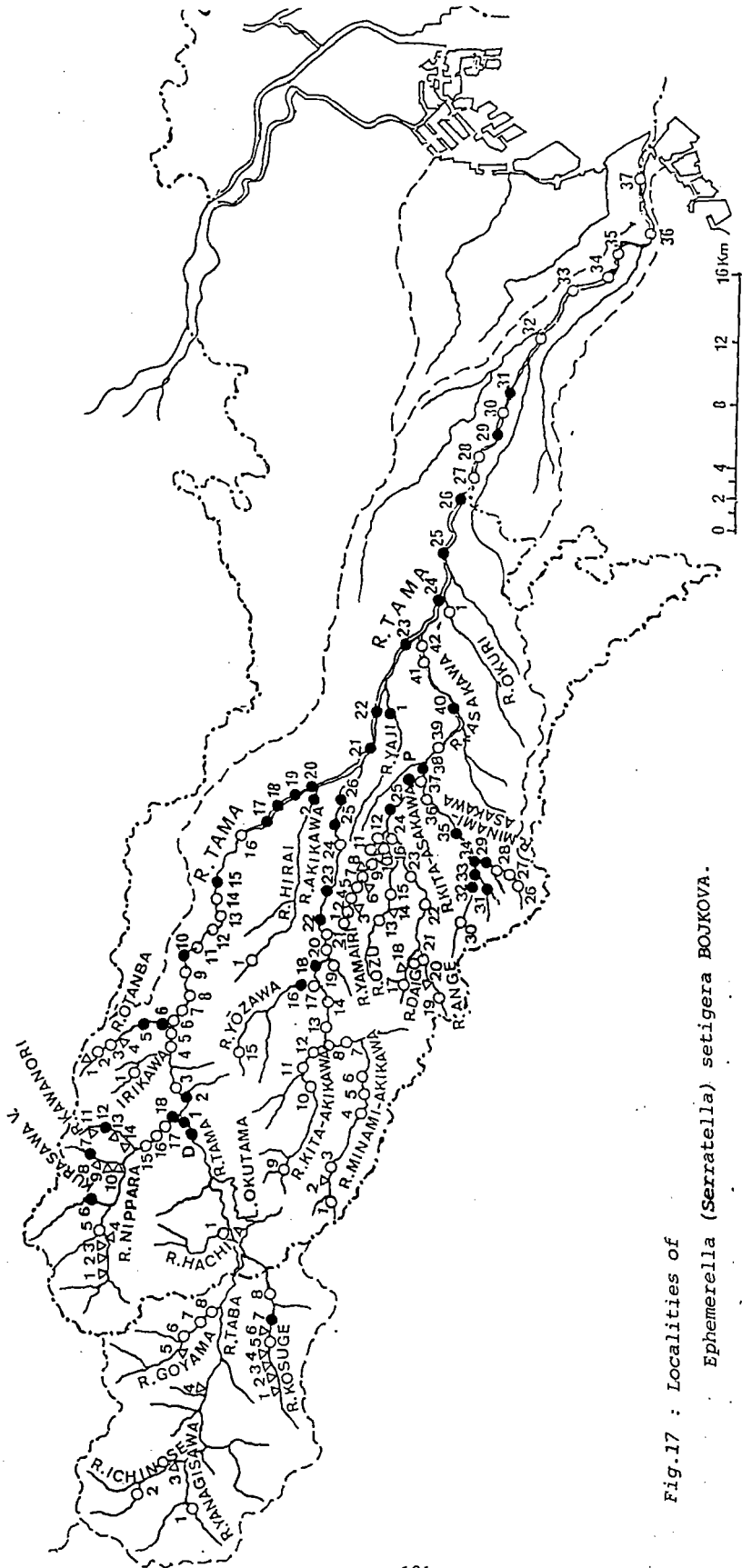


Fig.17 : Localities of
Ephemerella (Serratella) setigera BOJKOVA.

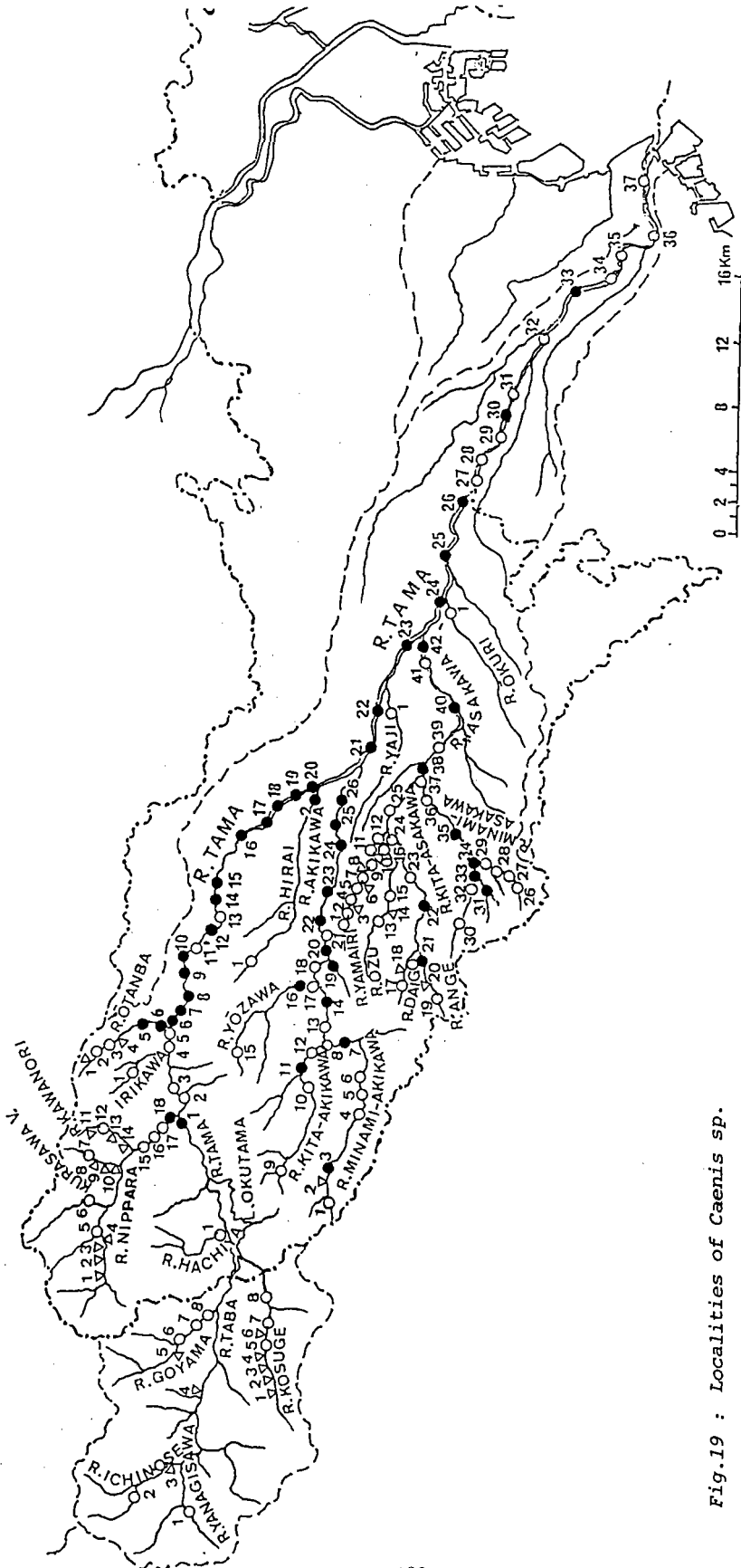


Fig.19 : Localities of *Caenis* sp.

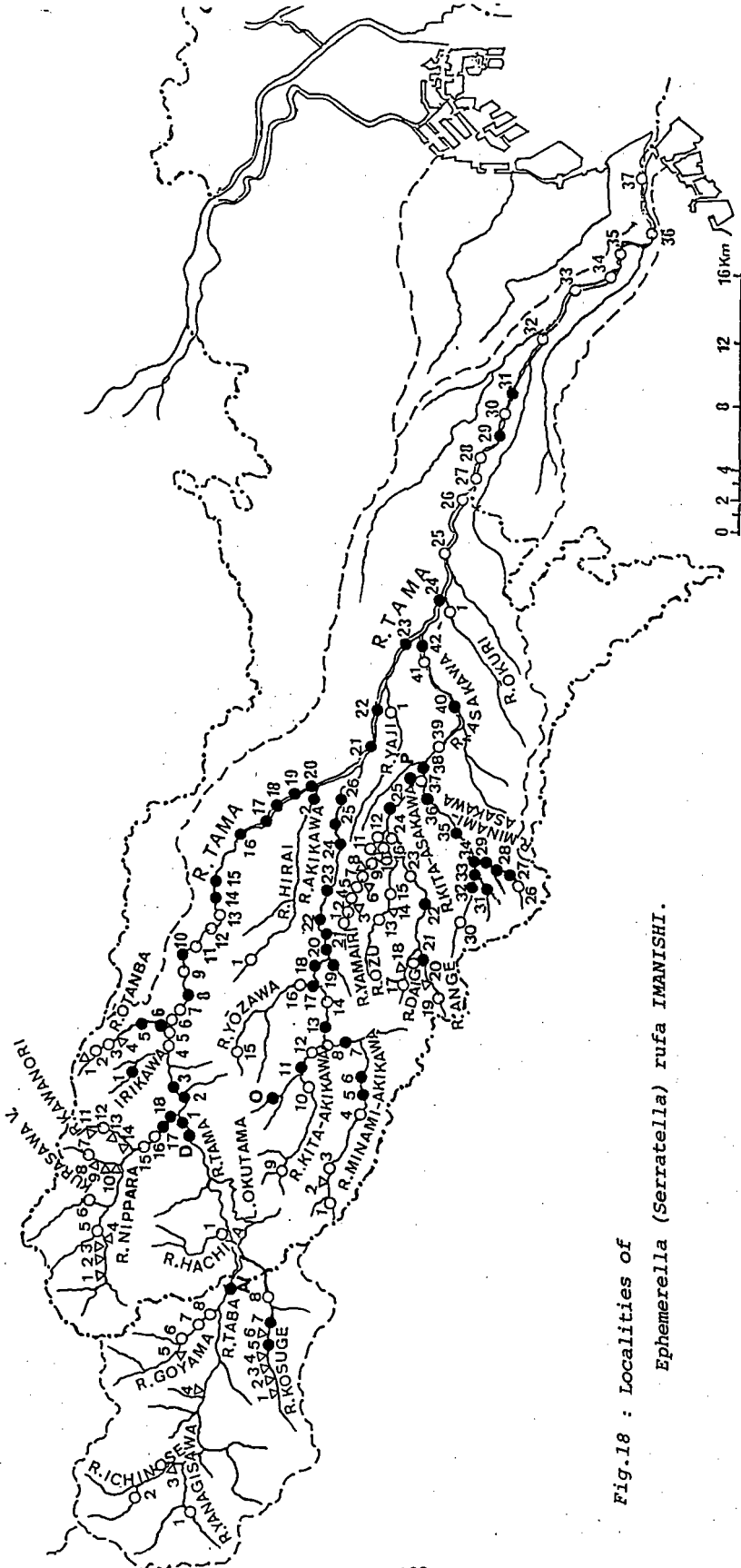


Fig.18 : Localities of *Ephemerella (Serratella) rufa* IMANISHI.

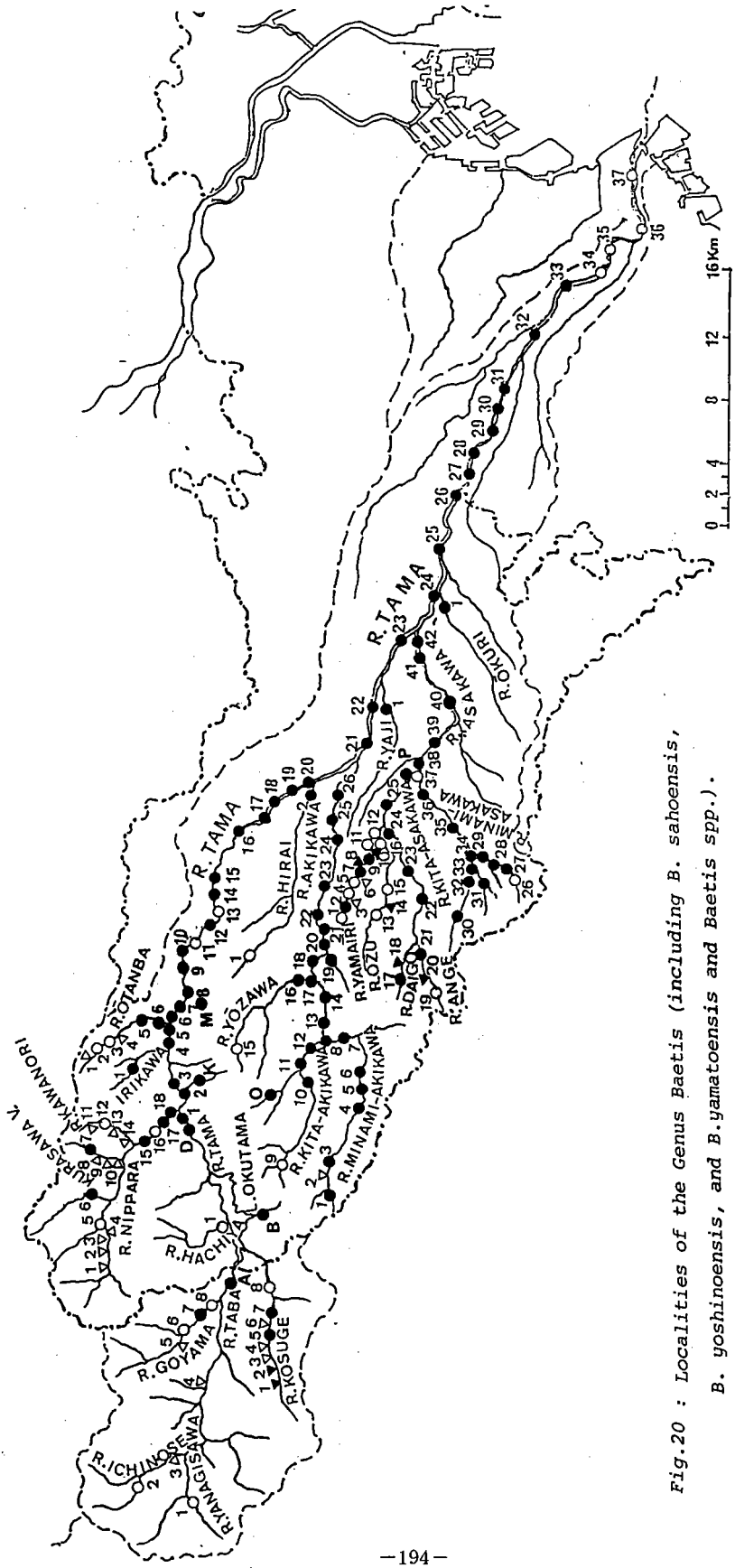


Fig.20 : Localities of the Genus *Baetis* (including *B. sahoensis*, *B. yoshinoensis*, and *B. yamatoensis* and *Baetis* spp.).

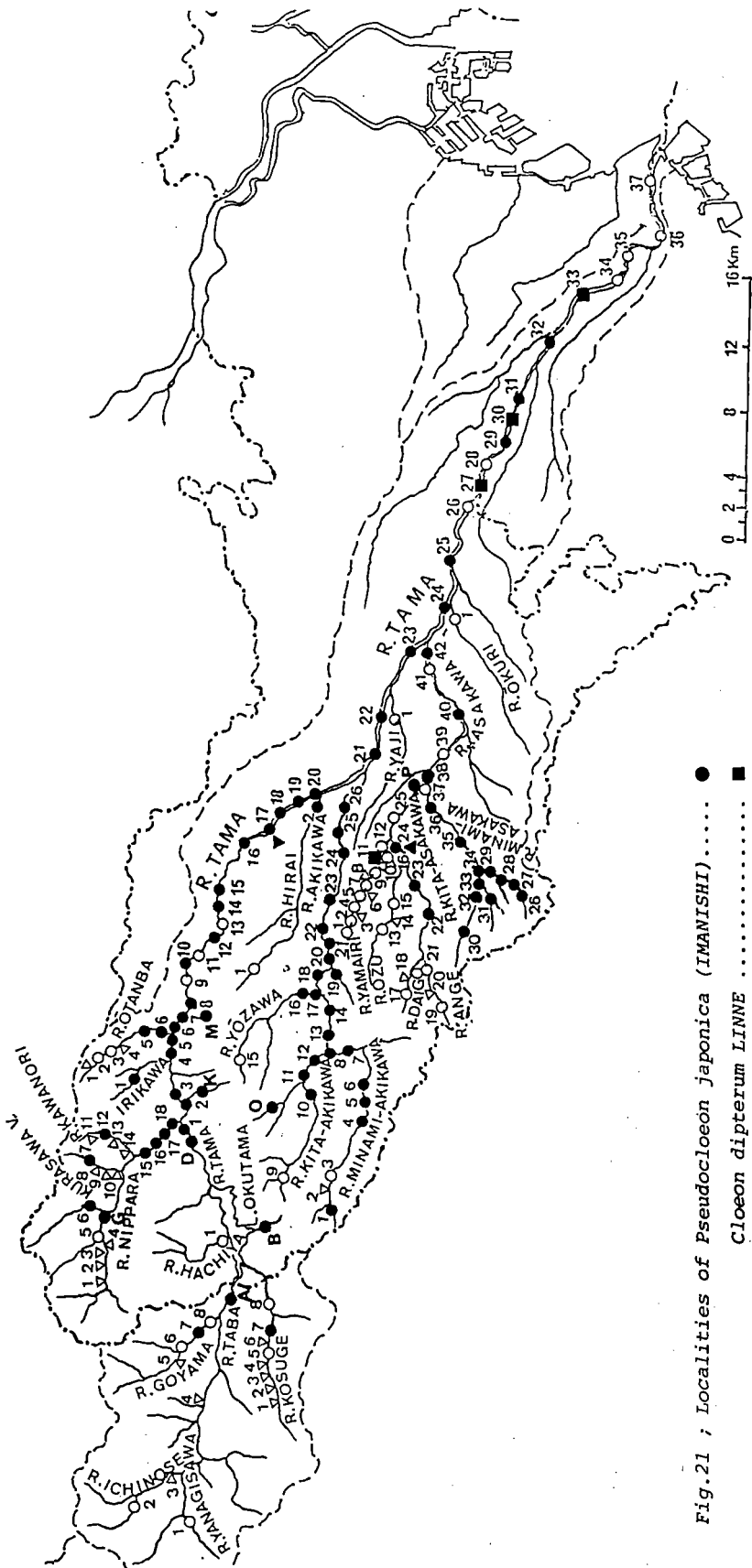


Fig.21 ; Localities of *Pseudocloeon japonica* (IMANISHI) ●
Cioeon dipterum LINNE ■
Siphonurus sanukensis TAKAHASHI ▲
Siphonurus sp. ▼

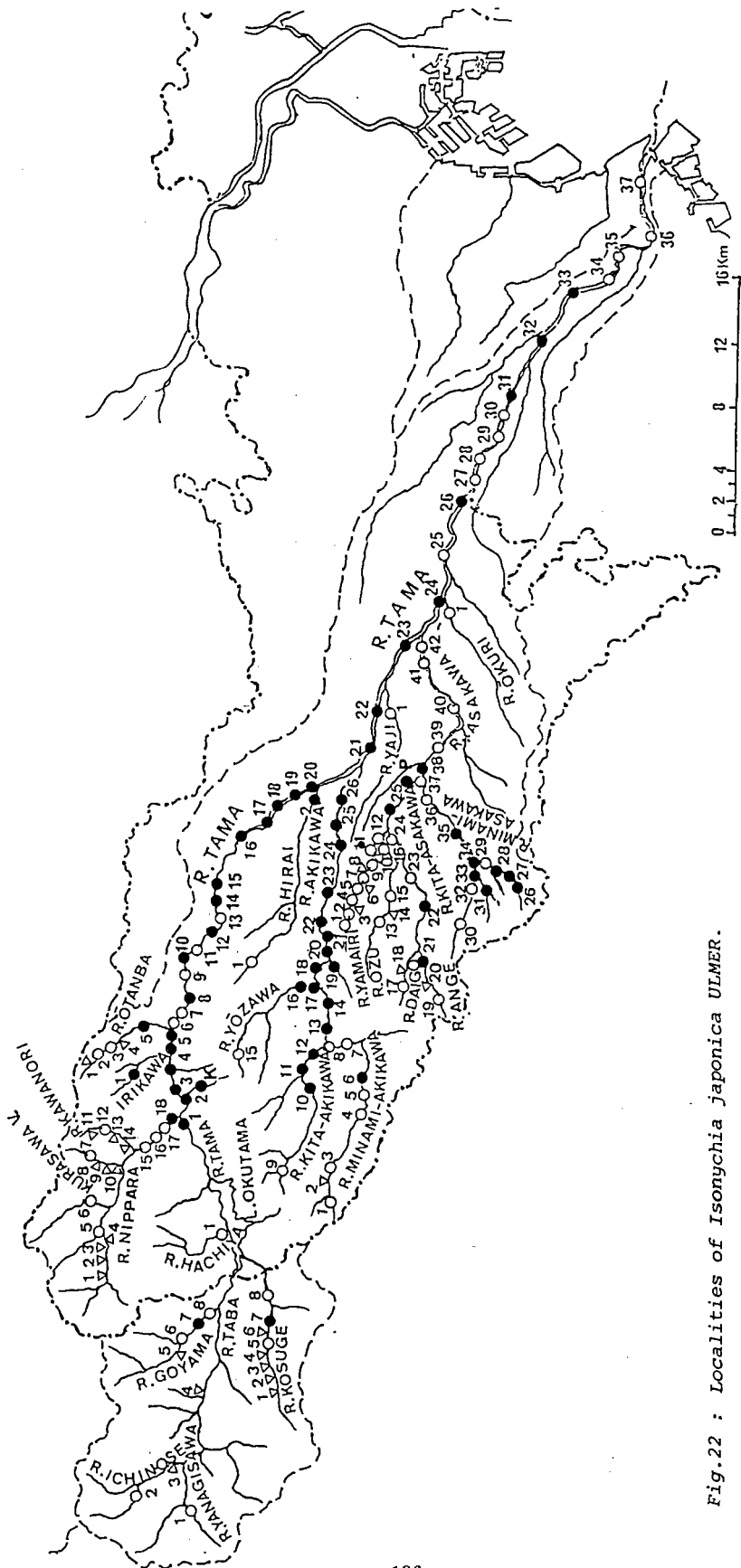


Fig.22 : Localities of *Isonychia japonica* ULMER.

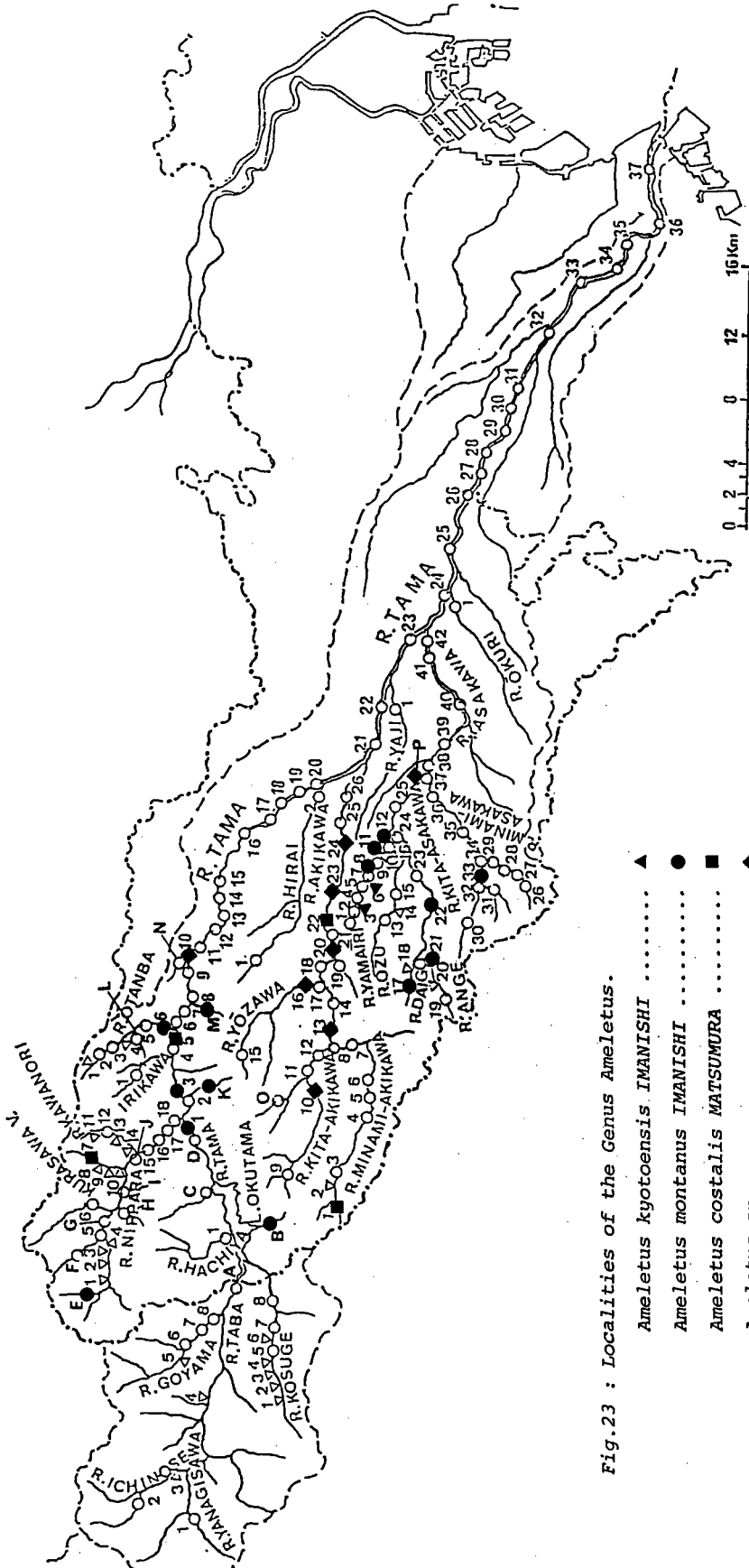


Fig.23 : Localities of the Genus Ameletus.

- Ameletus kyotoensis IMANISHI ▲
- Ameletus montanus IMANISHI ●
- Ameletus costalis MATSUMURA ■
- Ameletus sp. ◆

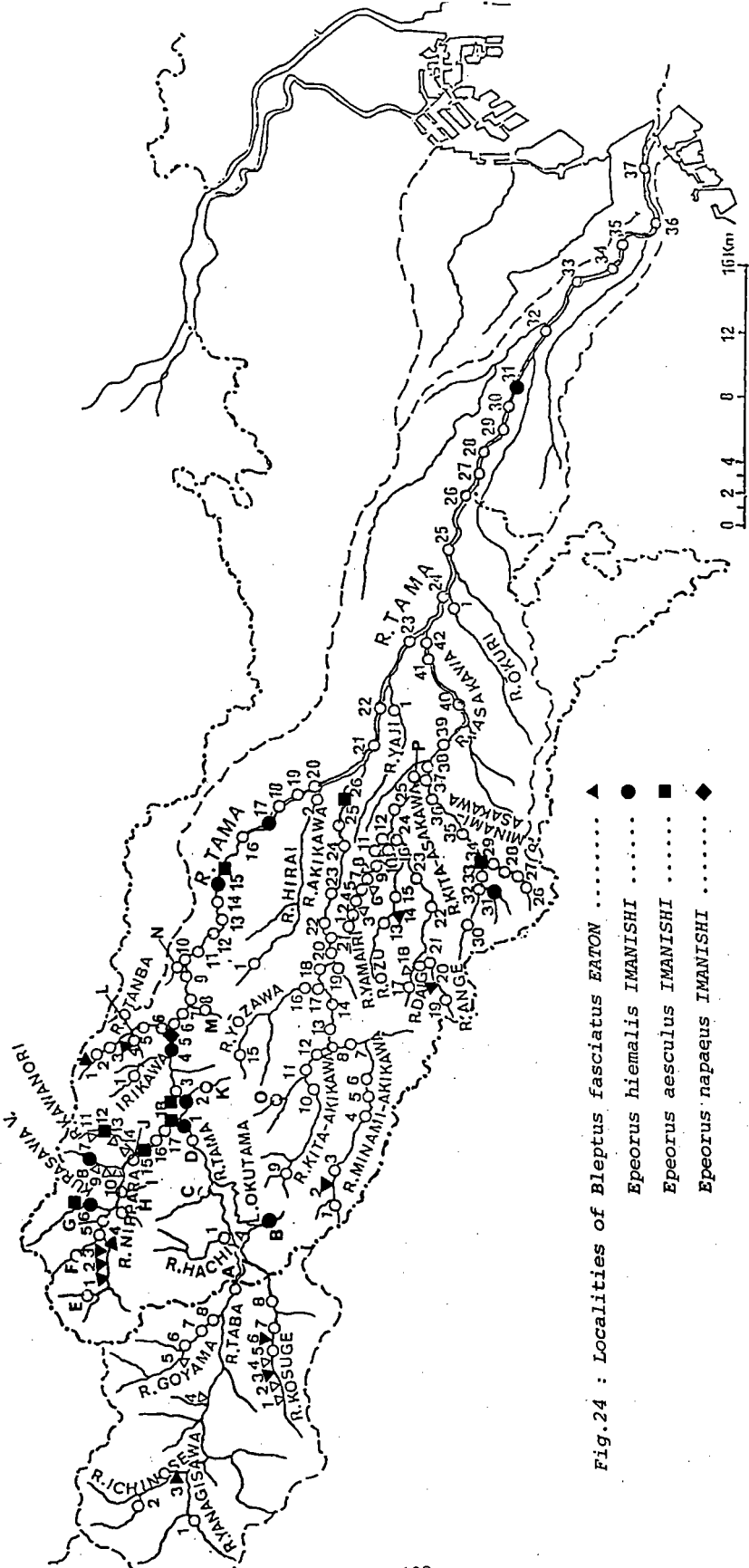


Fig.24 : Localities of *Bleptus fasciatus* Eaton ▲
Epeorus hiemalis Imanishi ●
Epeorus aesculus Imanishi ■
Epeorus napaeus Imanishi ◆

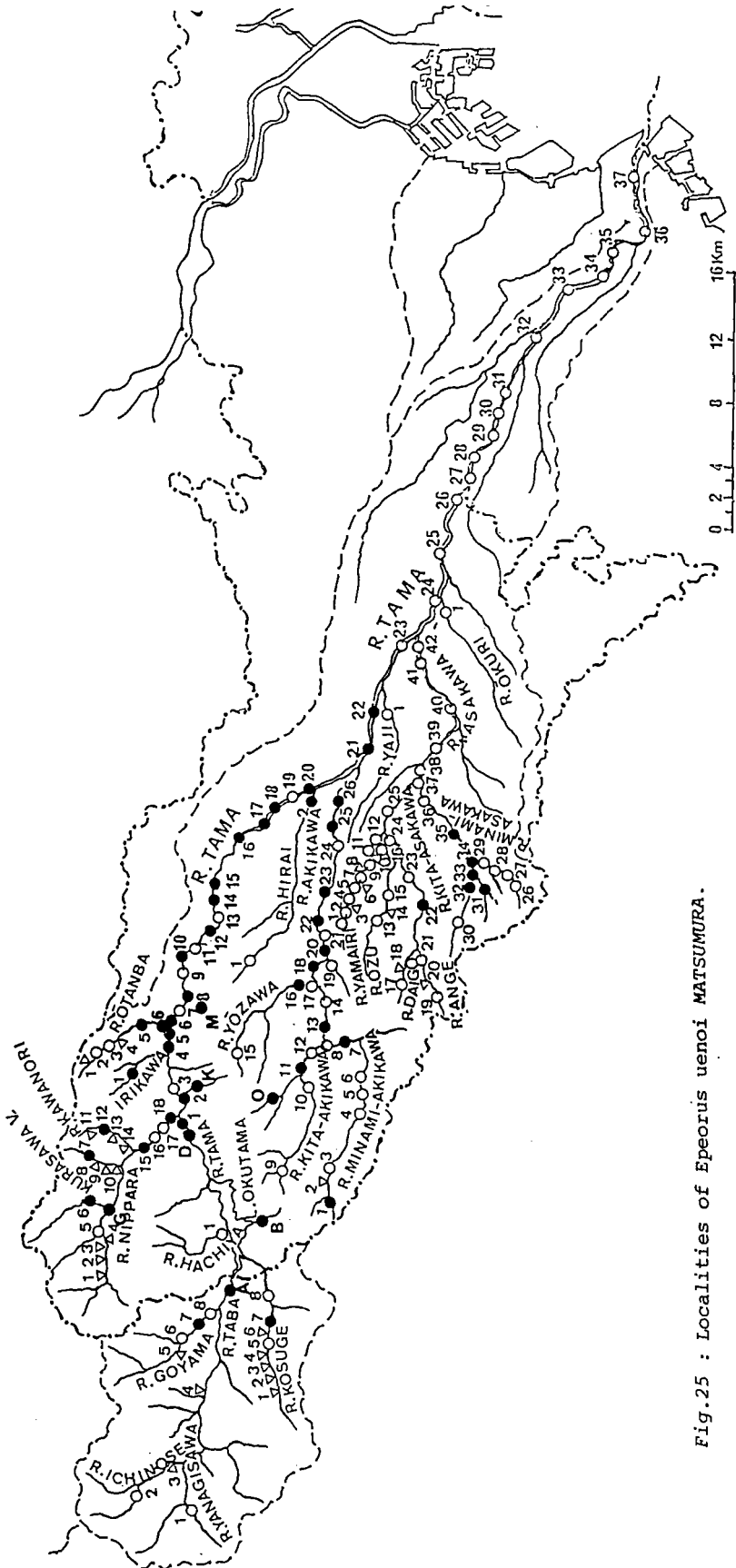


Fig.25 : Localities of *Epeorus uenoi* MATSUMURA.

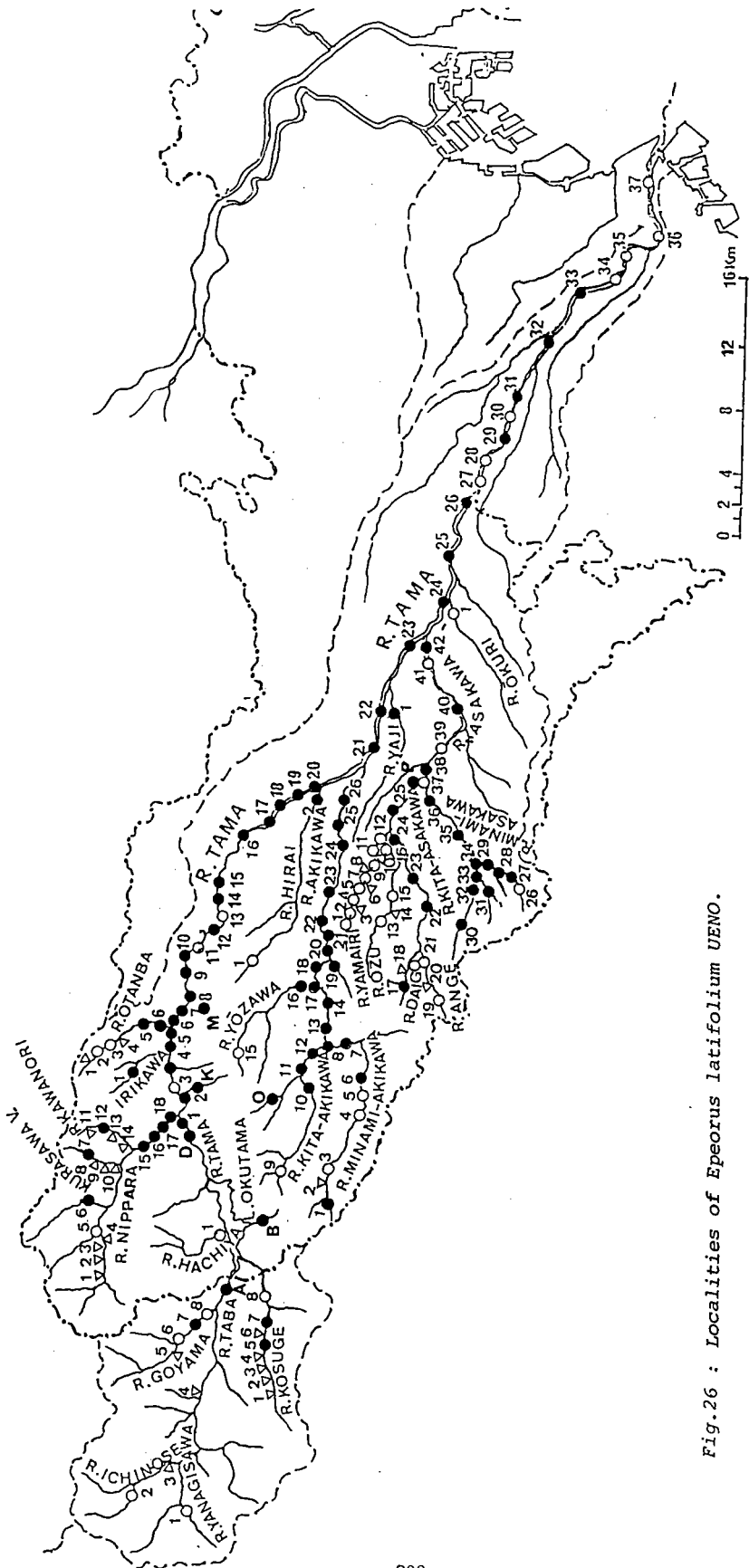


Fig.26 : Localities of *Epeorus latifolium* UENO.

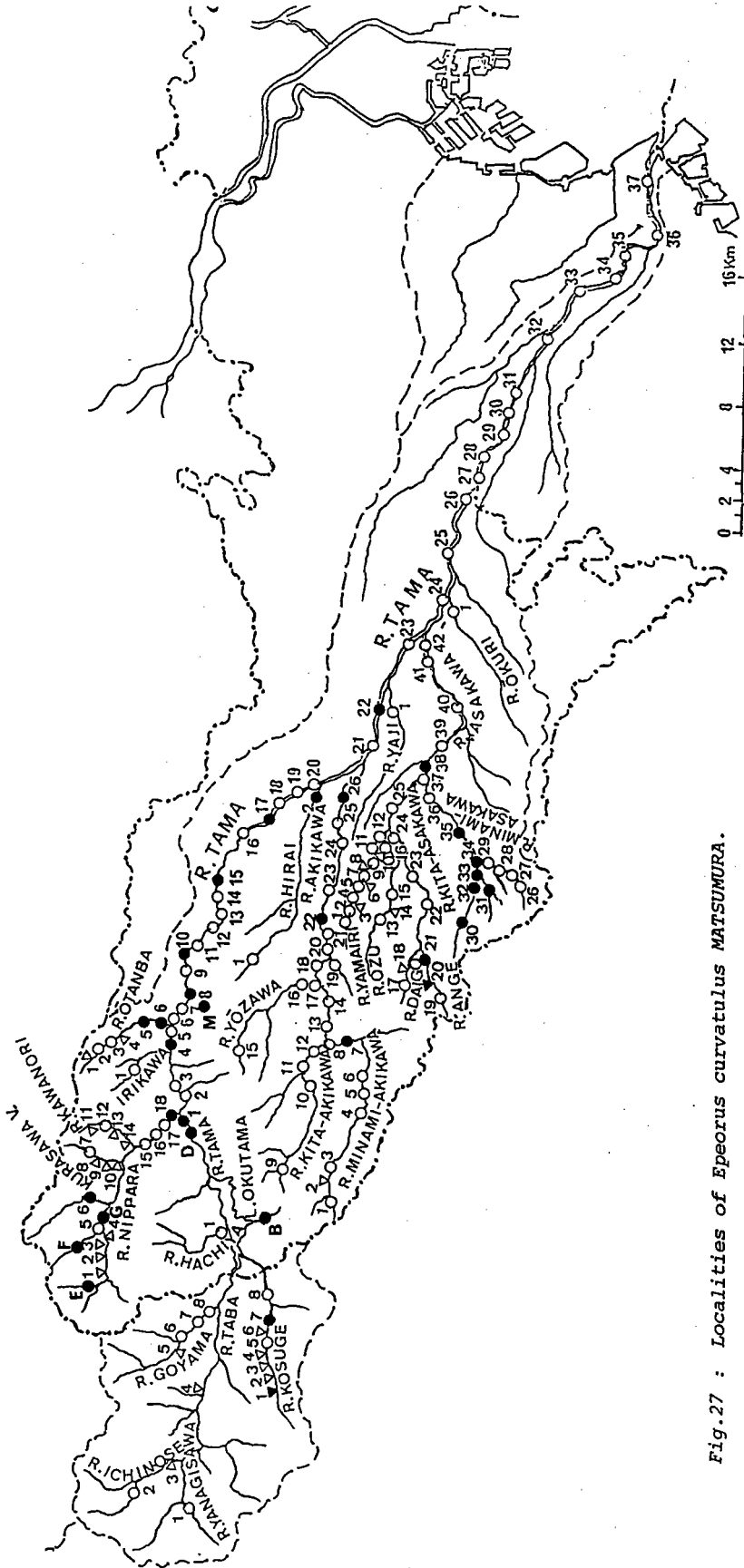


Fig.27 : Localities of *Epeorus curvatus matsumura*.

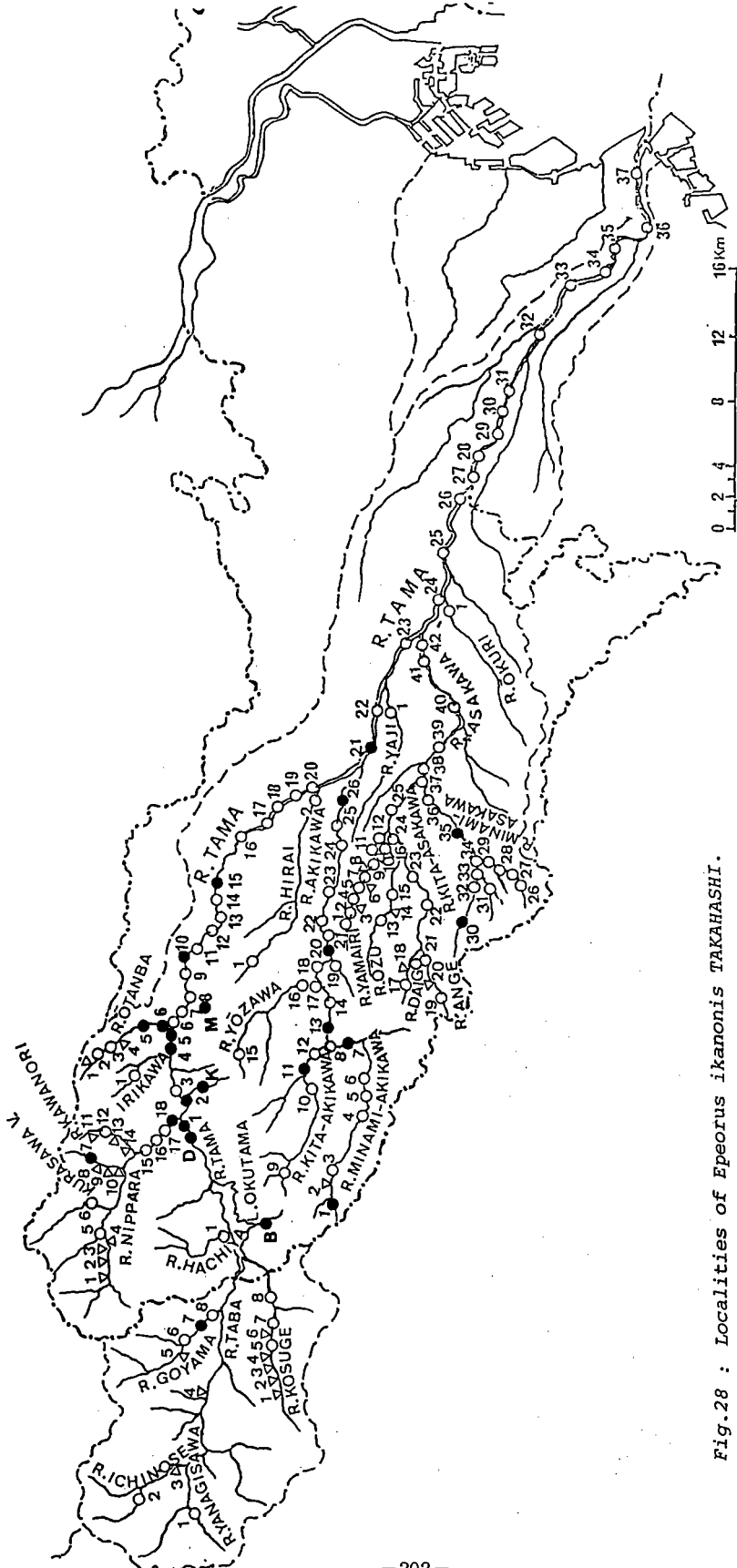


Fig. 28 : Localities of *Epeurus ikononis* TAKAHASHI.

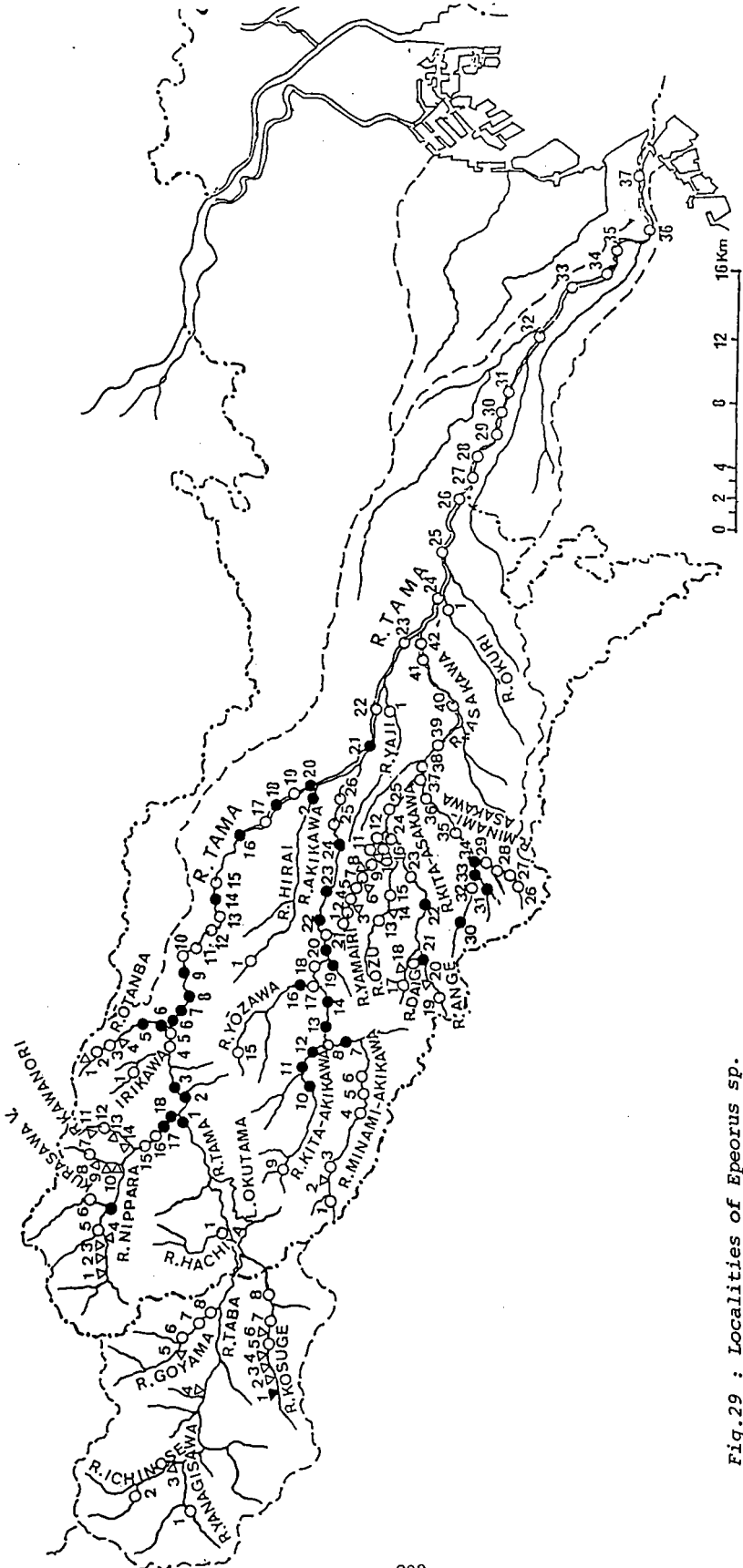


Fig.29 : Localities of *Epeorus sp.*

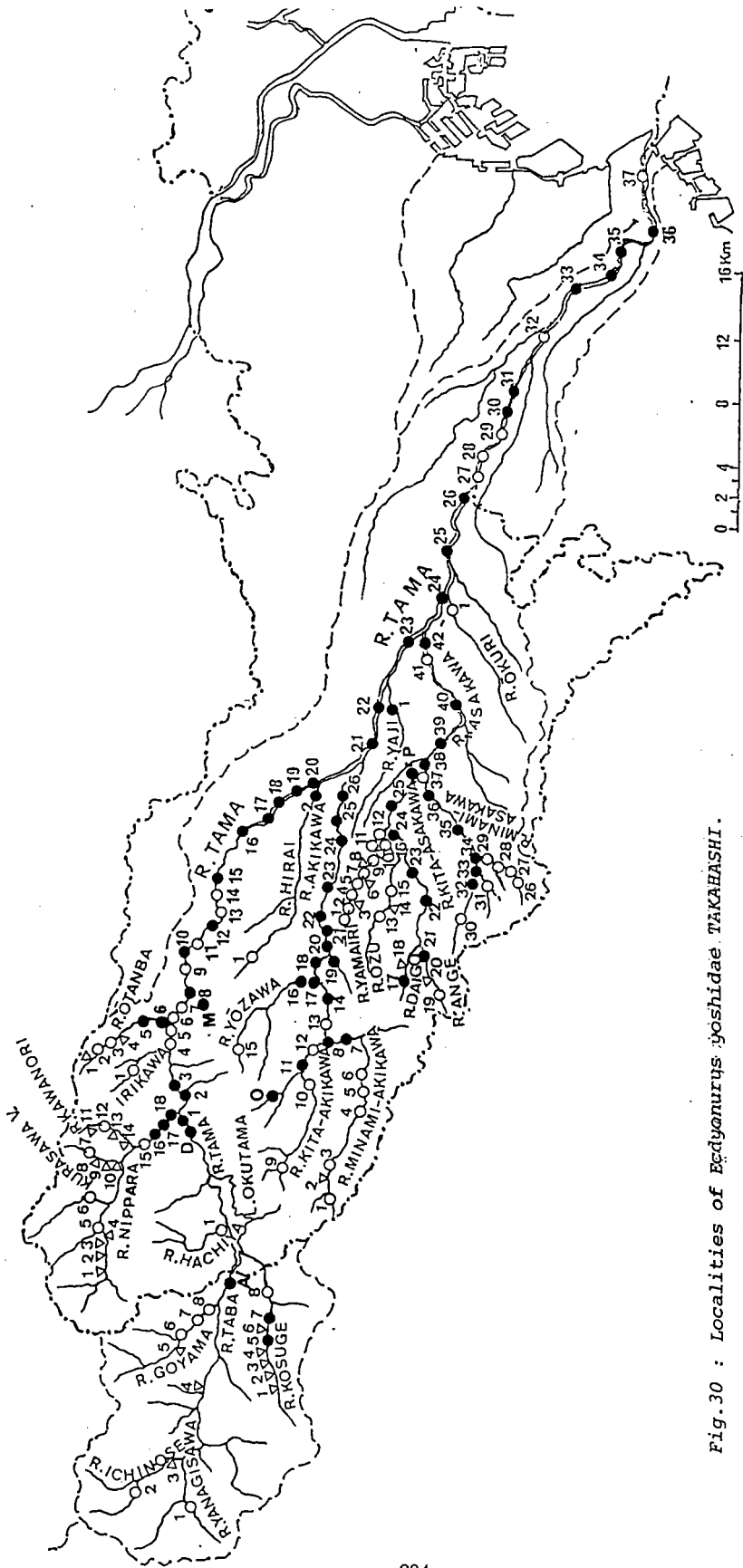


Fig. 30 : Localities of *Ecdyonurus yoshidae* TAKAHASHI.

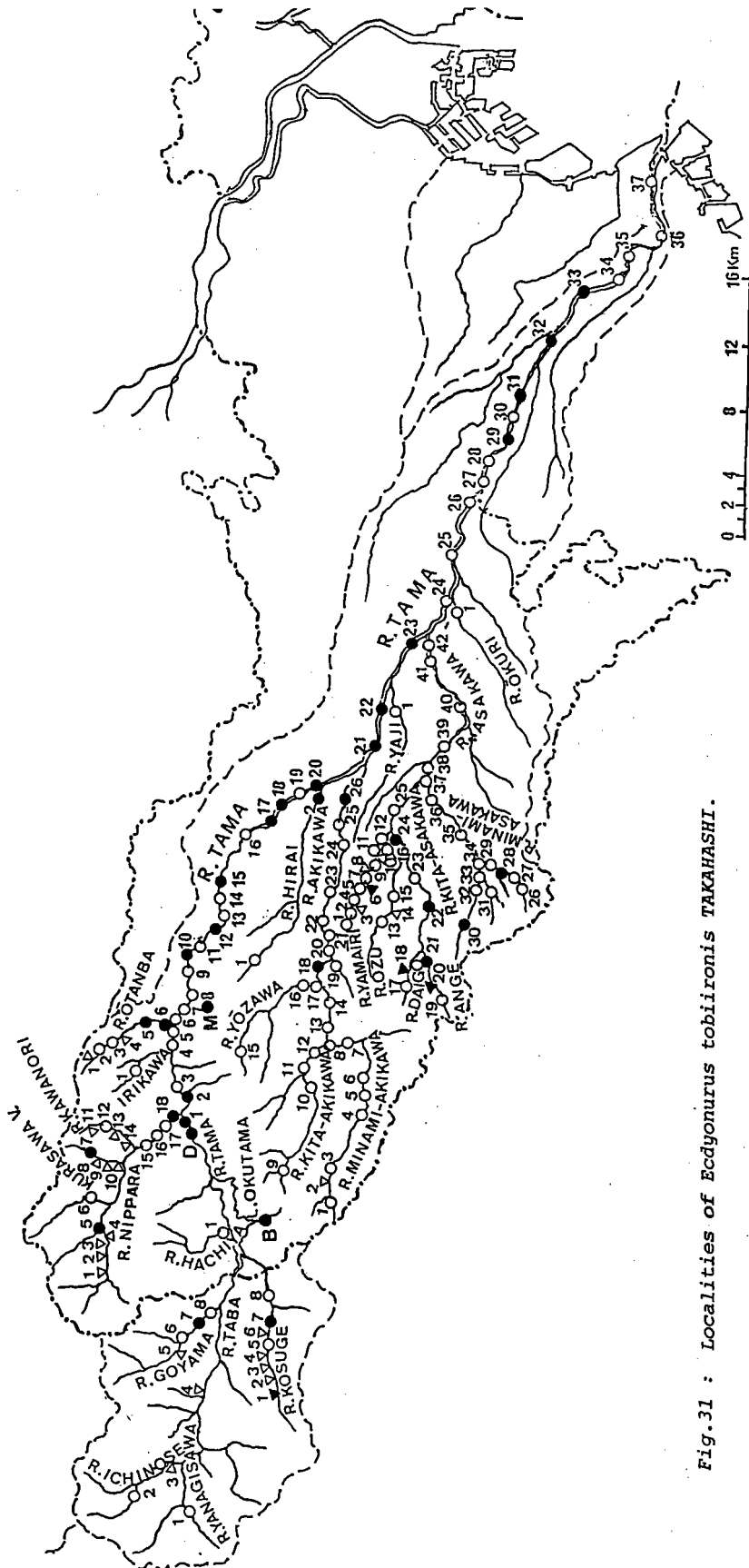


Fig.31 : Localities of *Ecdyonurus tobiironis* TAKAHASHI.

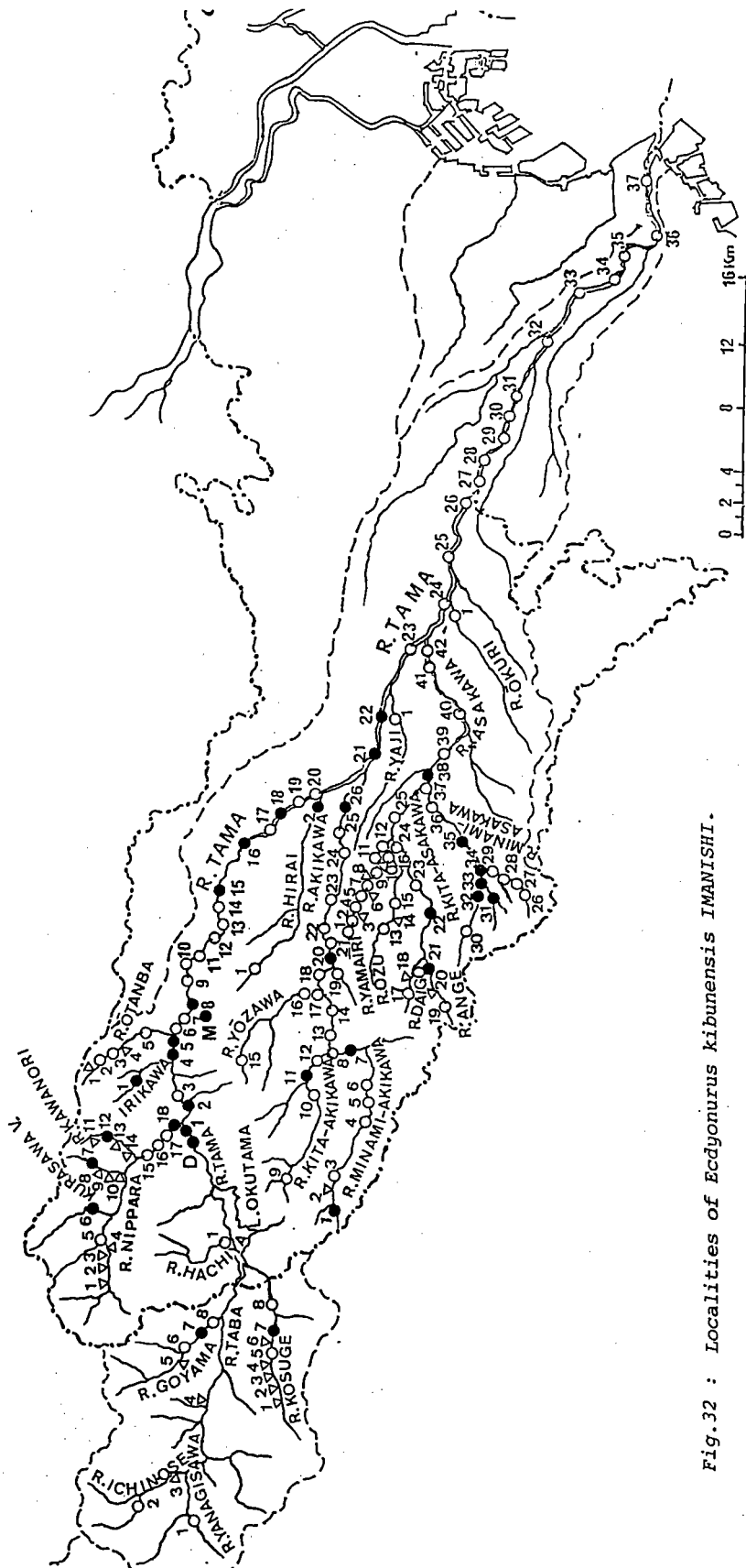


Fig.32 : Localities of *Ecdyonurus kibunensis* IMANISHI.

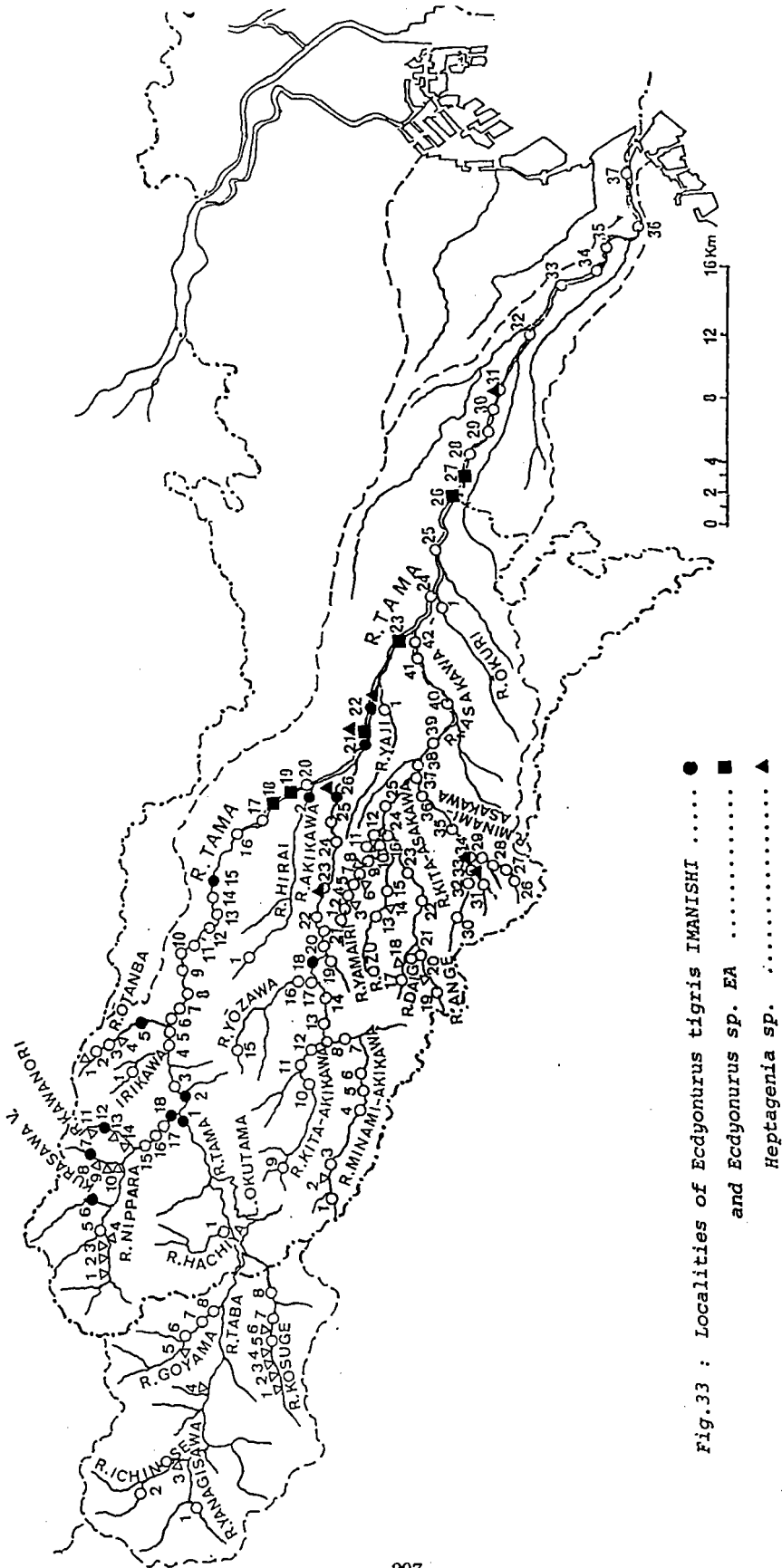


Fig.33 : Localities of *Ecdyonurus tigris* IMANISHI ●
 and *Ecdyonurus* sp. EA ■
Heptagenia sp. ▲

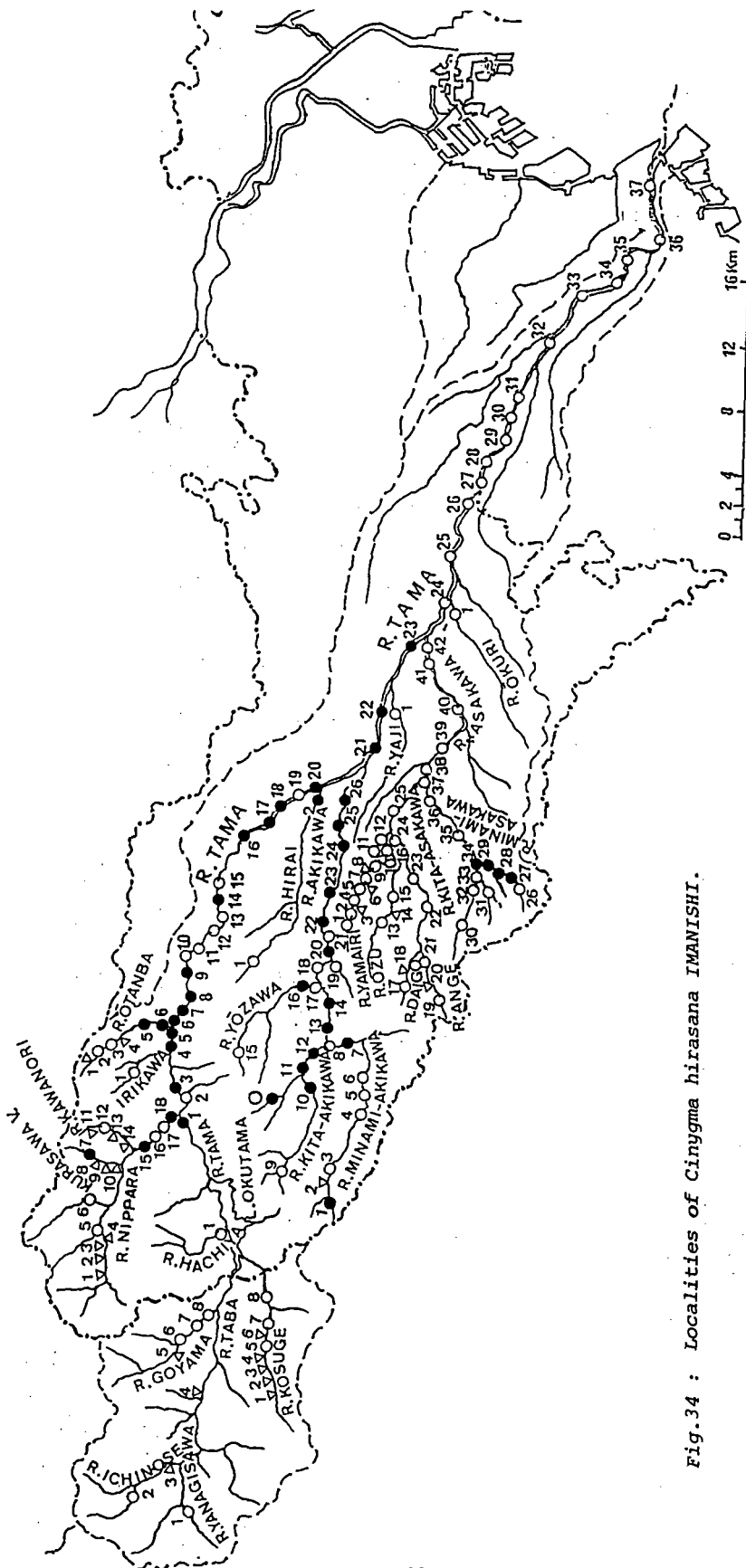


Fig. 34 : Localities of *Cinygma hirasana* IMANISHI.

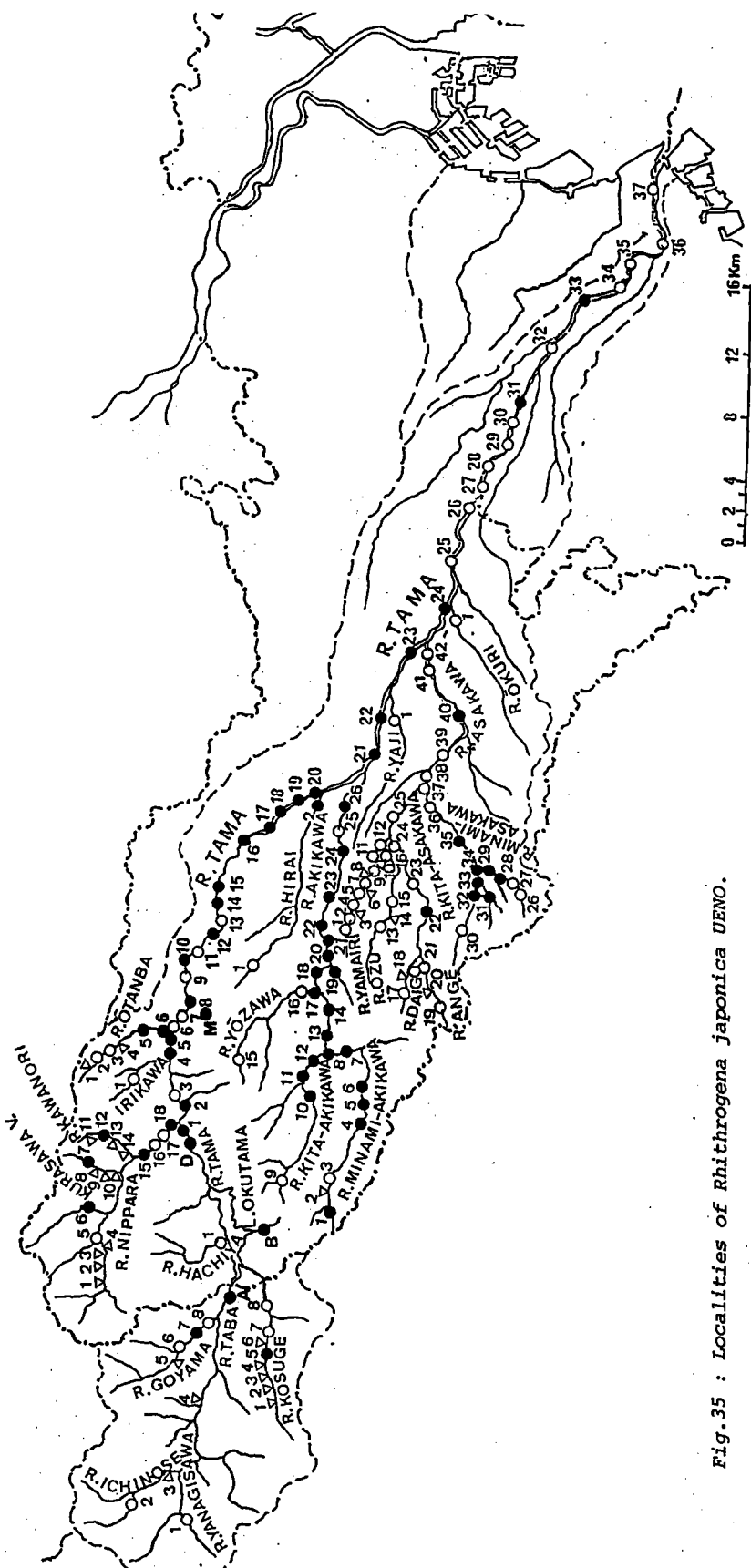


Fig.35 : Localities of *Rhitrogena japonica* UENO.

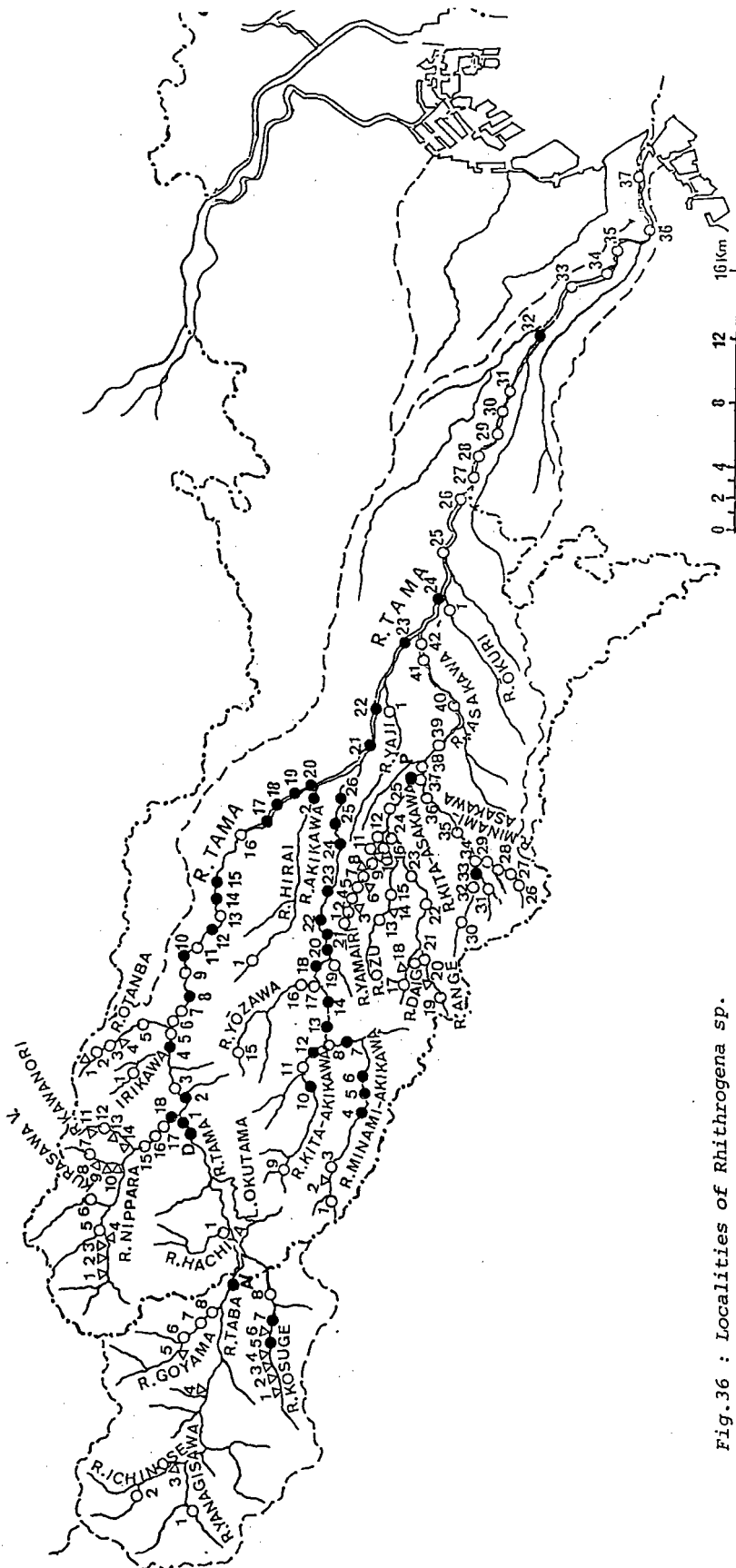


Fig. 36 : Localities of *Rithrogena* sp.

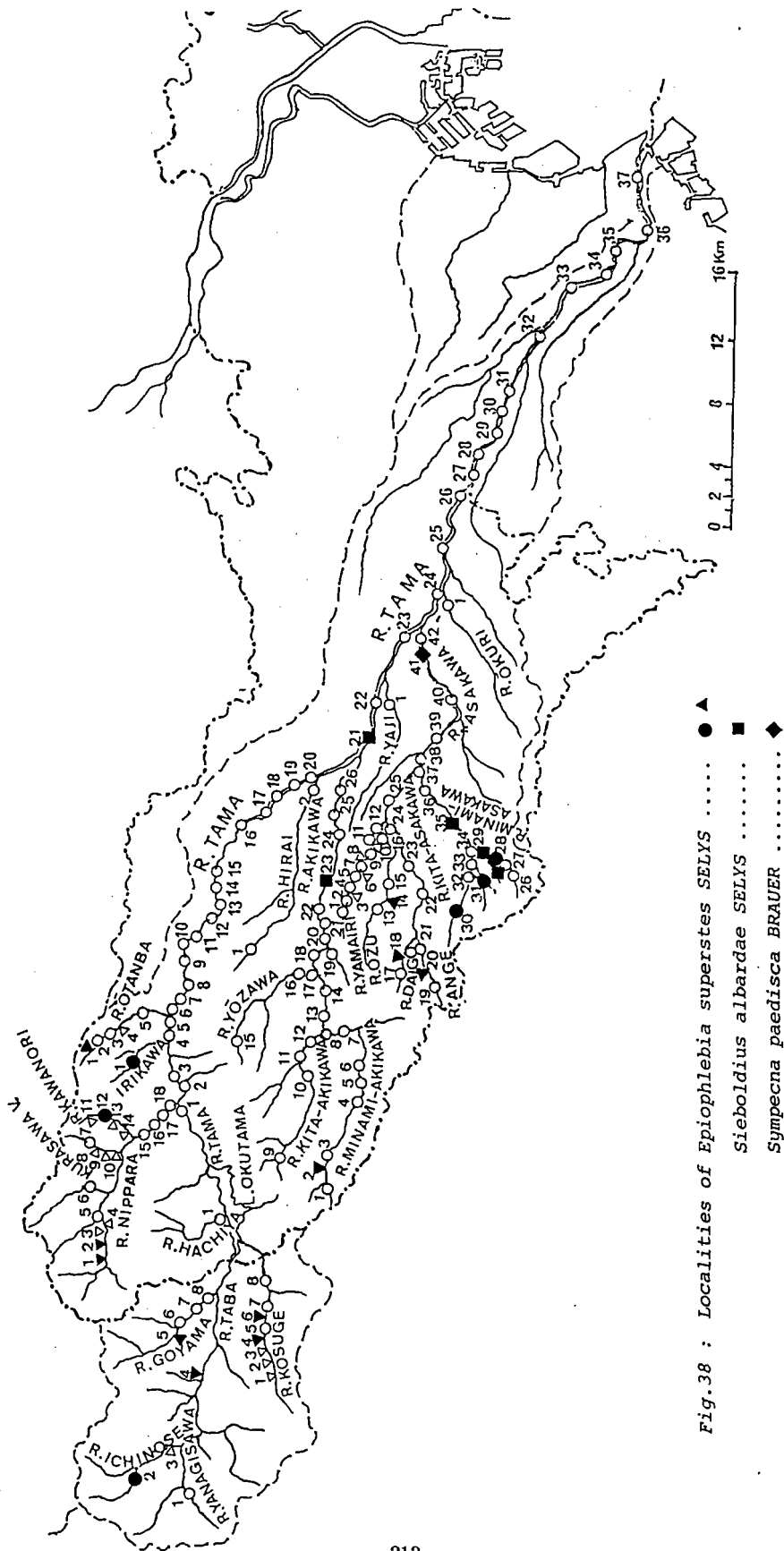


Fig.38 : Localities of *Epiophlebia superstes* SELYS ● ▲
Sieboldius albardae SELYS ■
Sympetna paedisca BRAUER ◆

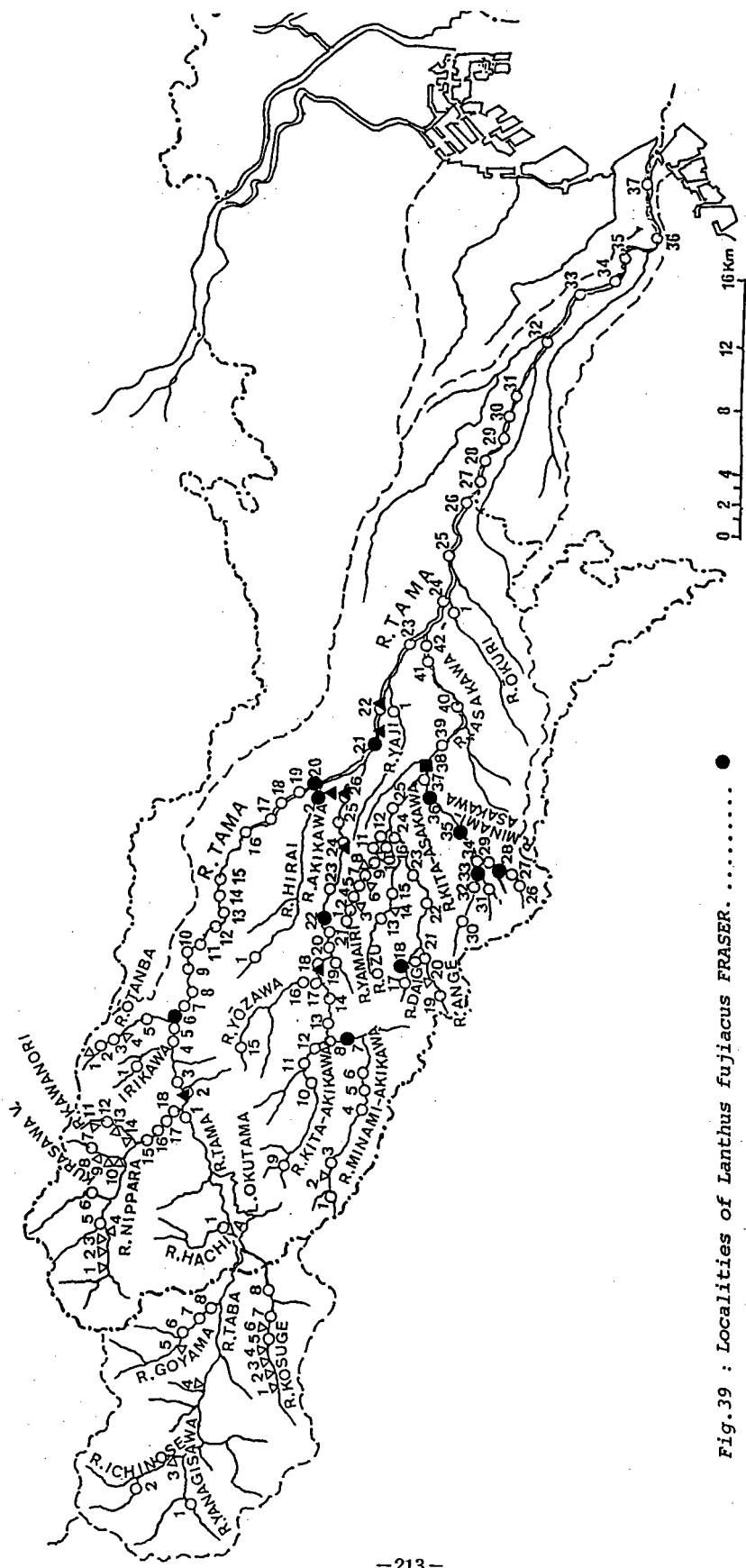


Fig. 39 : Localities of *Lanthus fujiacus* FRASER. ●
Gomphus postocularis SELYS. ▲
Anisogomphus maacki SELYS. ■

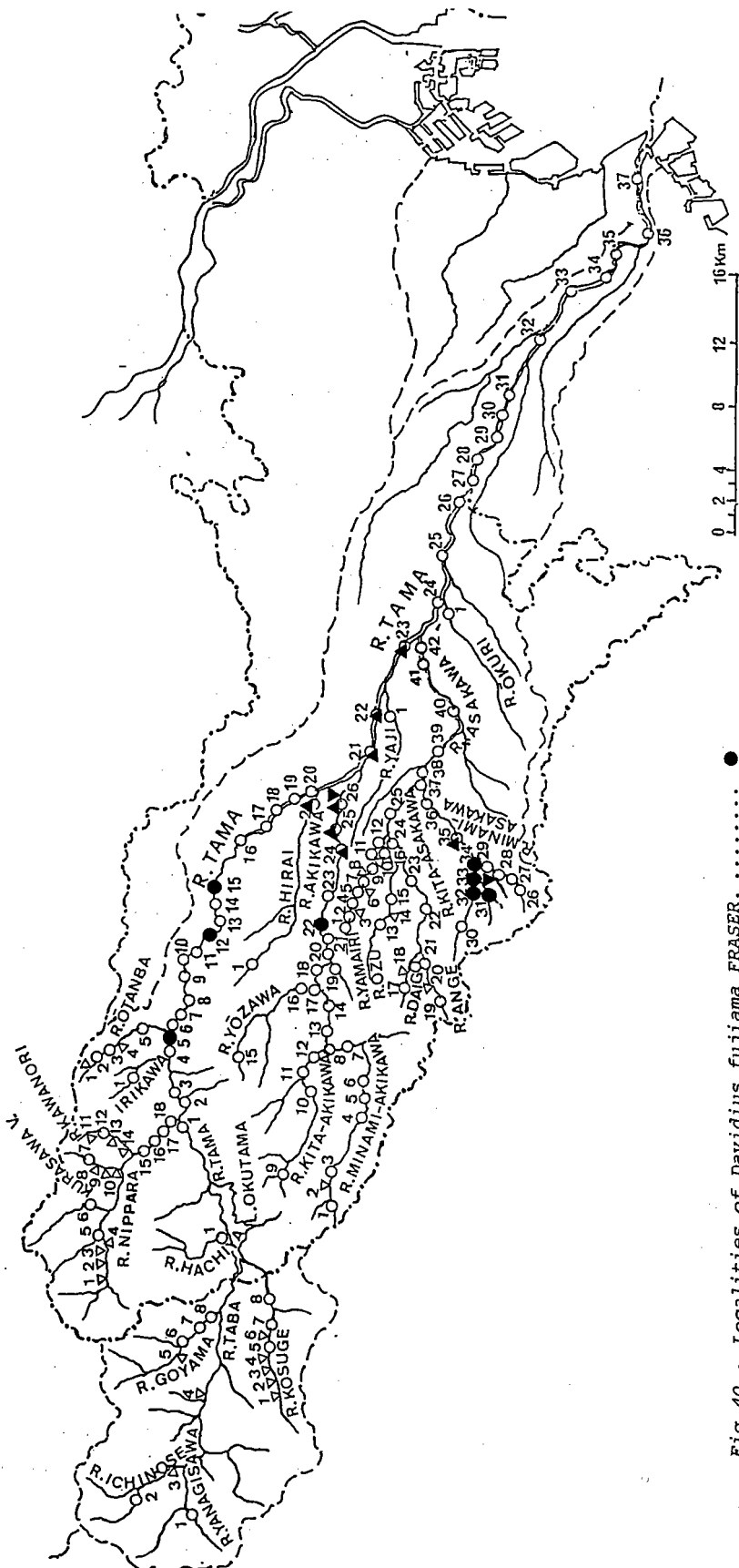


Fig.40 : Localities of *Davidius fujiana* FRASER. ●
Onychomphus viridicostus OGUMA ▲
Sinogomphus flavolimbatus OGUMA ▽

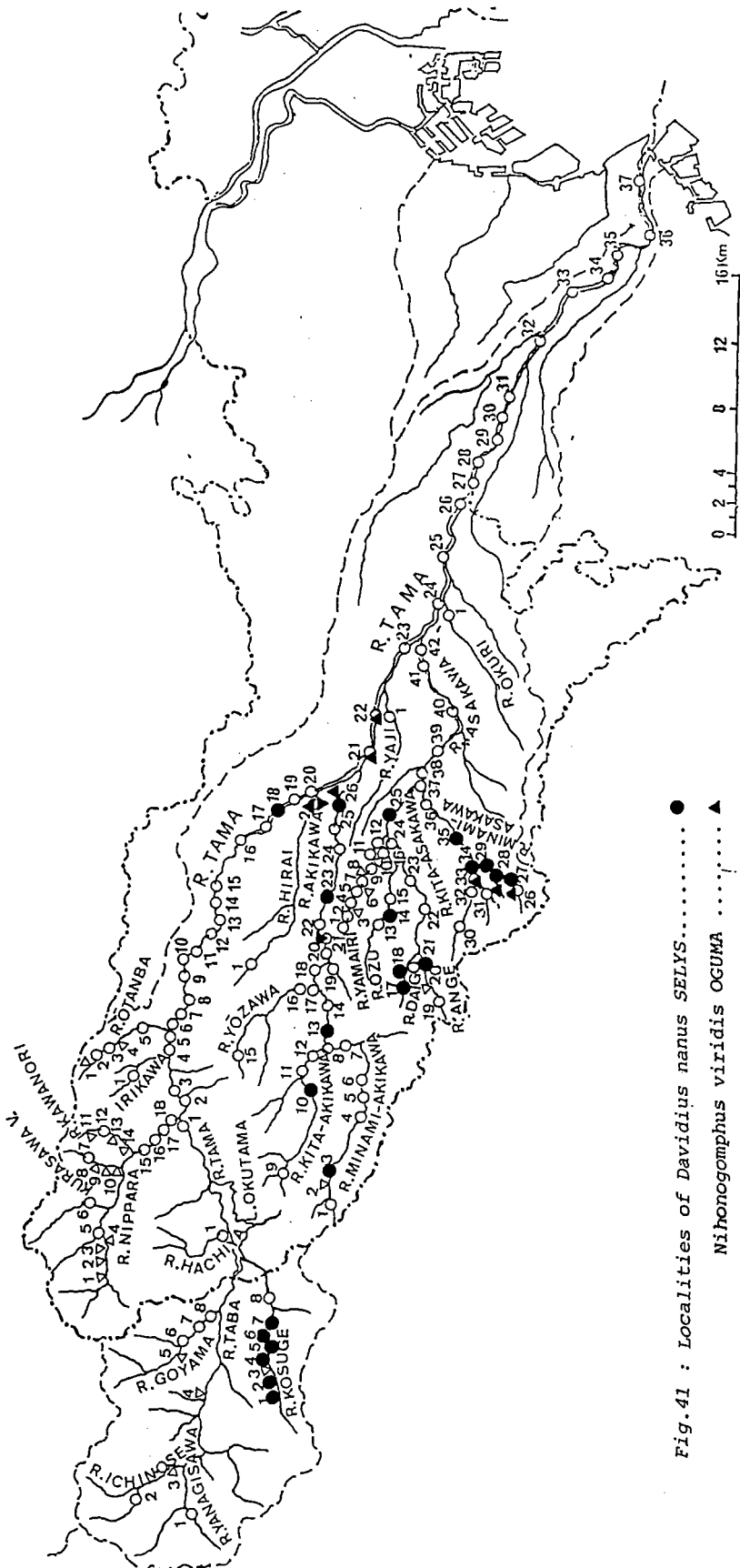


Fig. 41 : Localities of *Davidius nanus* SELYS.....●
Nihongomphus viridis OGUMA▲
Stylogomphus suzukii OGUMA▼

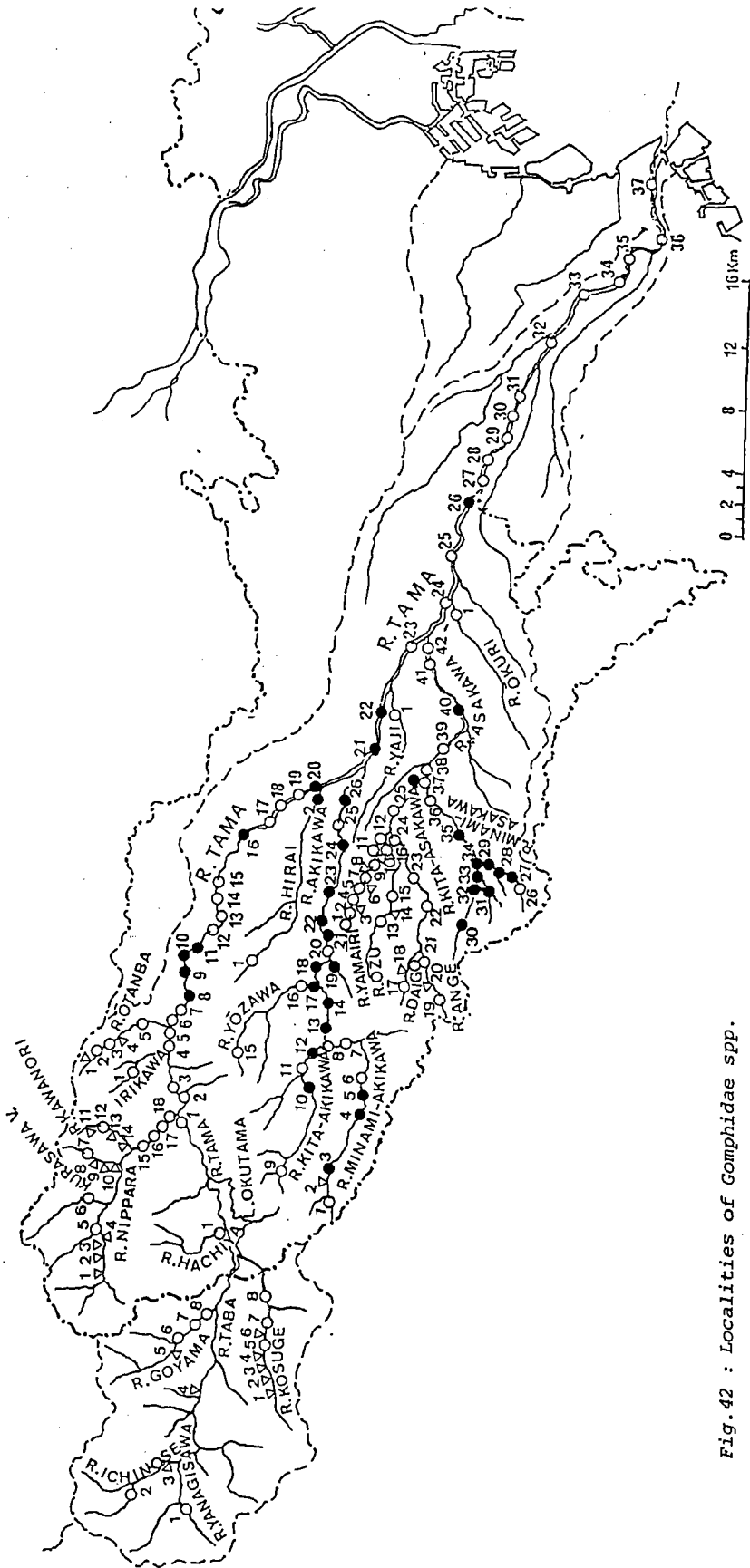


Fig.42 : Localities of Comphidae spp.

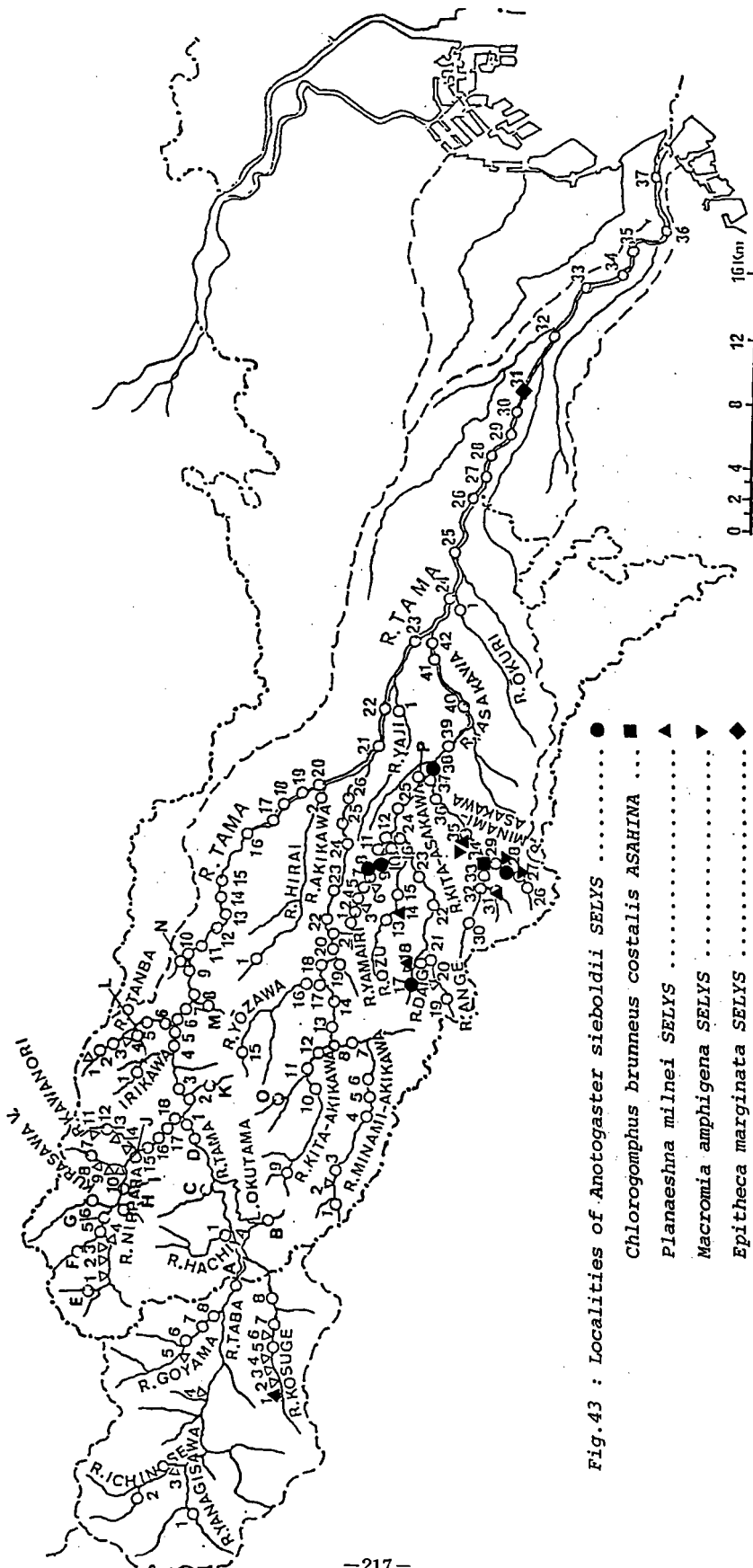


Fig.43 : Localities of *Anotogaster sieboldii* SELYS ●
Chlorogomphus brunneus costalis ASAHINA ■
Planaeshna milnei SELYS ▲
Macromia amphigena SELYS ▼
Epitheca marginata SELYS ◆

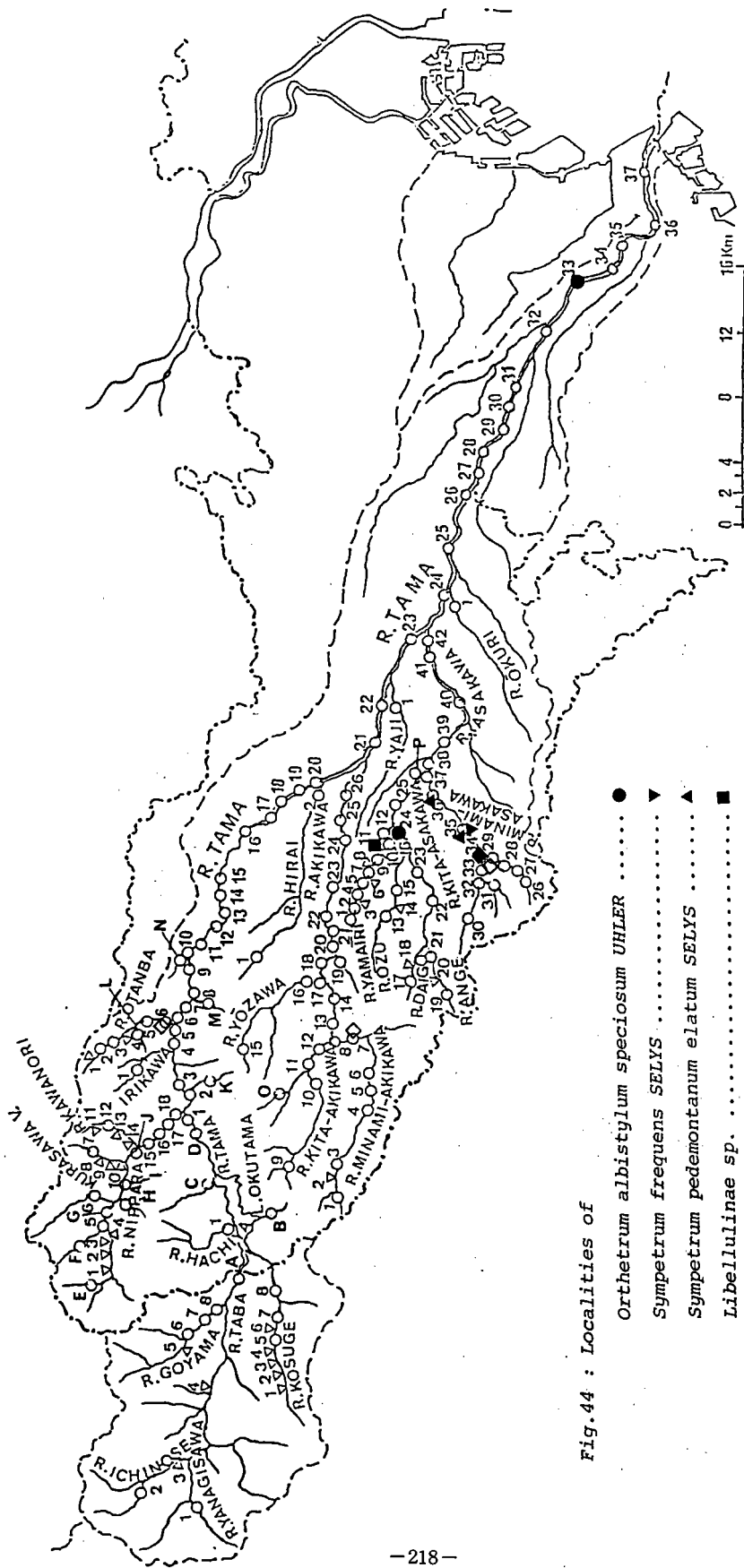


Fig. 44 : Localities of

- Orthetrum albistylum speciosum UHLER ●
- Sympetrum frequens SELYS ▼
- Sympetrum pedemontanum elatum SELYS ▲
- Libellulinae sp. ■
- Zygoptera sp. ◆
- Odonata sp. ◇

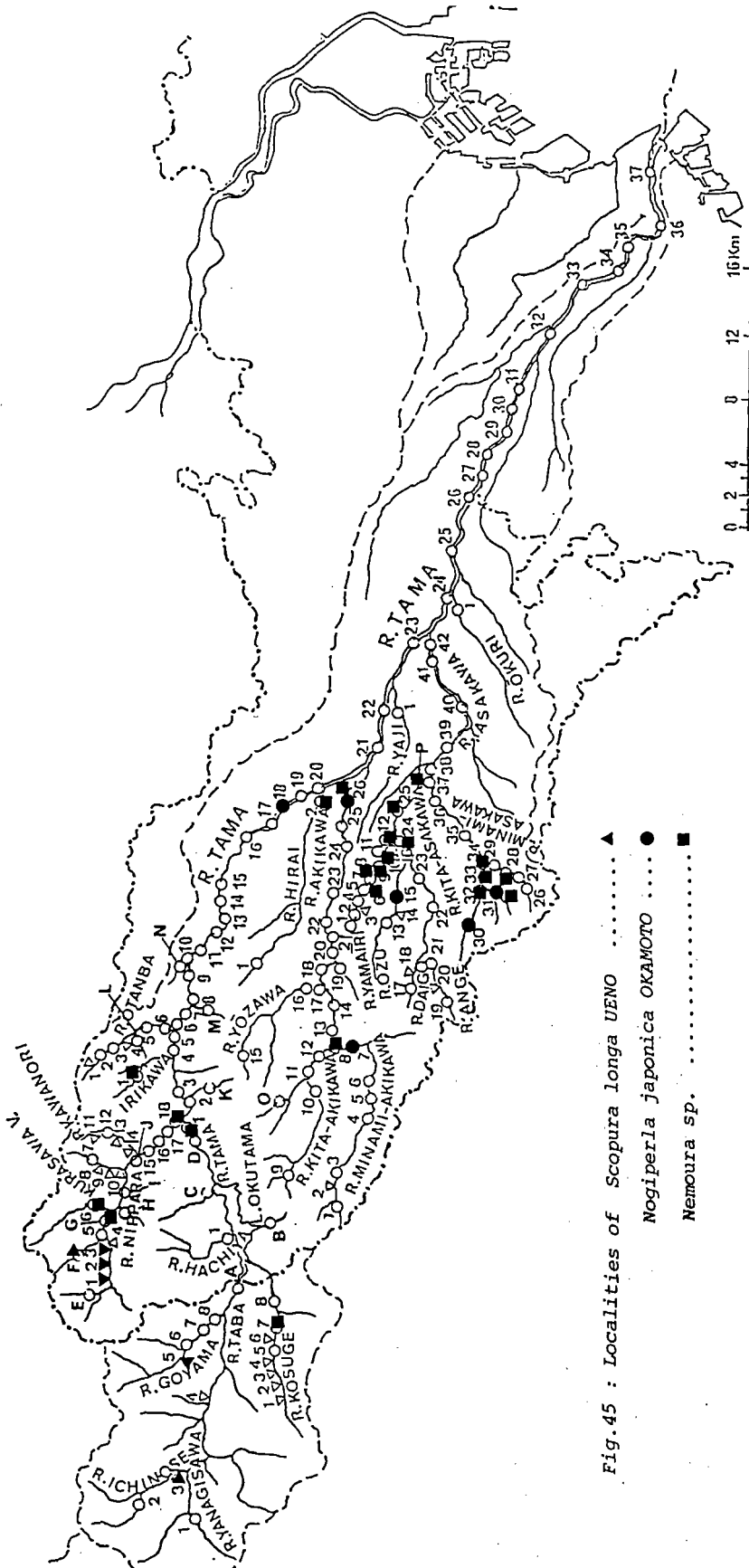


Fig.45 : Localities of *Scopura longa* UENO▲
Nogiperla japonica OKAMOTO●
Nemoura sp.■

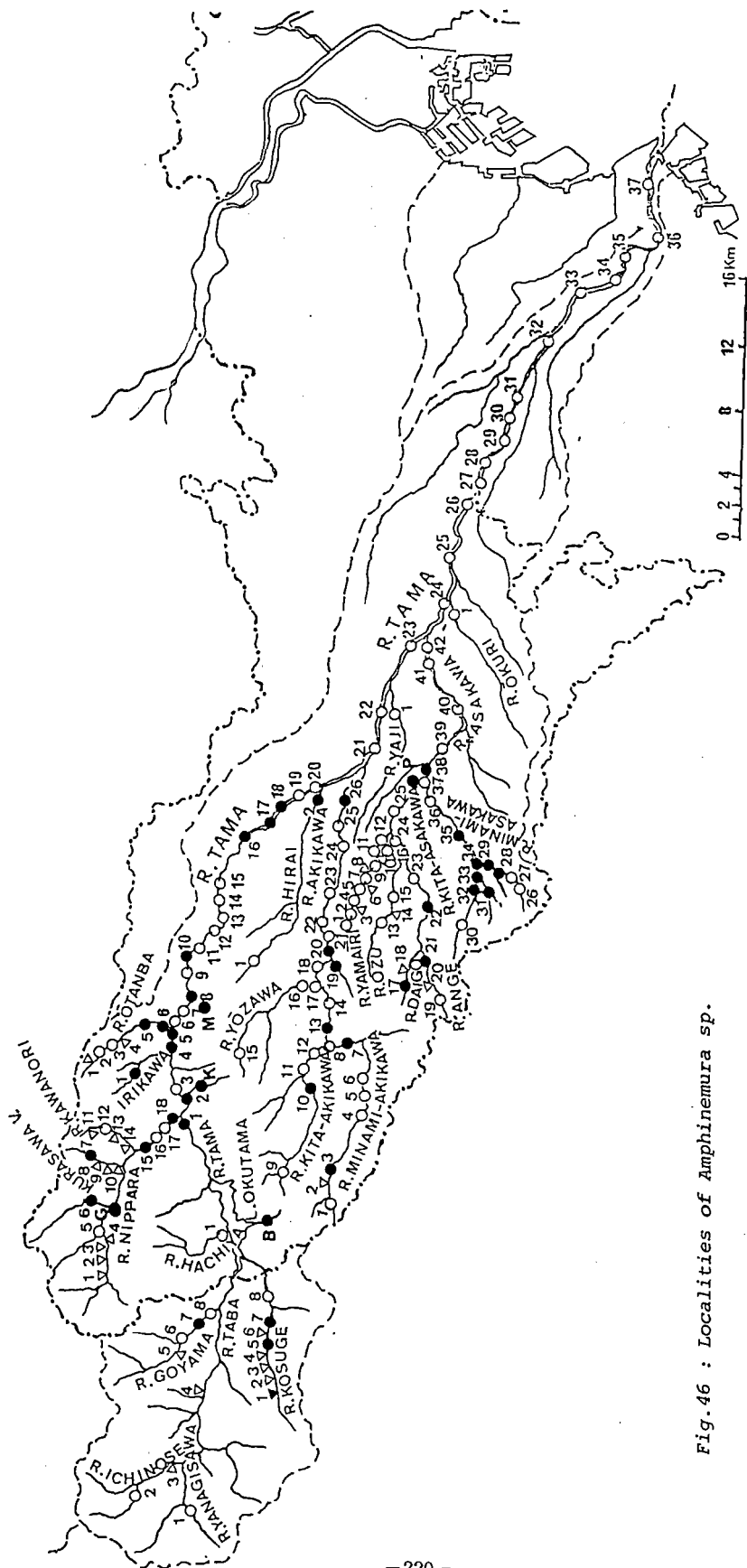


Fig. 46 : Localities of *Amphinemura* sp.

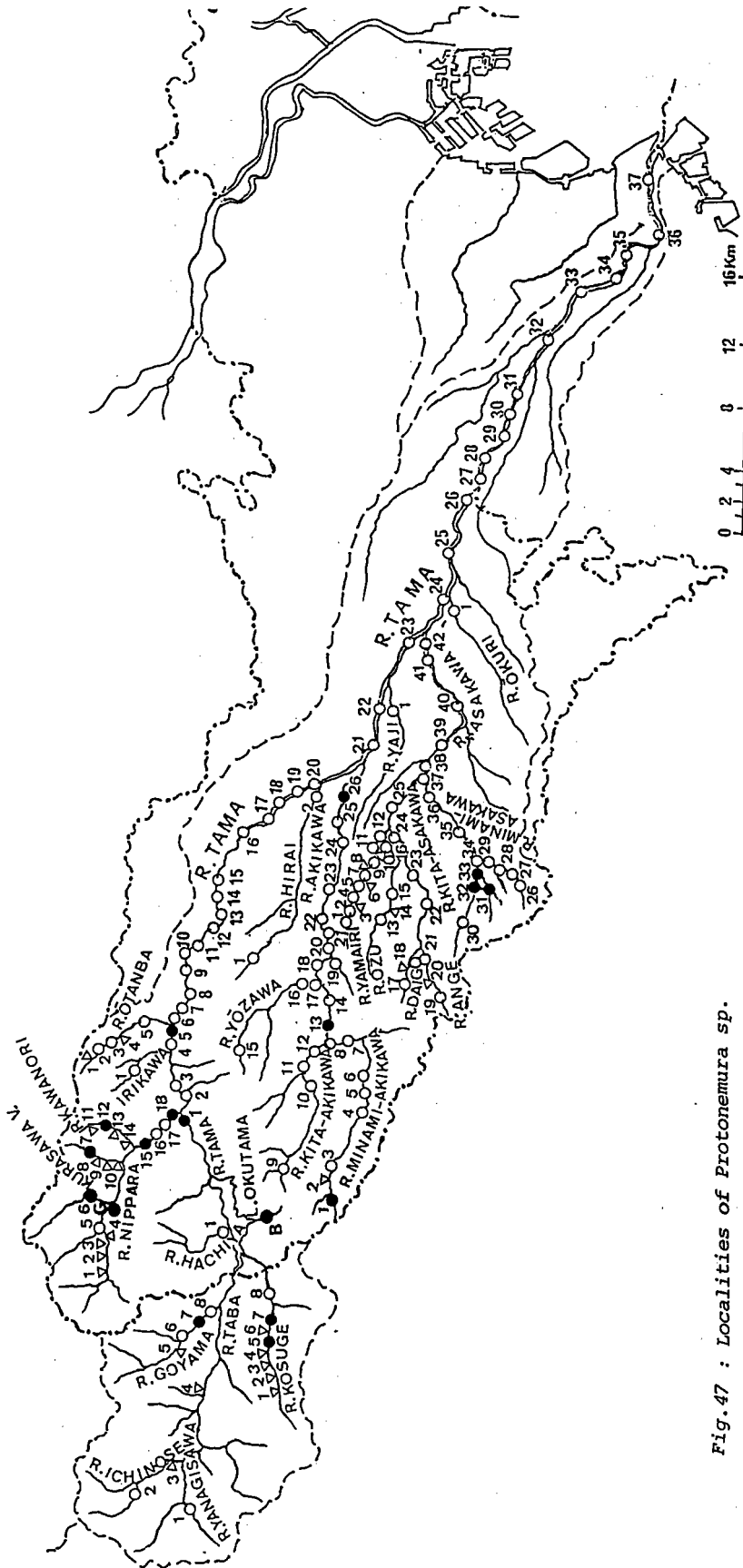


Fig. 47 : Localities of *Protonemura* sp.

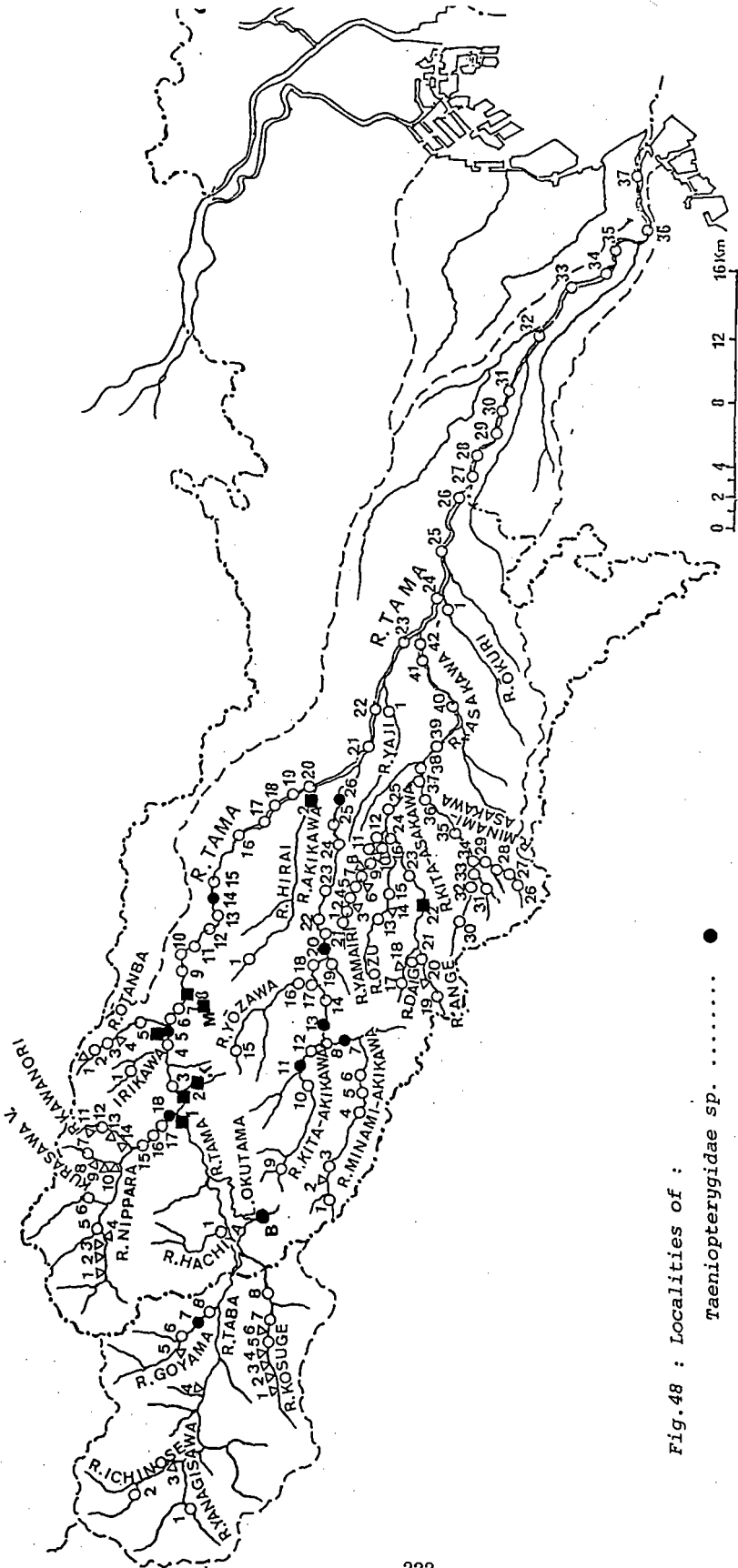


Fig. 48 : Localities of :

Taeniopterygidae sp. ●

Capniidae sp. ■

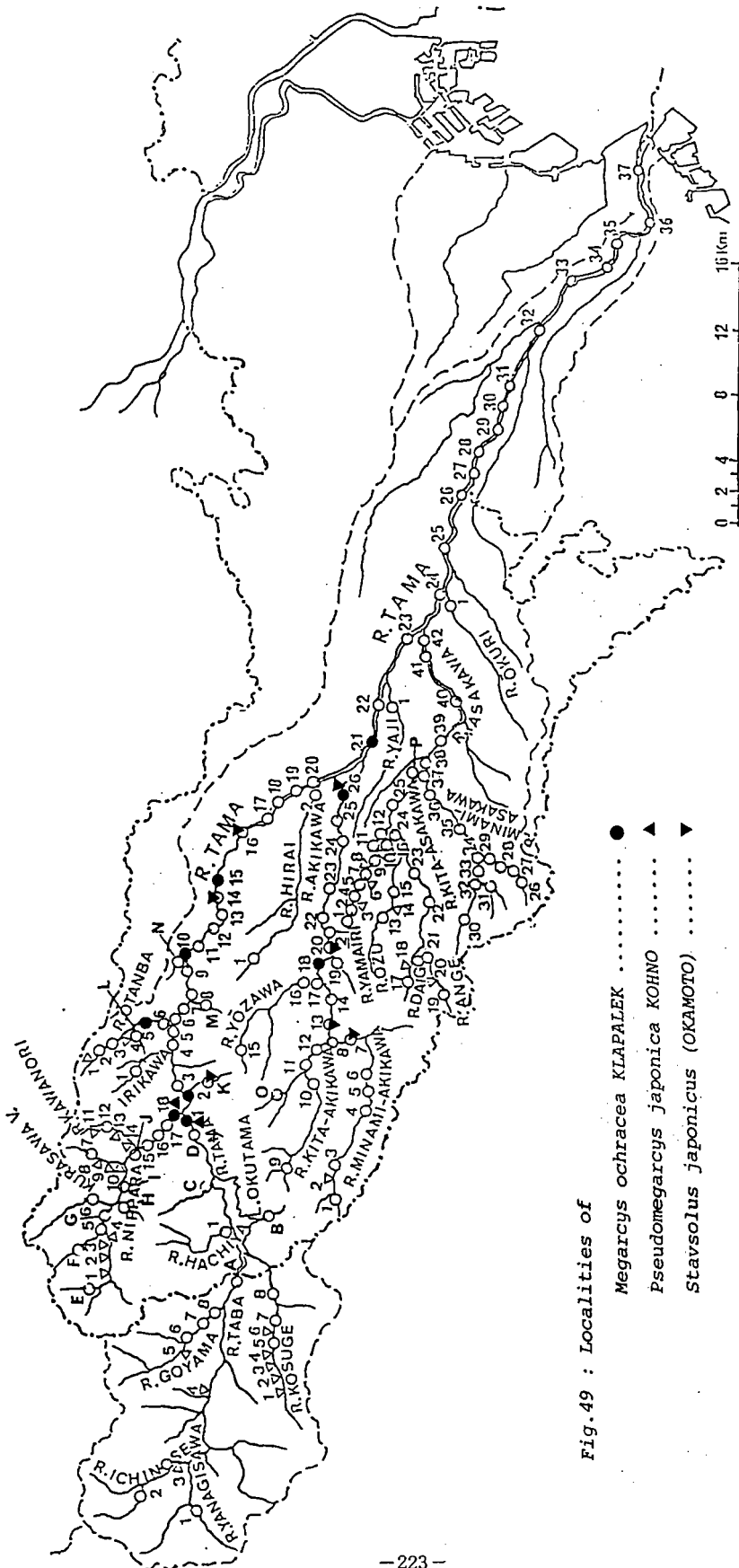


Fig.49 : Localities of

- Megarcys ochracea KIAPALEX ●
- Pseudomegarcys japonica KOHNO ▲
- Stausolus japonicus (OKAMOTO) ▼

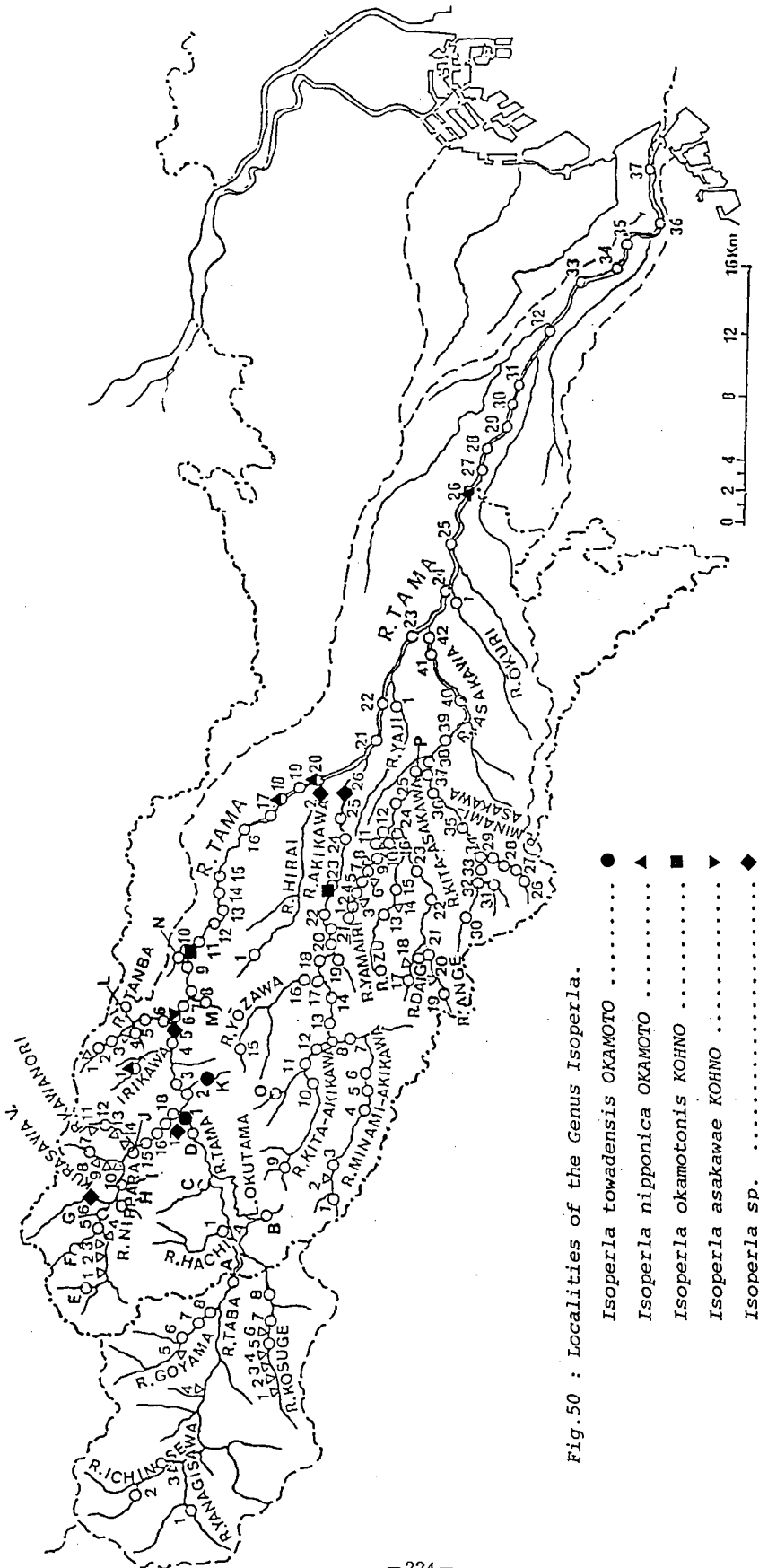


Fig.50 : Localities of the Genus *Isoperla*.

- Isoperla towadensis* OKAMOTO ●
- Isoperla nipponica* OKAMOTO ▲
- Isoperla okamotoi* KOHNO ■
- Isoperla asakawae* KOHNO ▼
- Isoperla* sp. ◆

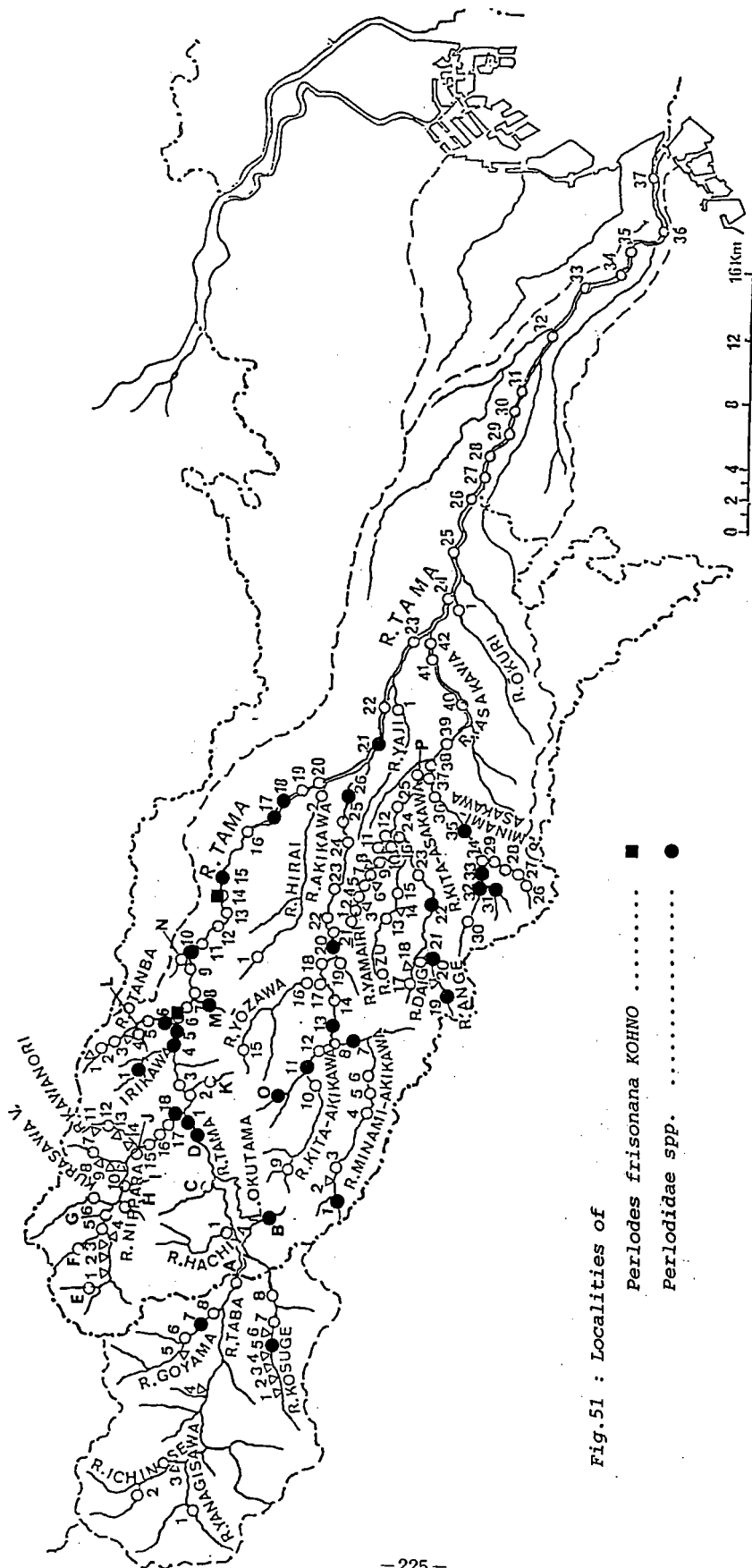


Fig.51 : Localities of

- Perlodes frisonana KOHNO
- Perlodidae spp.

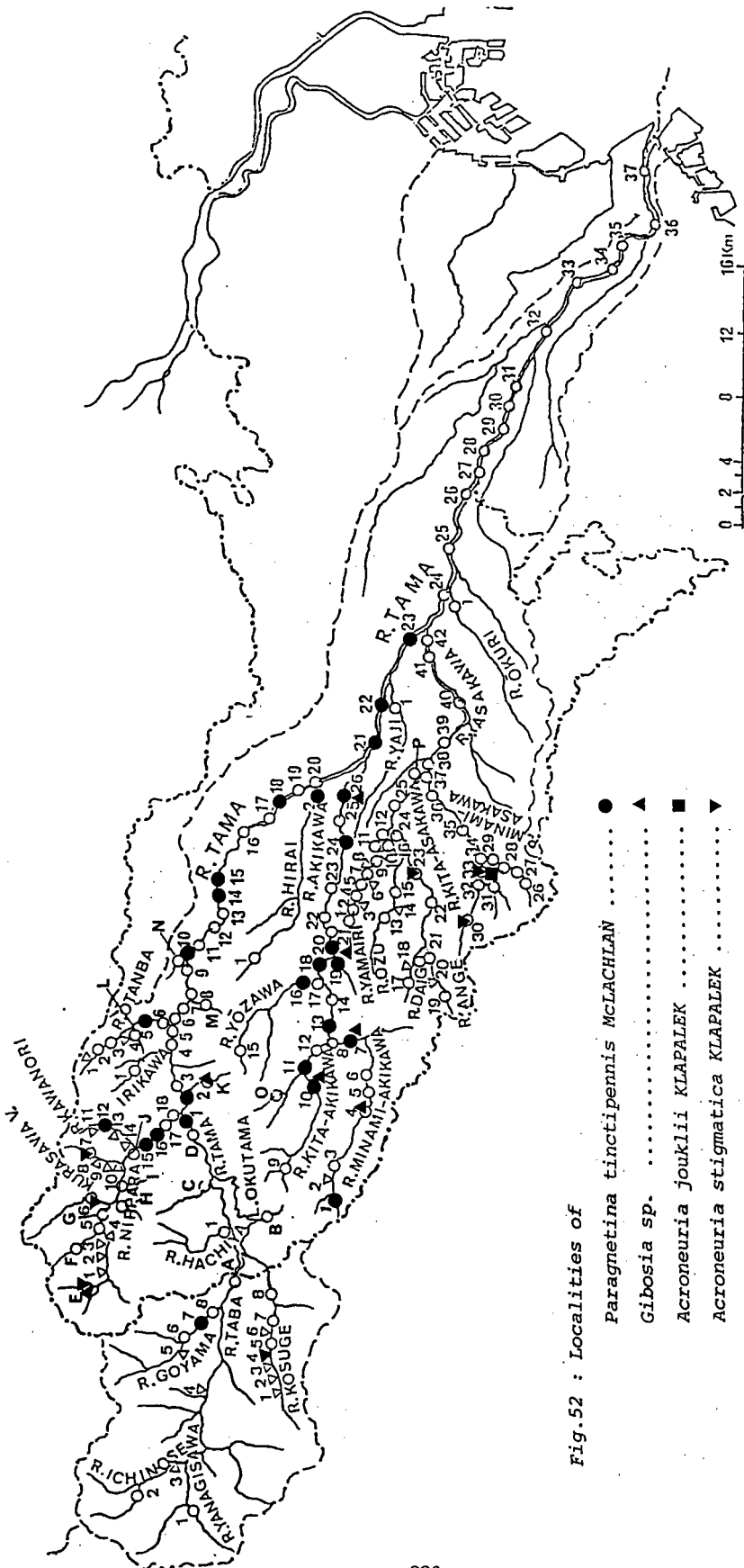


Fig. 52 : Localities of

- *Paragnetina tinctipennis* MCLACHLAN
- ▲ *Gibosia* sp.
- *Acroneria joukii* KLAPALEK
- ▼ *Acroneria stigmatica* KLAPALEK

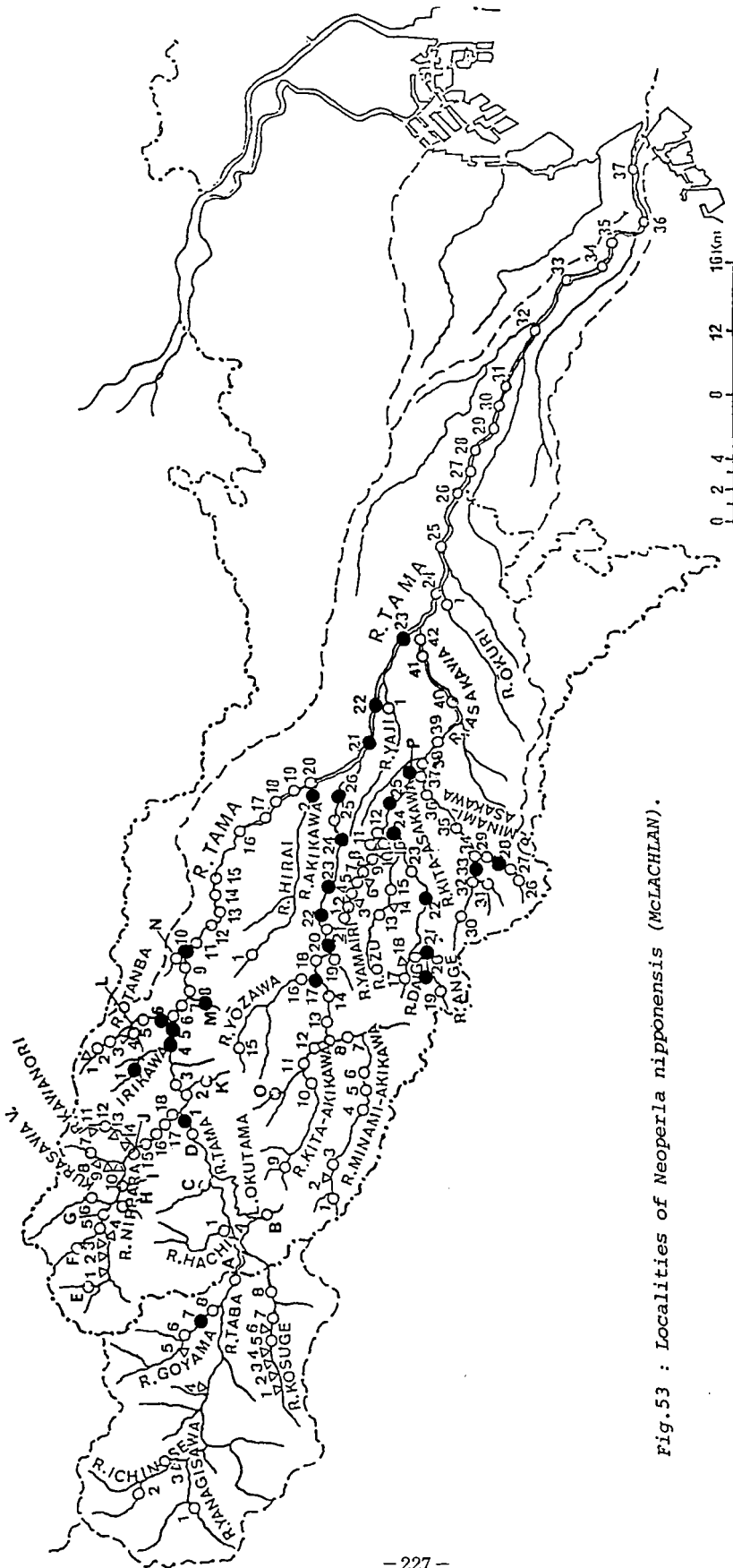


Fig. 53 : Localities of *Neoperla nipponensis* (McLACHLAN).

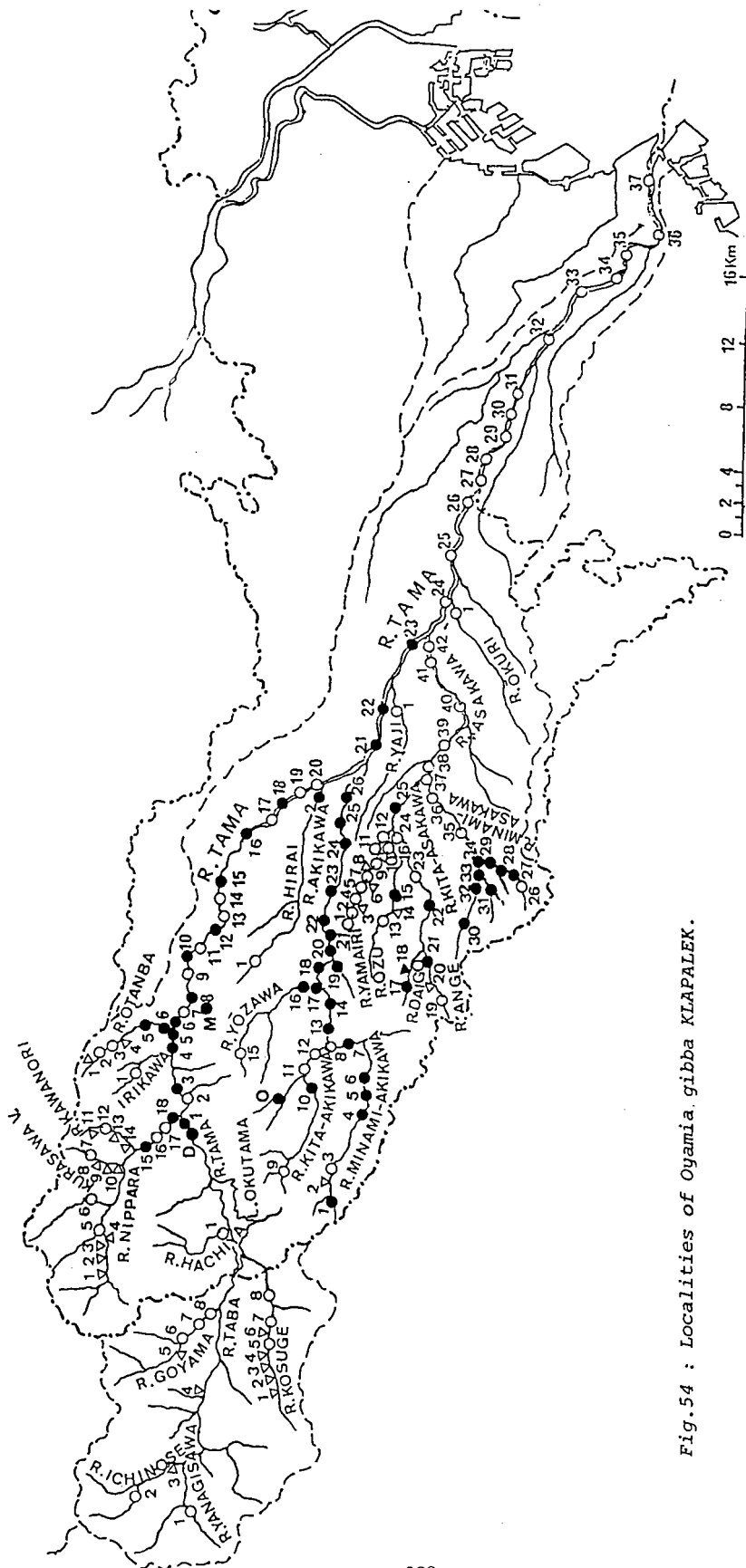


Fig.54 : Localities of *Oyamia gibba klapalek*.

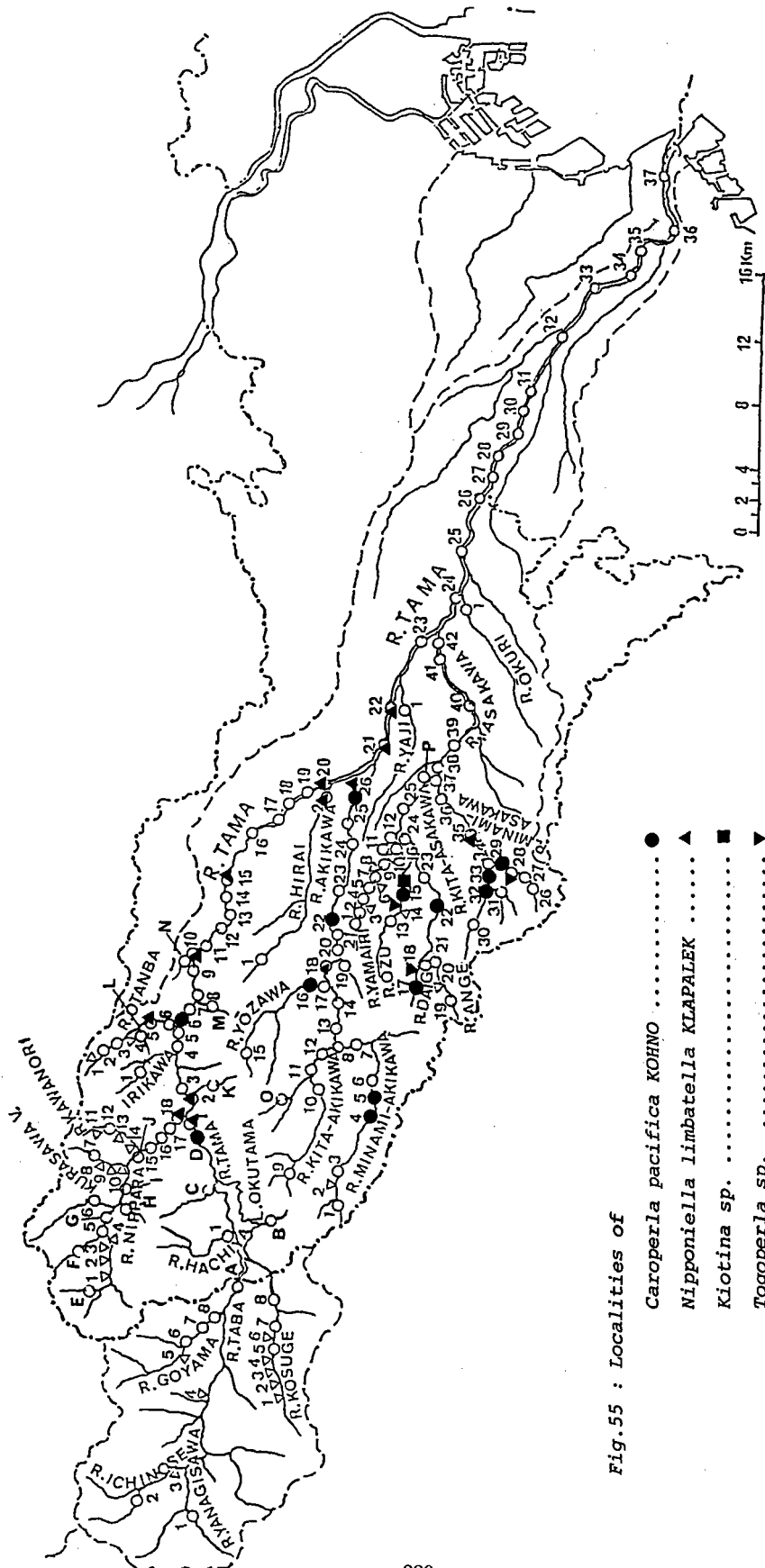


Fig.55 : Localities of

- *Caroperla pacifica* KOHNO
- ▲ *Nipponiella limbata* Klapalek
- *Kiotina* sp.
- ▼ *Togoperla* sp.

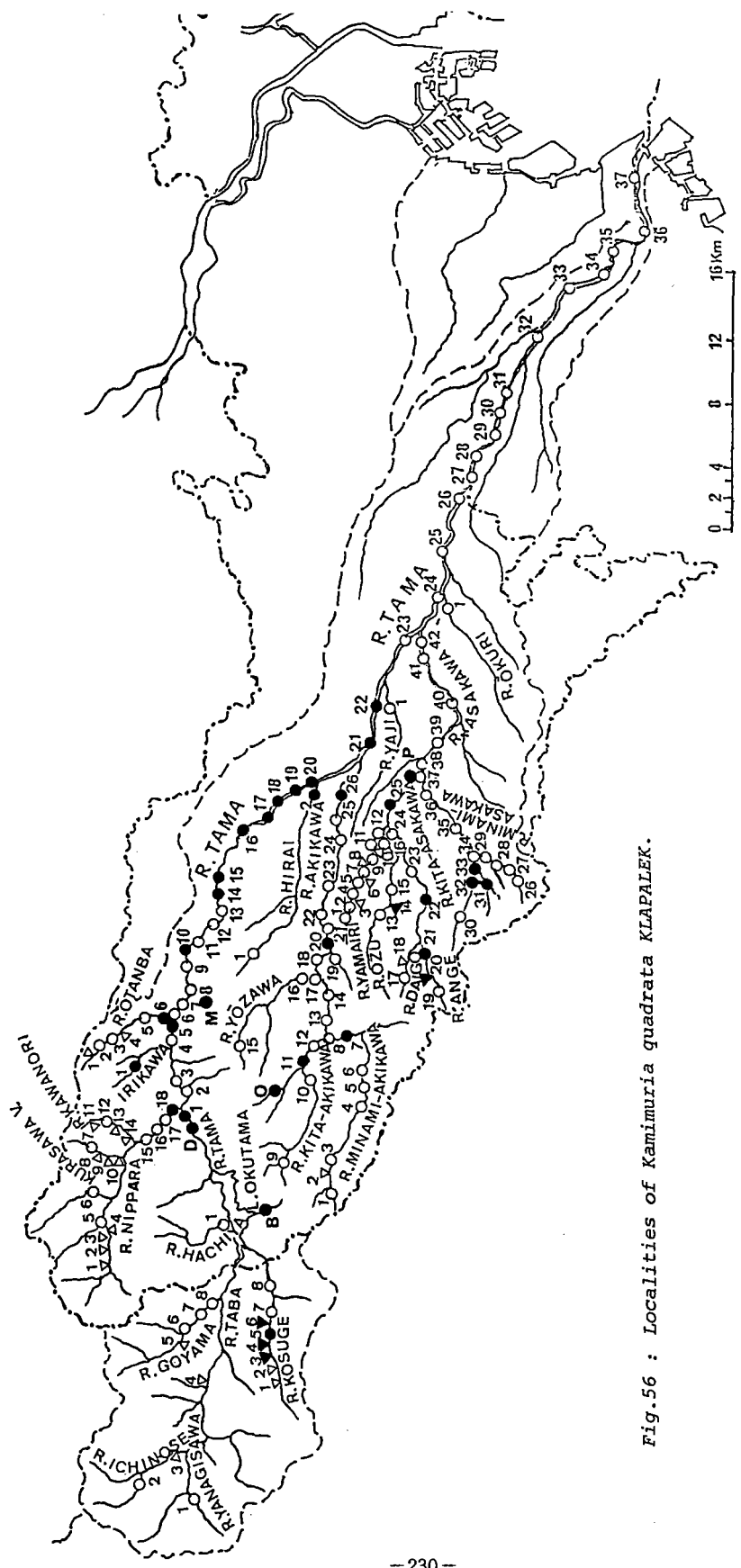


Fig.56 : Localities of Kamimuria quadrata Klapalek.

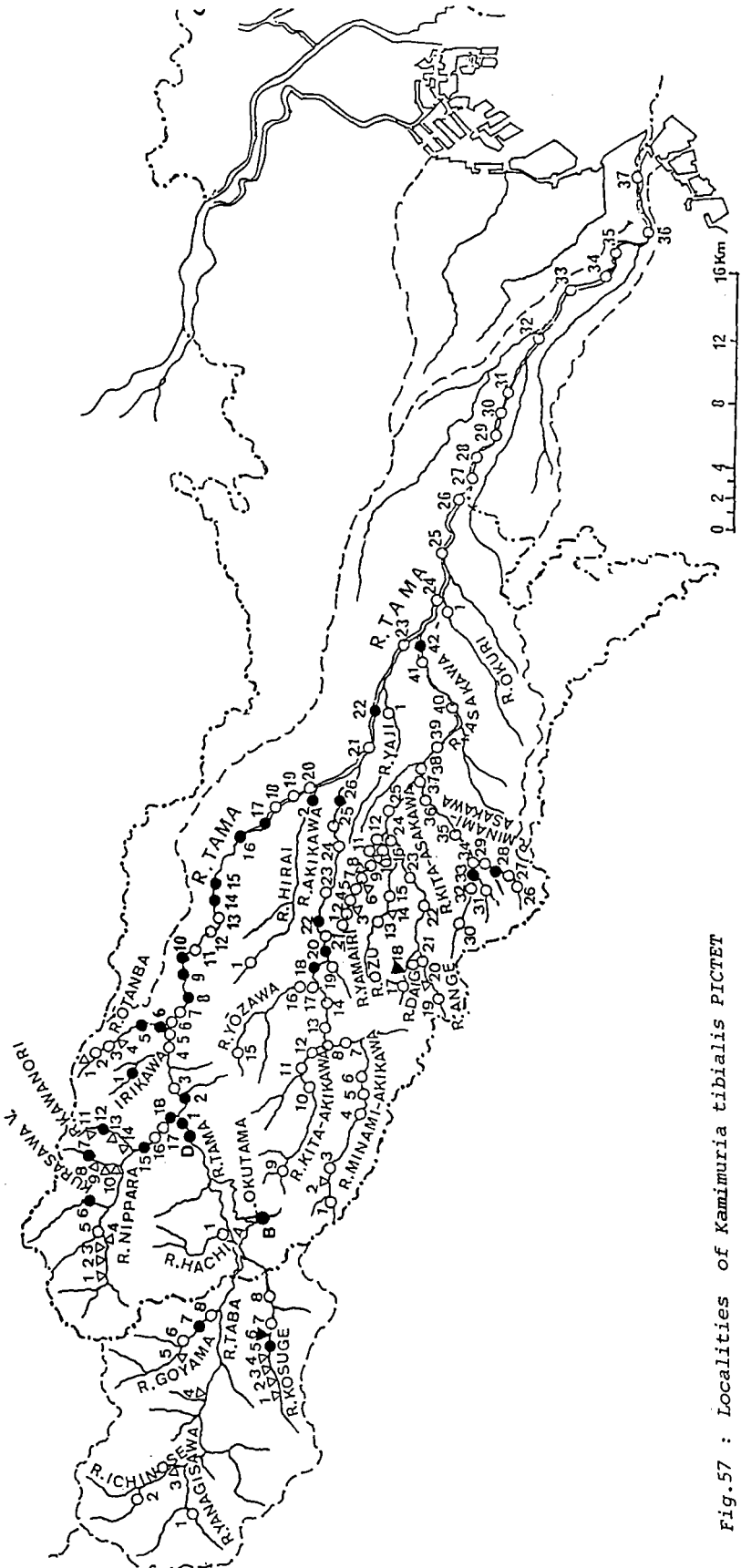


Fig.57 : Localities of *Kamimuria tibialis* PICTET

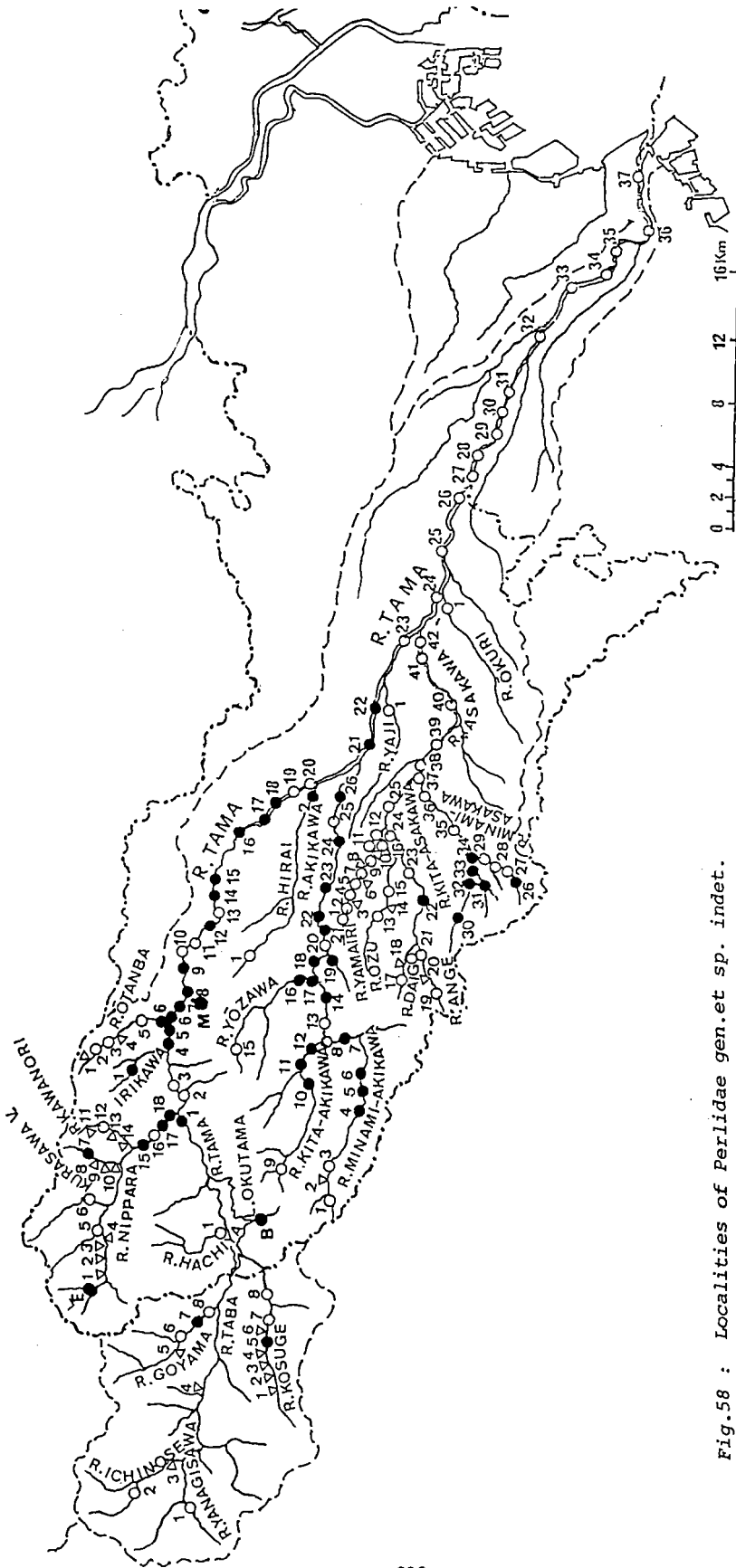


Fig. 58 : Localities of Perilidae gen. et sp. indet.

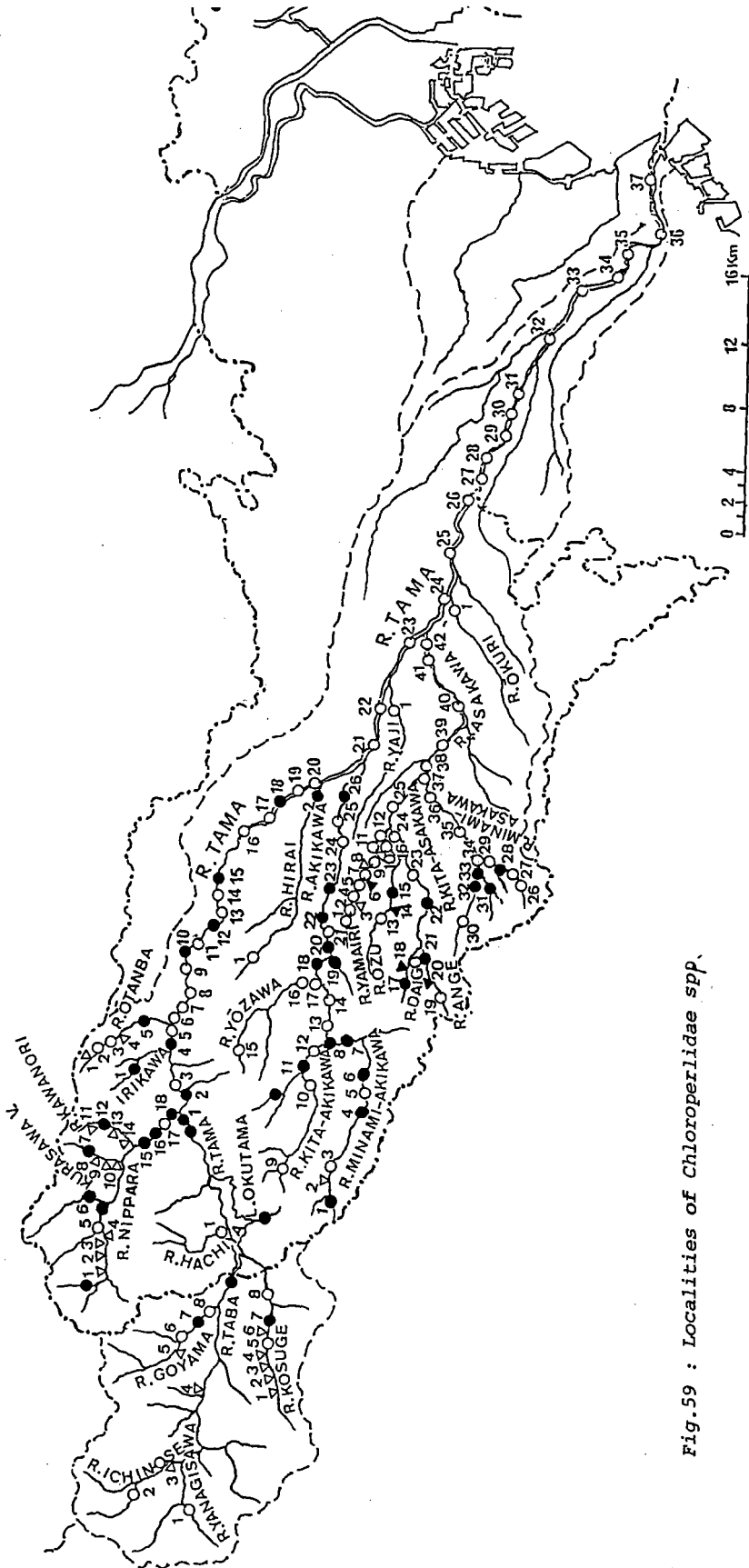


Fig. 59 : Localities of Chloroperiidae spp.

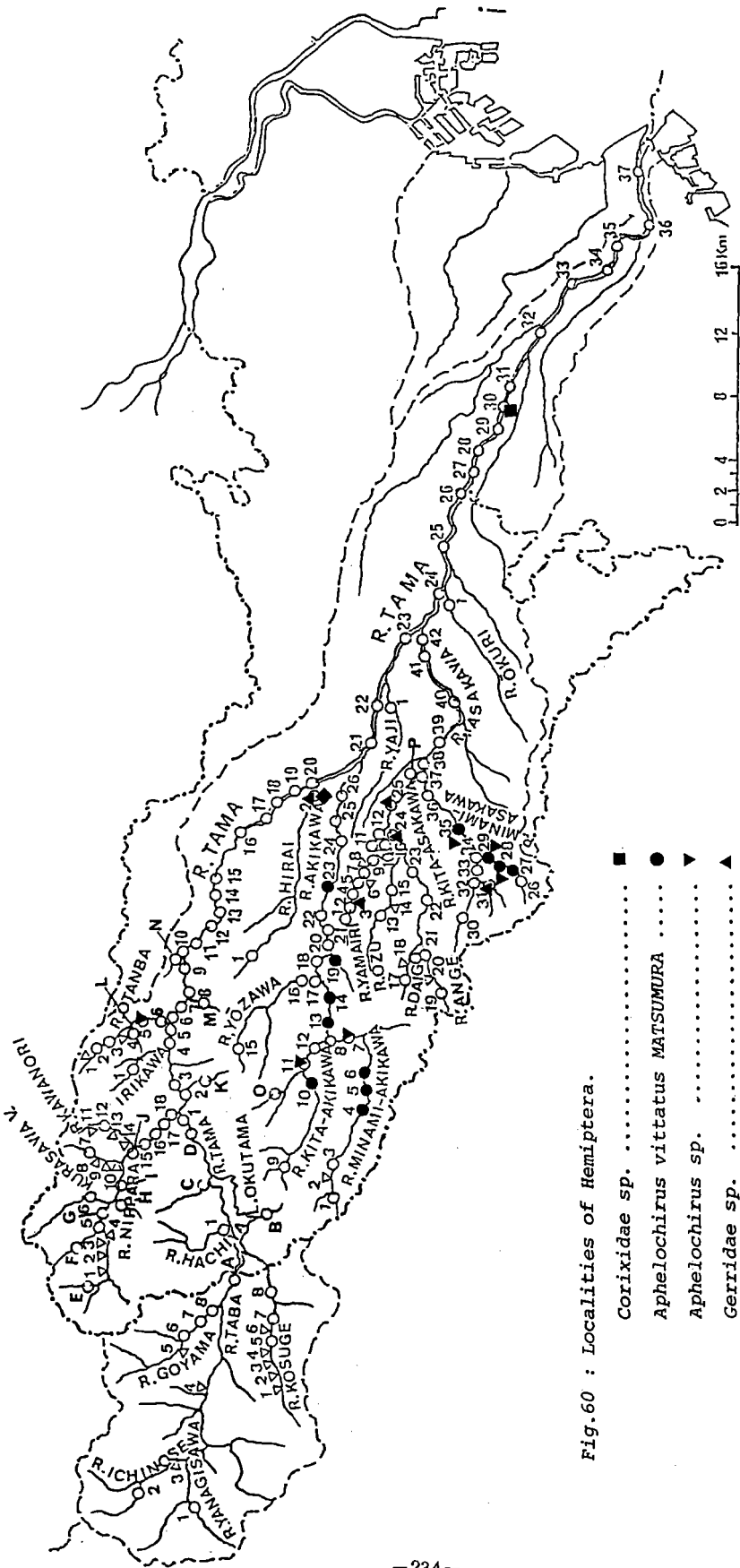


Fig.60 : Localities of Hemiptera.

- Corixidae sp. ■
- Aphelochirus vittatus MATSUMURA ●
- Aphelochirus sp. ▼
- Gerridae sp. ▲
- Notonectidae sp. ◆

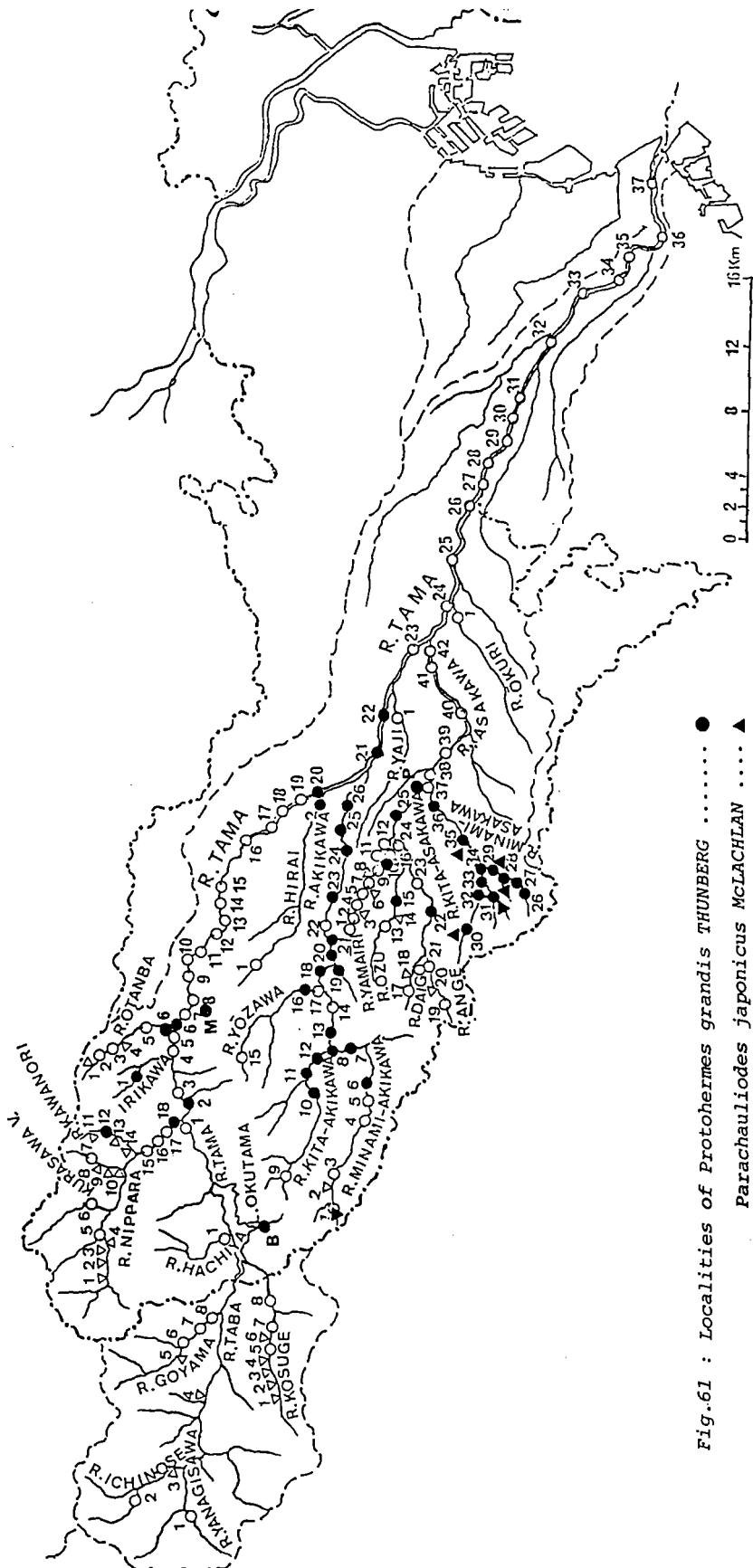


Fig.61 : Localities of *Protohermes grandis* THUNBERG ●
Parachauliodes japonicus McLACHLAN ▲
Osmylus kisoensis IWATA ▼

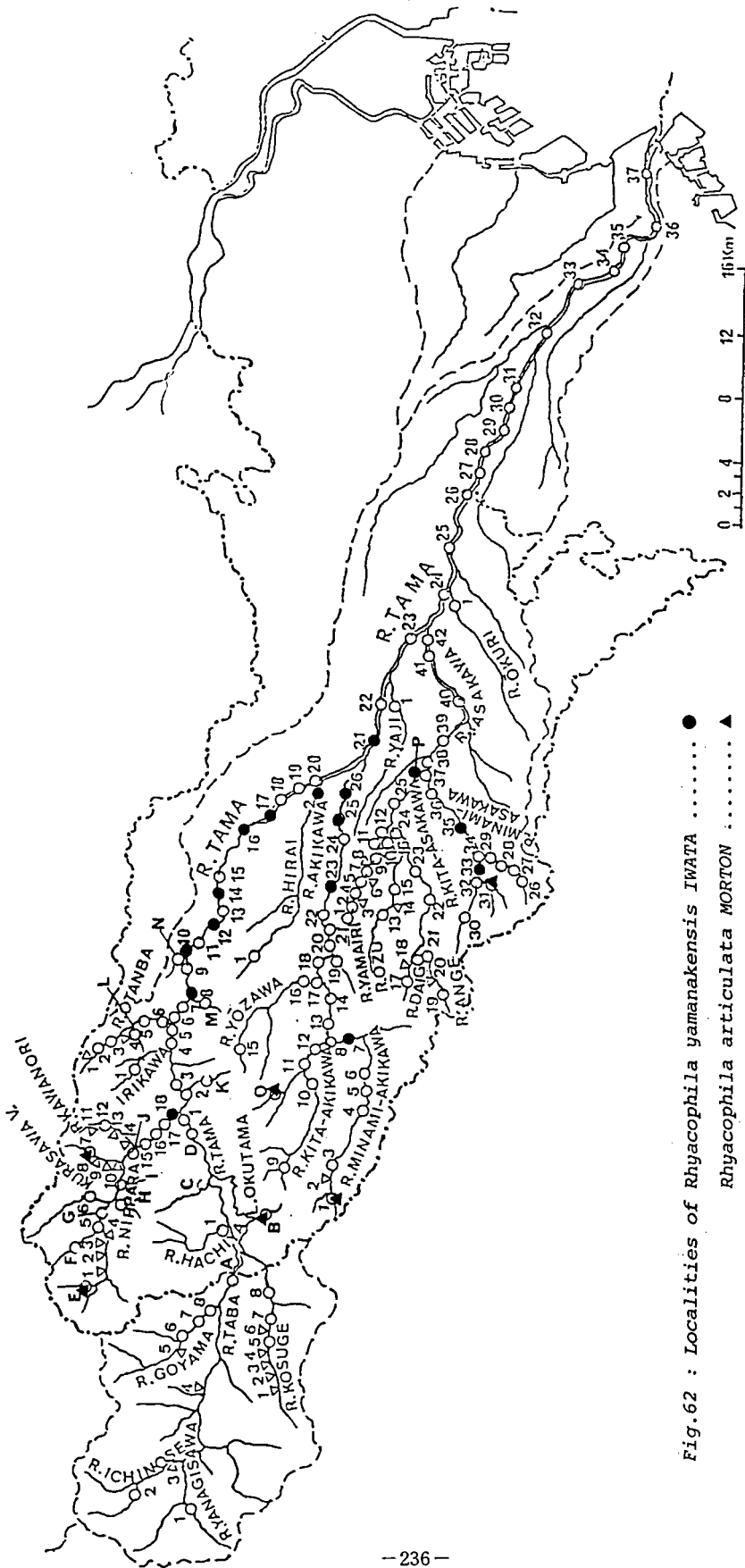


Fig.62 : Localities of *Rhyacophila yamanakensis* IWATA ●
Rhyacophila articulata MORTON ▲

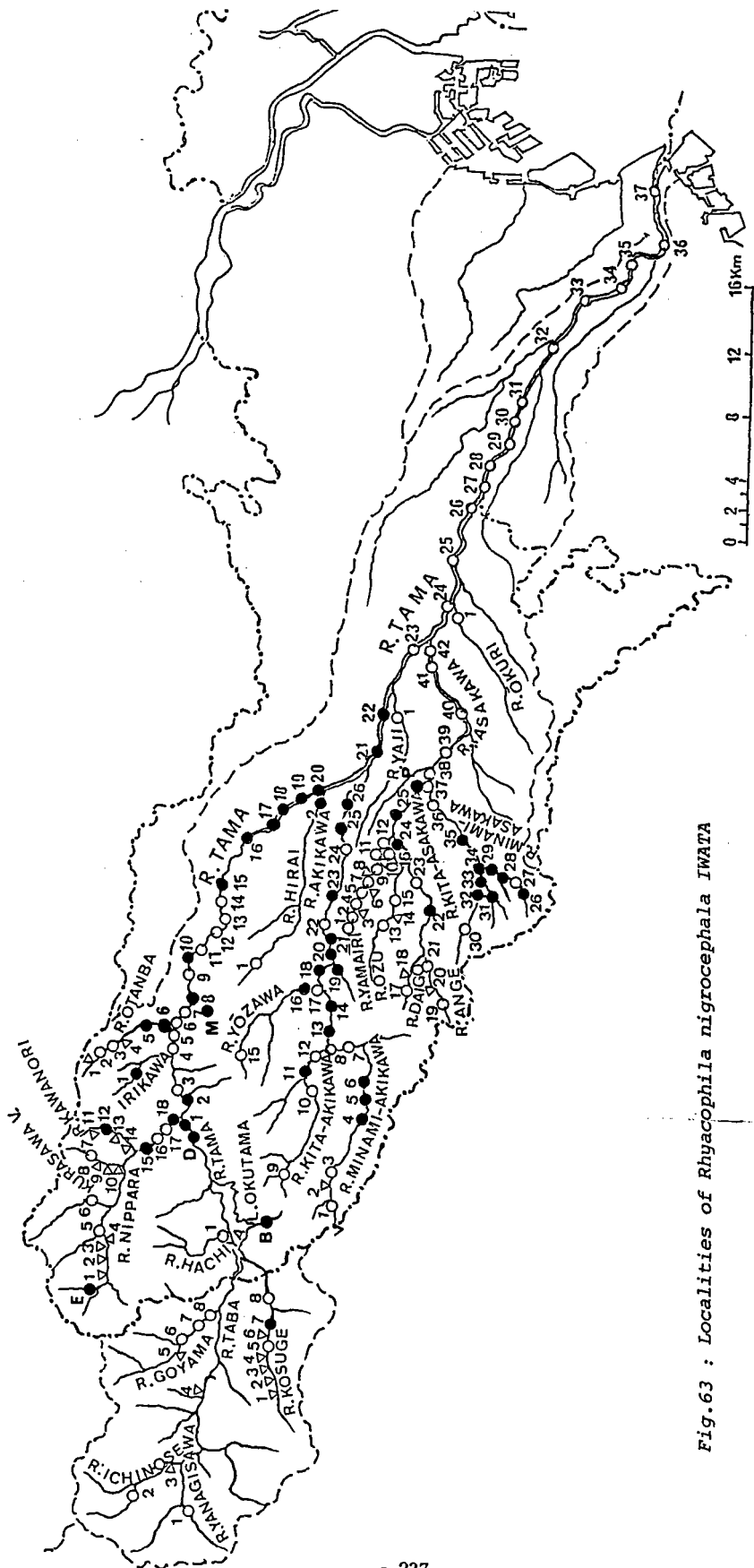


Fig. 63 : Localities of *Rhyacophila nigrocephala* IWATA

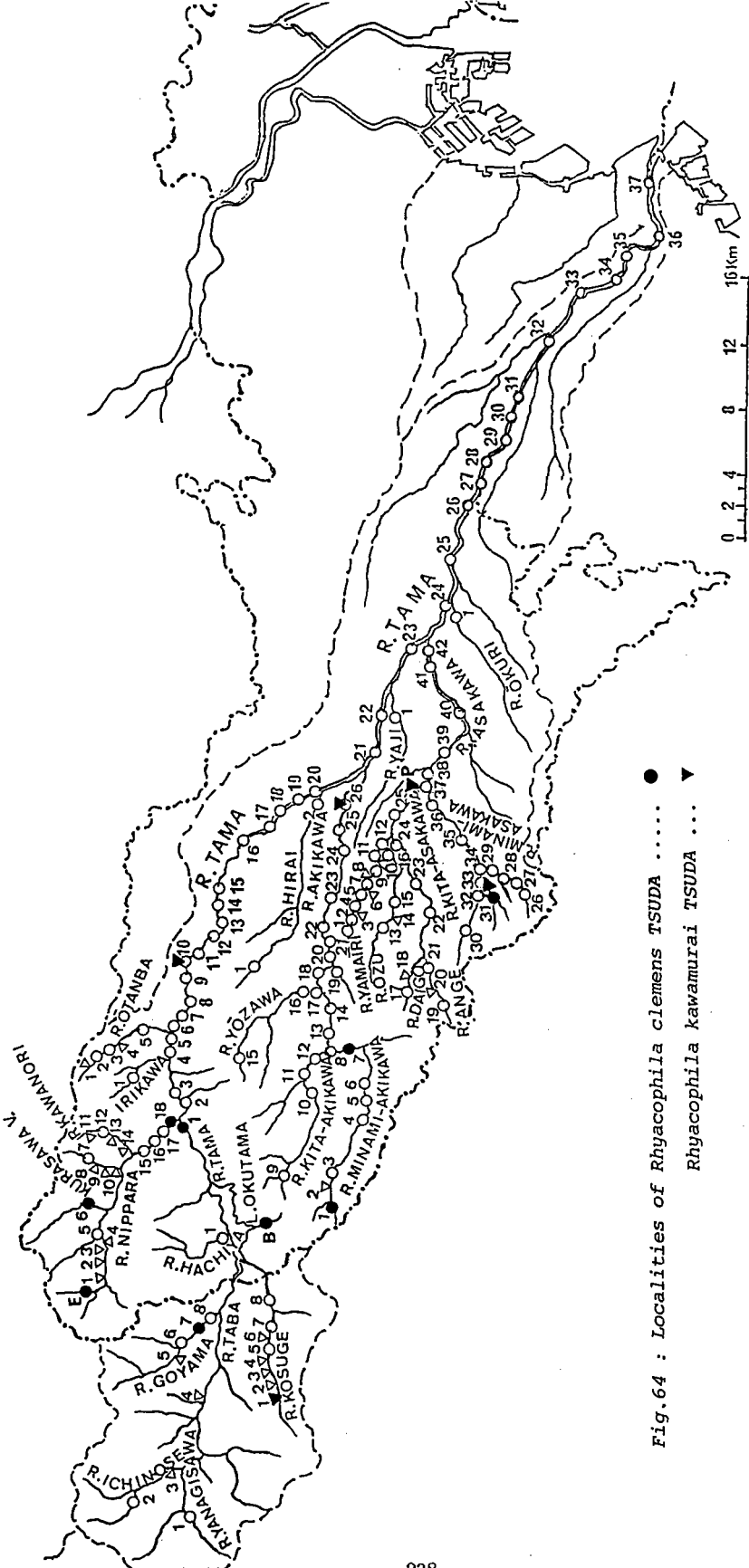


Fig. 64 : Localities of *Rhyacophila clemens tsuda* ●
Rhyacophila kawamurai tsuda ... ▼

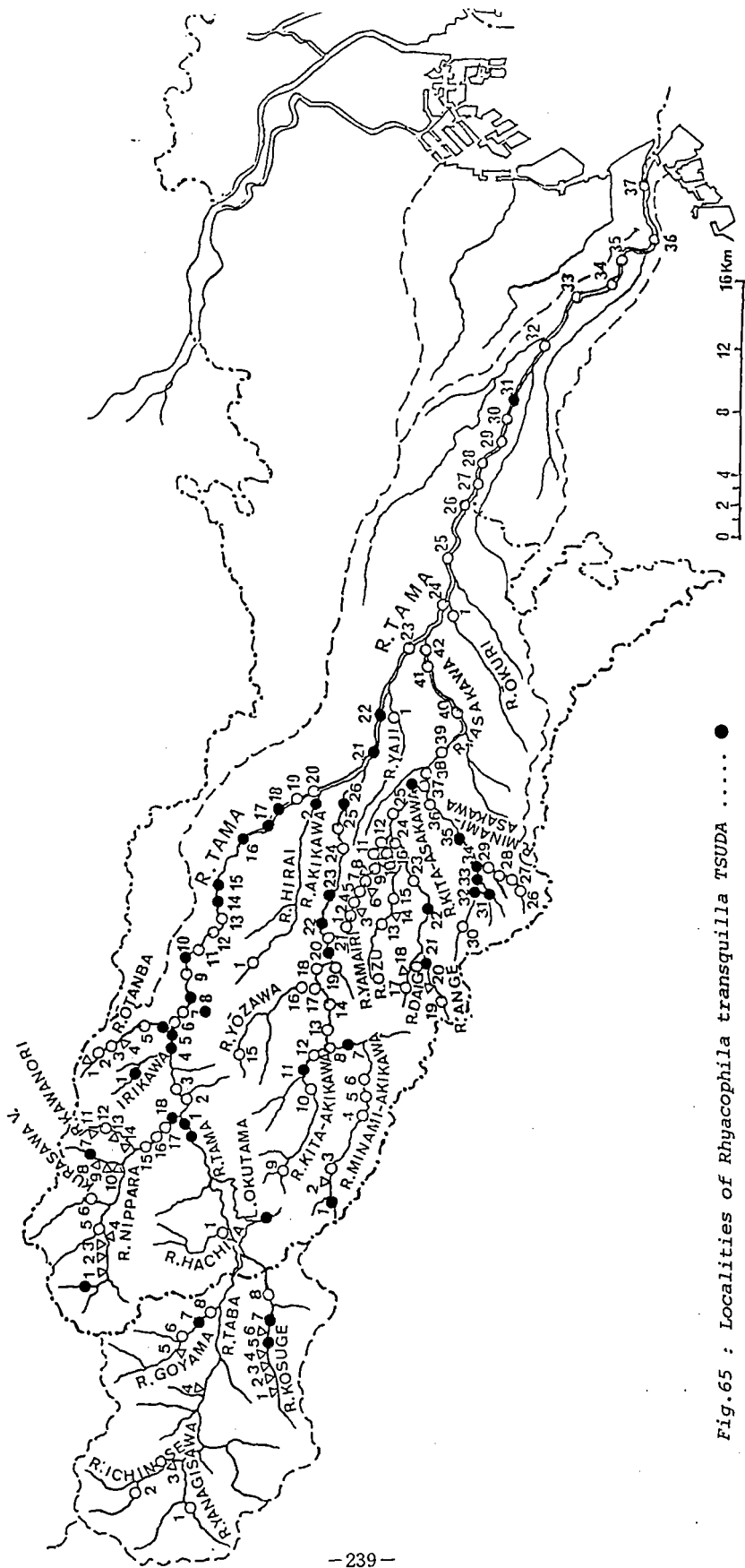


Fig.65 : Localities of *Rhyacophila transquilla* TSUDA ●

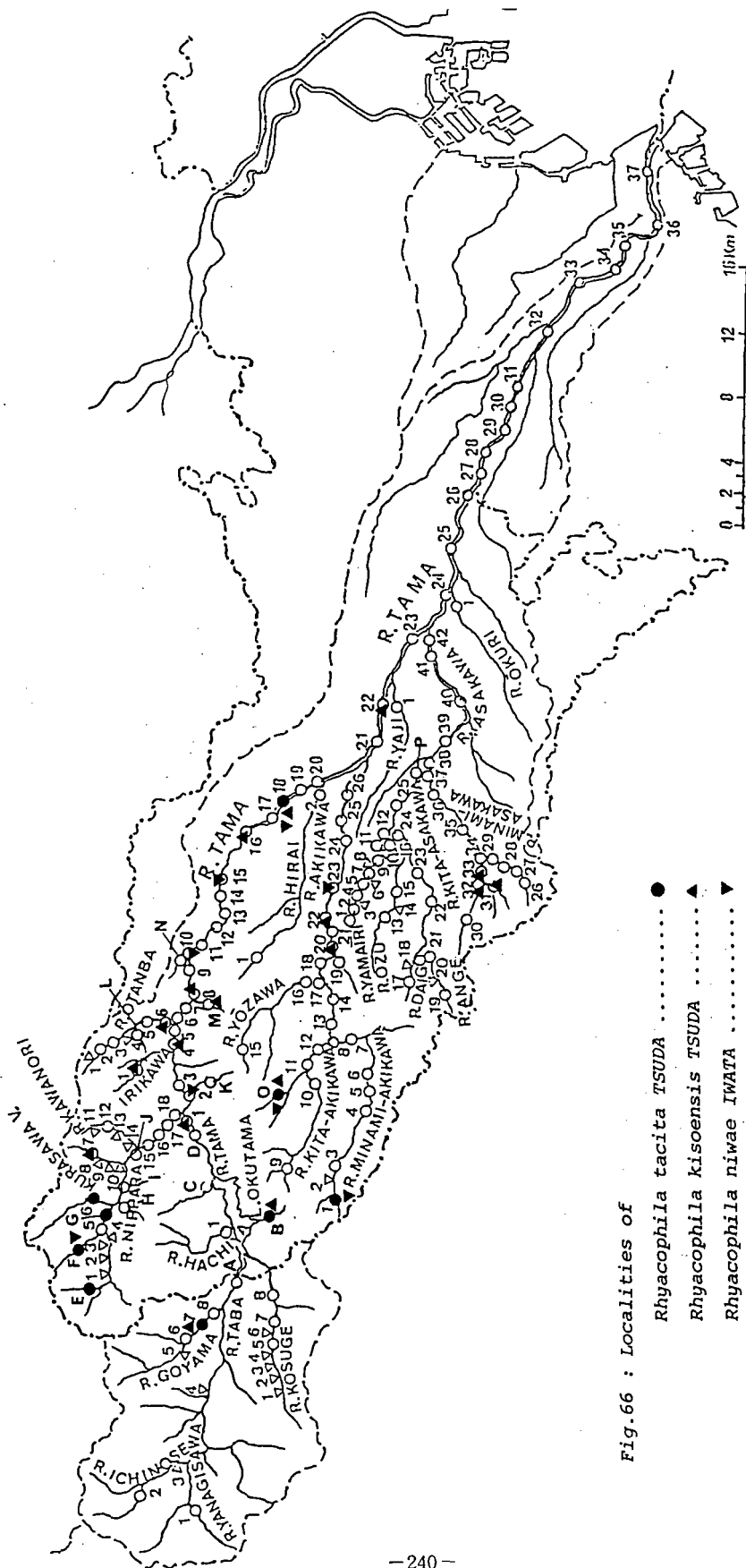


Fig.66 : Localities of

- Rhyacophila tacita TSUDA ●
- Rhyacophila kisoensis TSUDA ▲
- Rhyacophila niwae IWATA ▼

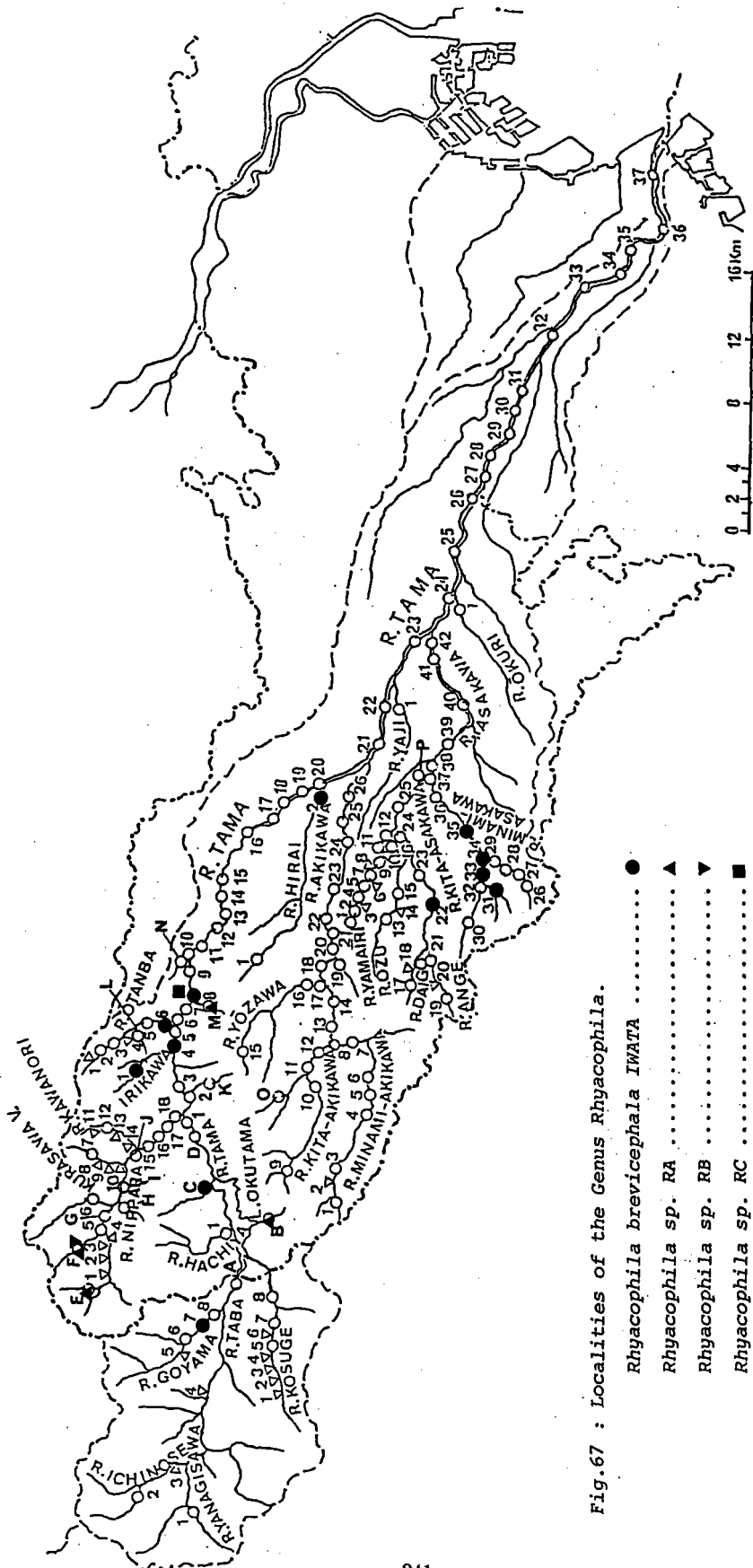


Fig.67 : Localities of the Genus *Rhyacophila*.

- Rhyacophila brevicephala iwata*
- Rhyacophila sp. RA*
- Rhyacophila sp. RB*
- Rhyacophila sp. RC*

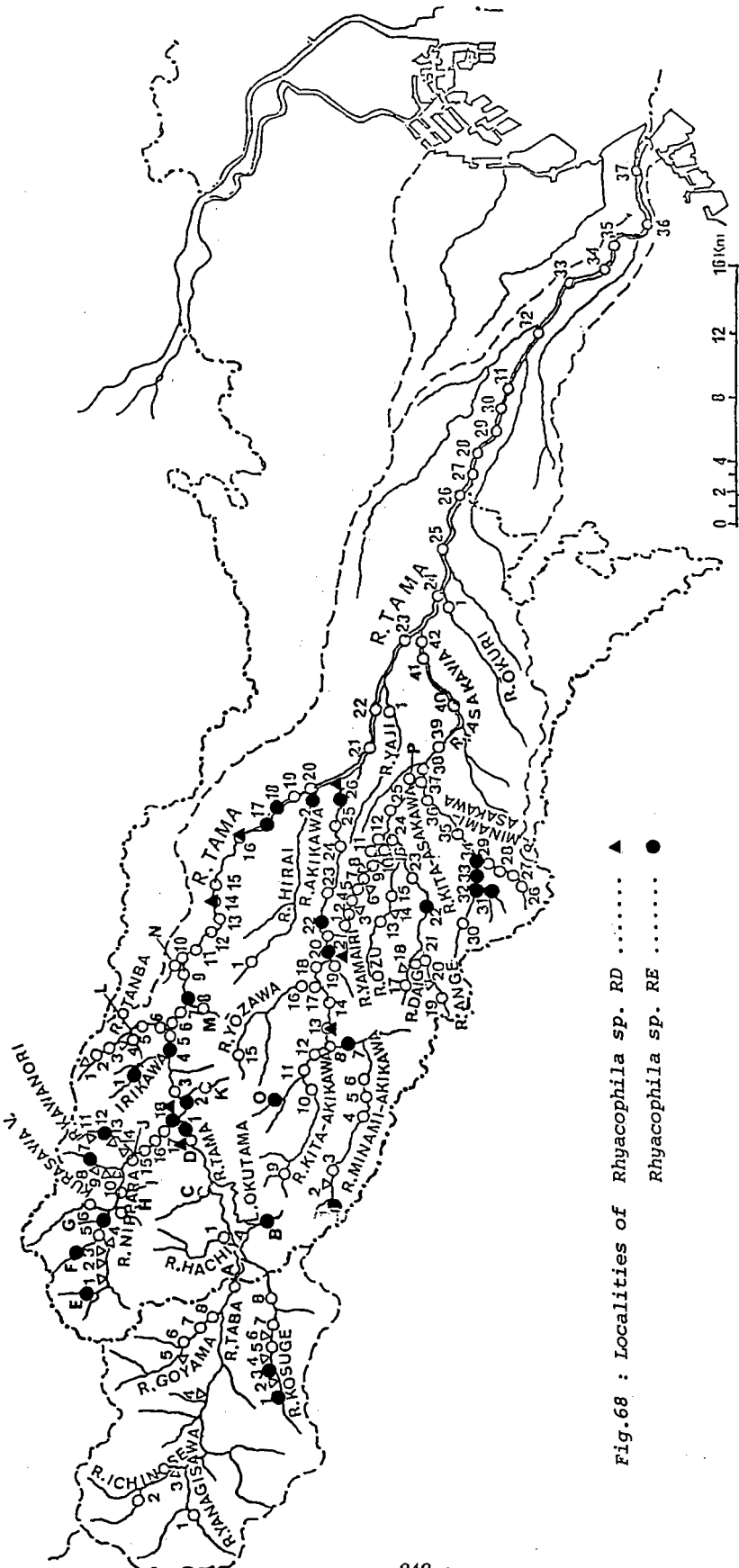


Fig.68 : Localities of *Rhyacophila* sp. RD ▲
Rhyacophila sp. RE ●

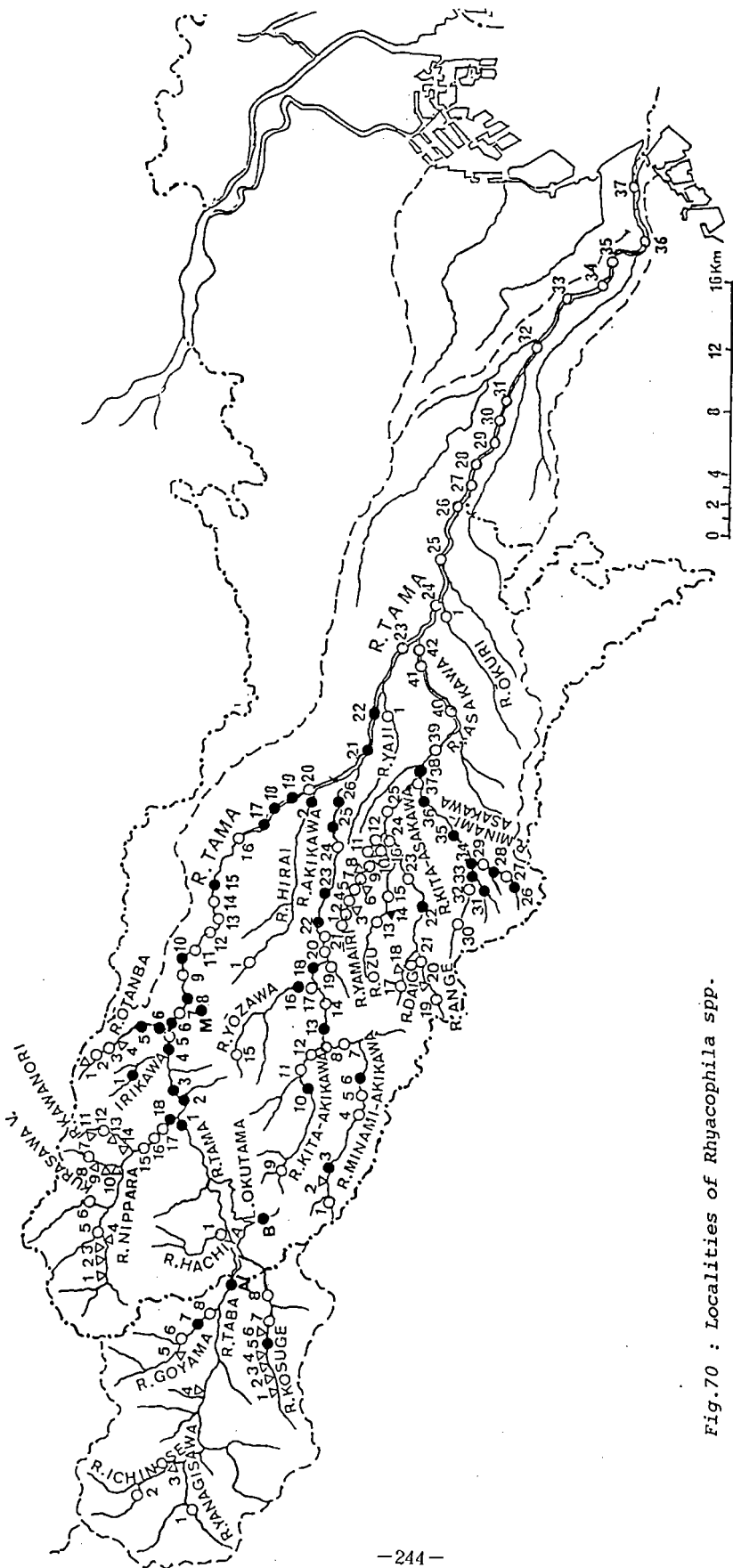


Fig. 70 : Localities of *Rhyacophila* spp.

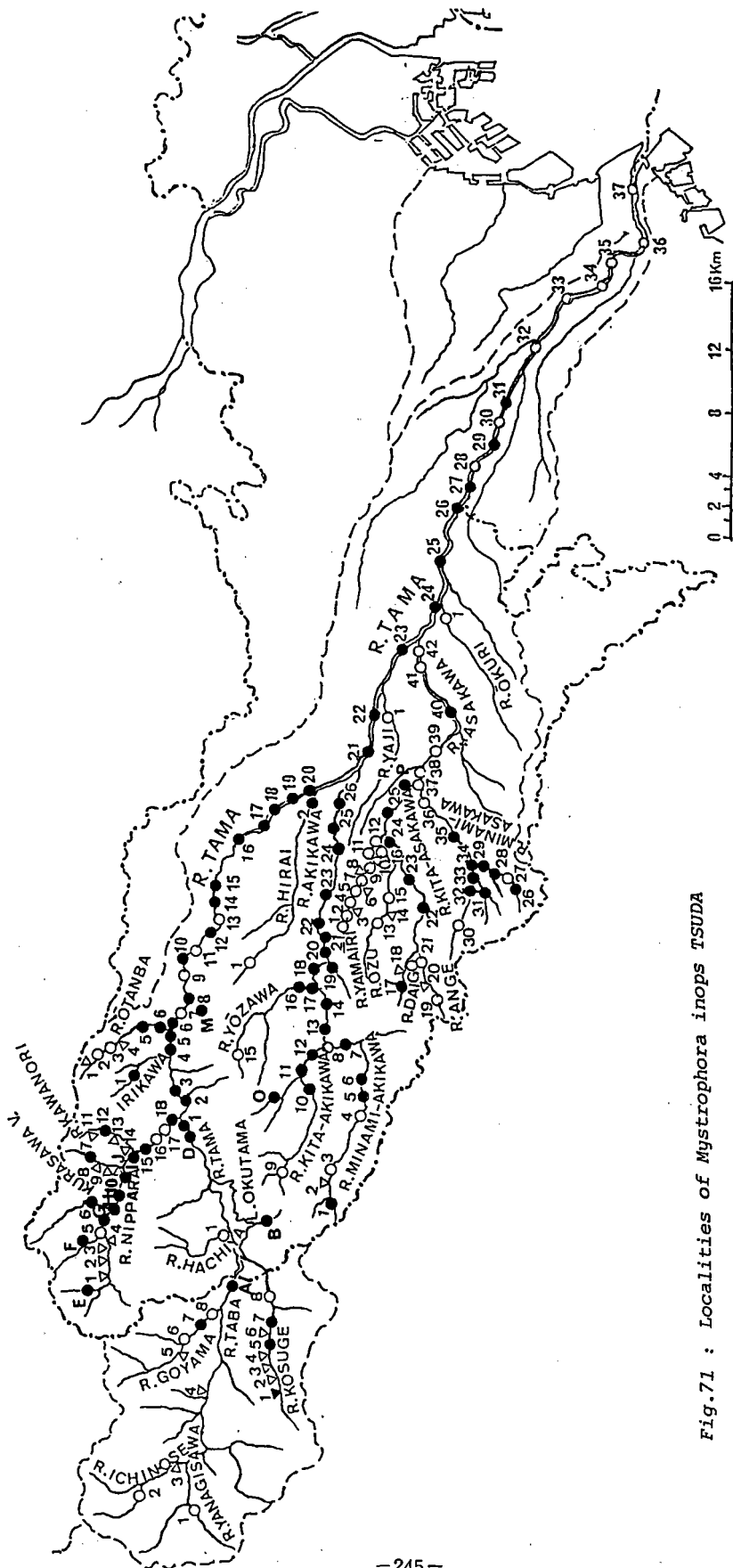


Fig.71 : Localities of *Mystrophora inops tsuda*

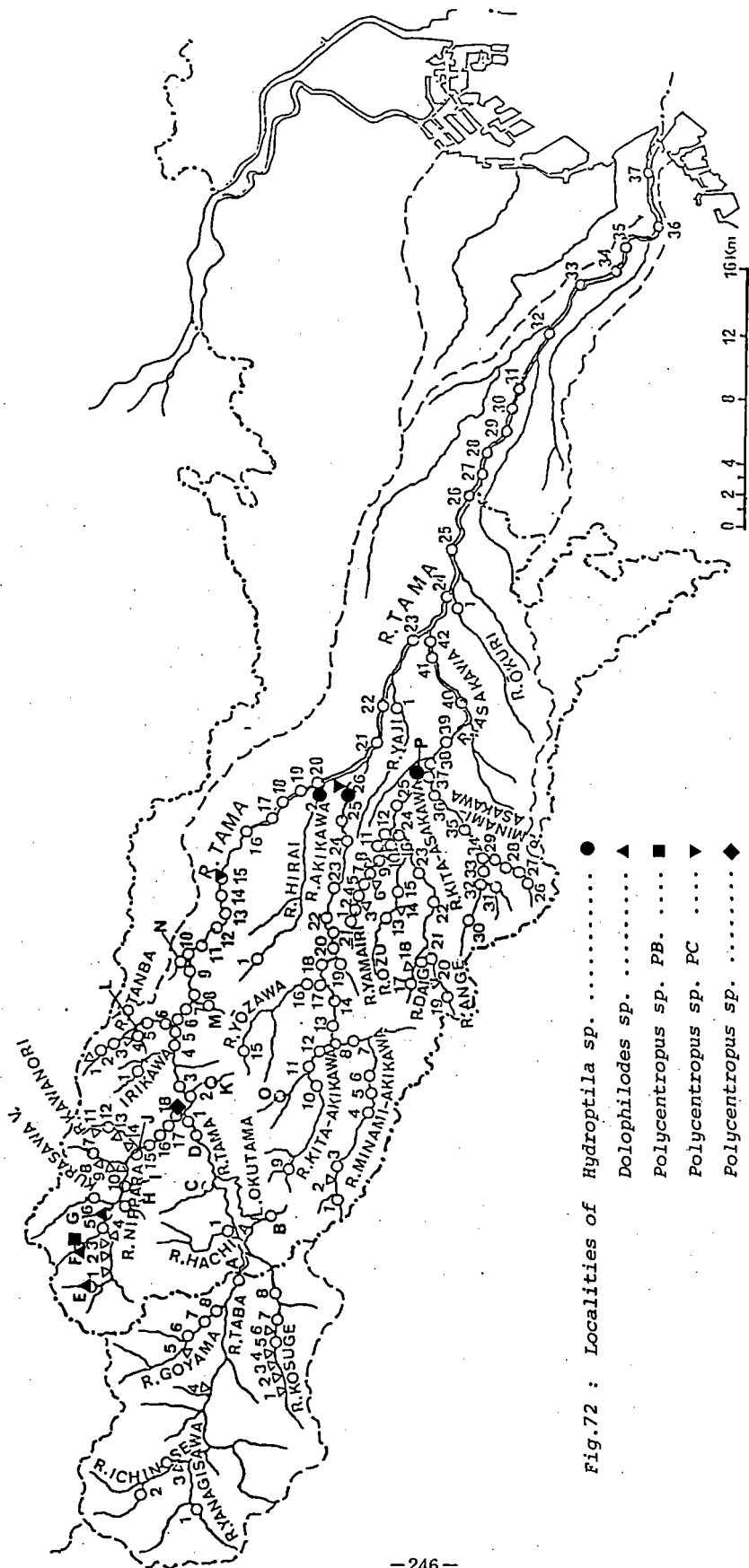


Fig. 72 : Localities of *Hydroptila sp.* ●
Dolophilodes sp. ▲
Polycentropus sp. PB. ■
Polycentropus sp. PC. ▼
Polycentropus sp. ◆

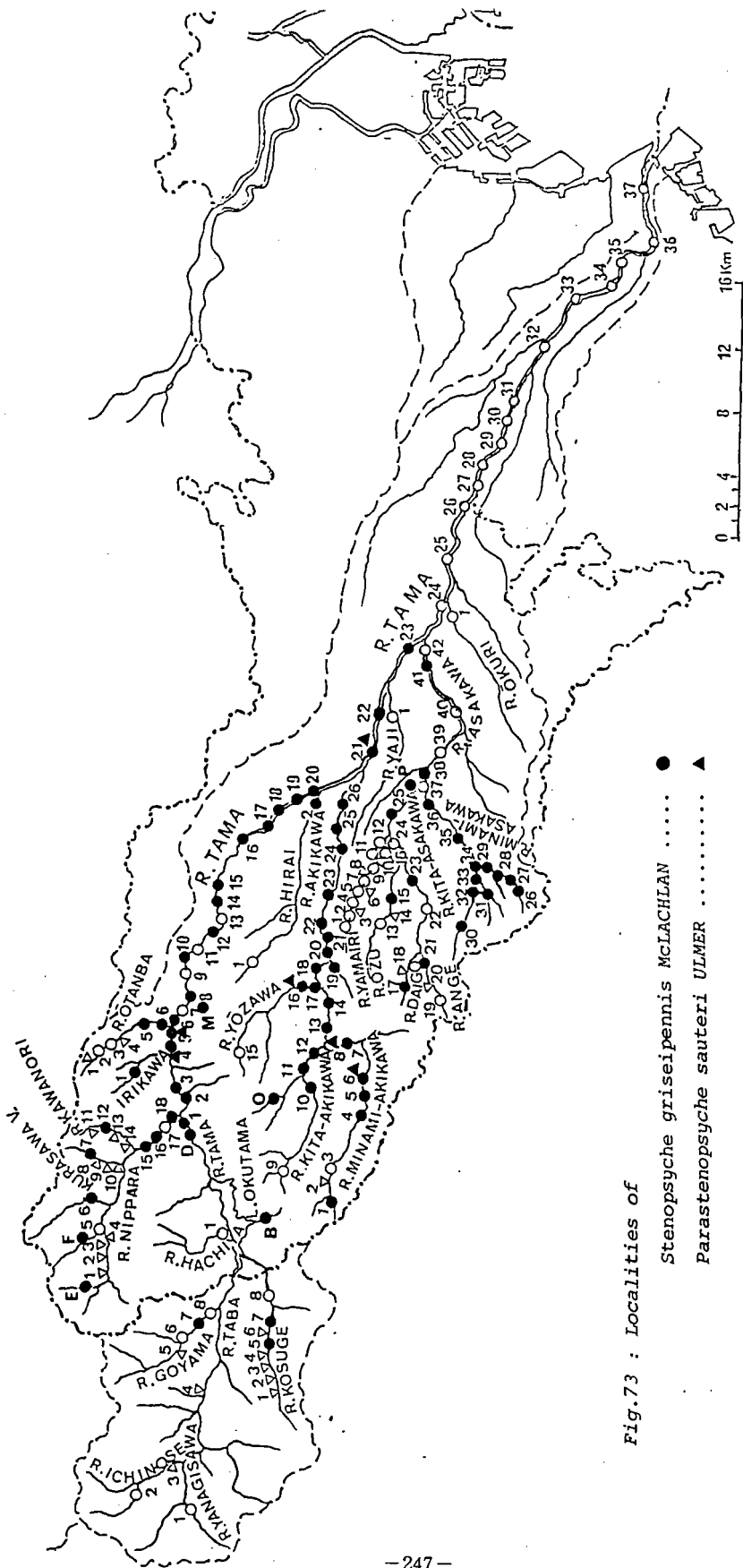


Fig.73 : Localities of

- Stenopsyche griseipennis MCLACHLAN ●
- Paratenopsyche sauteri ULMER ▲

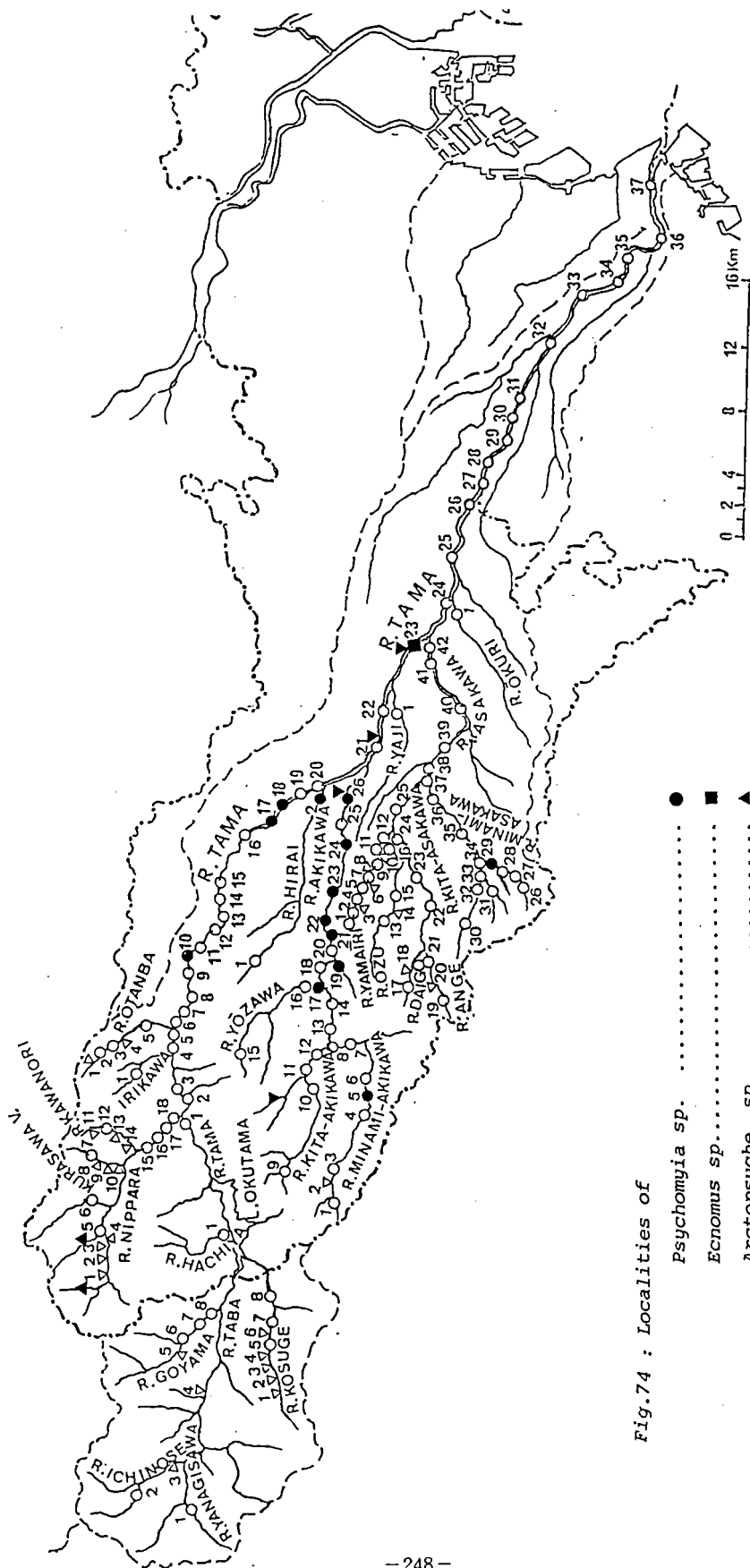


Fig.74 : Localities of

- *Psychomyia* sp.
- *Ecnomus* sp.
- ▲ *Arctopsyche* sp.
- ▼ *Macronema radiatum* McLACHLAN

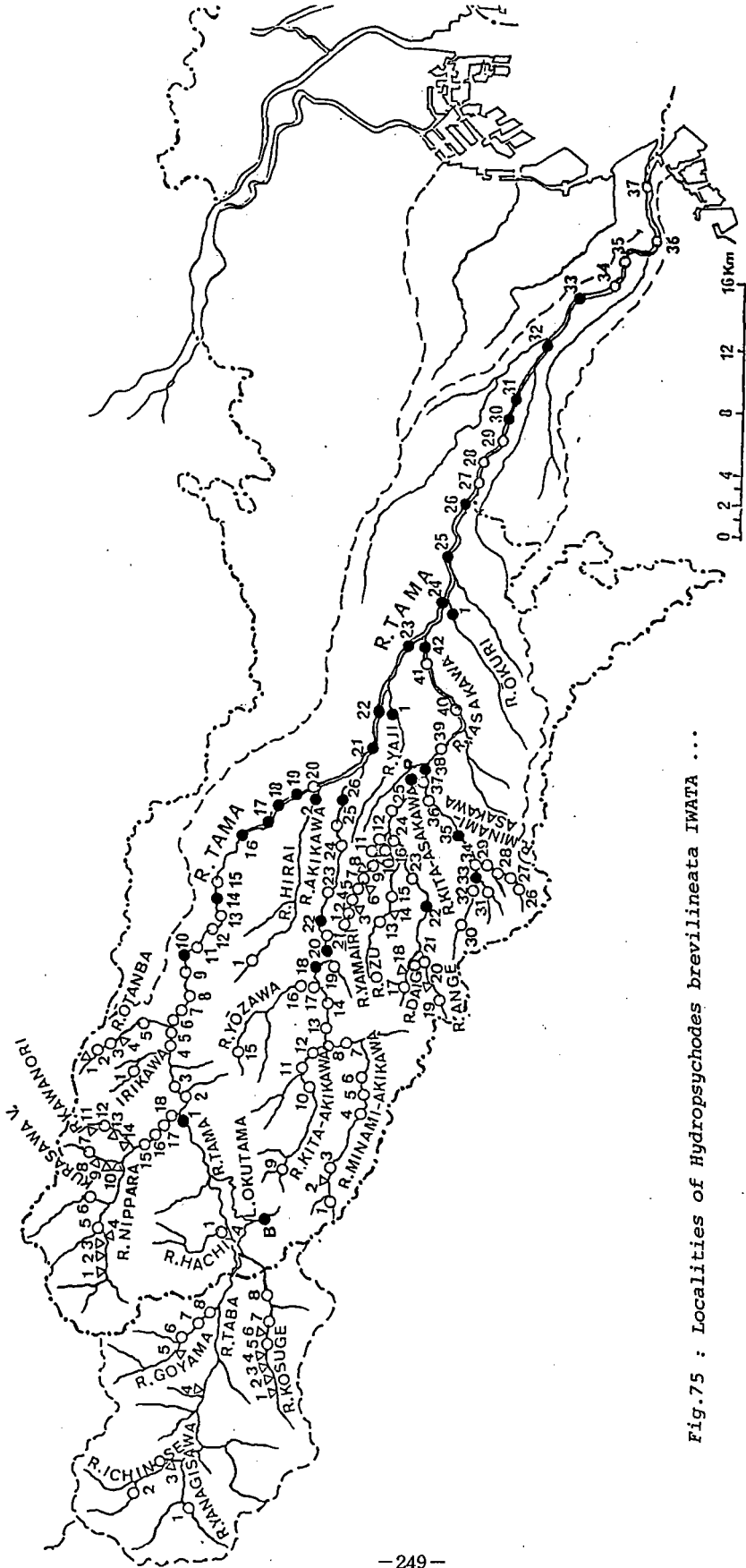


Fig.75 : Localities of *Hydropsychodes brevilineata* IWATA ...

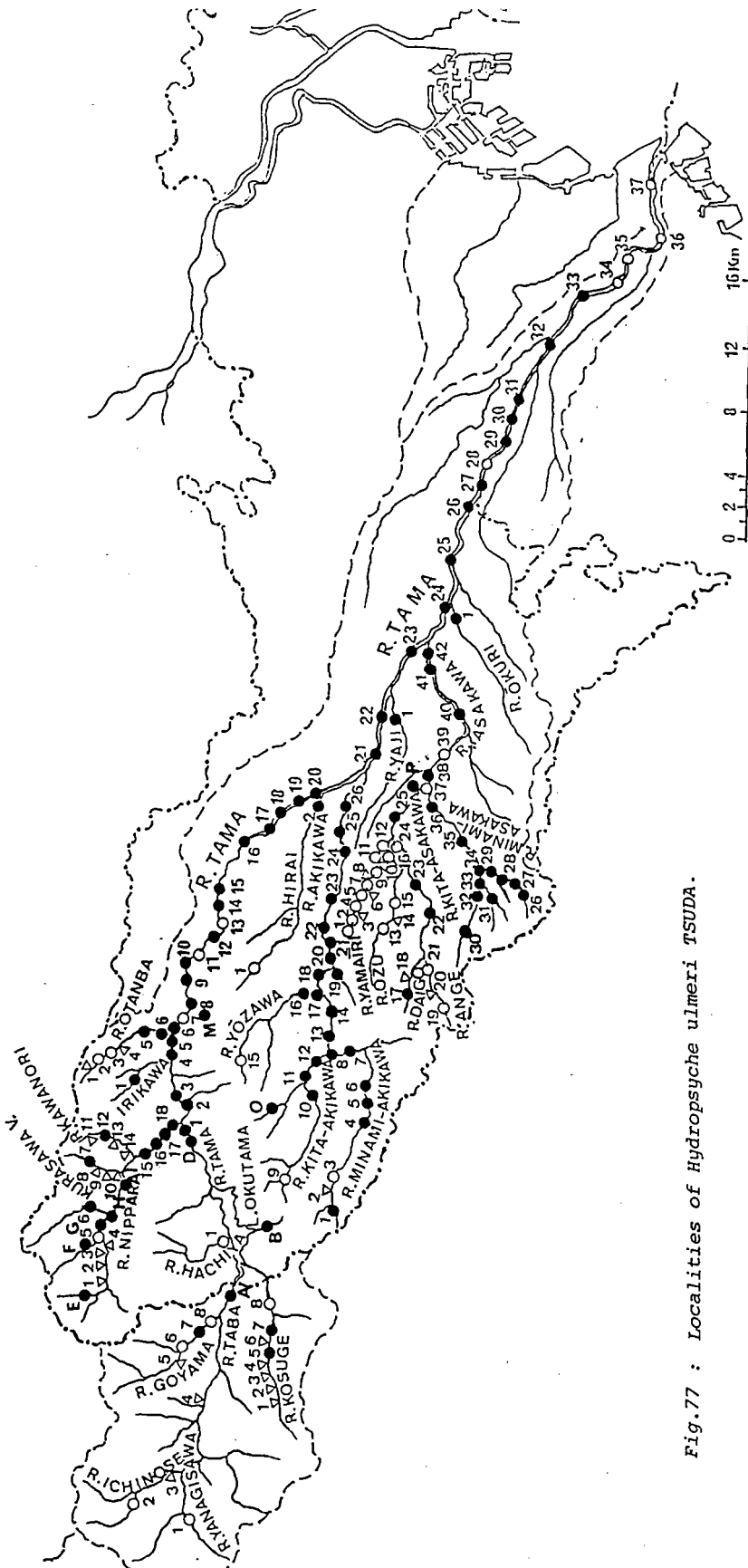


Fig.77 : Localities of *Hydropsyche ulmeri* TSUDA.

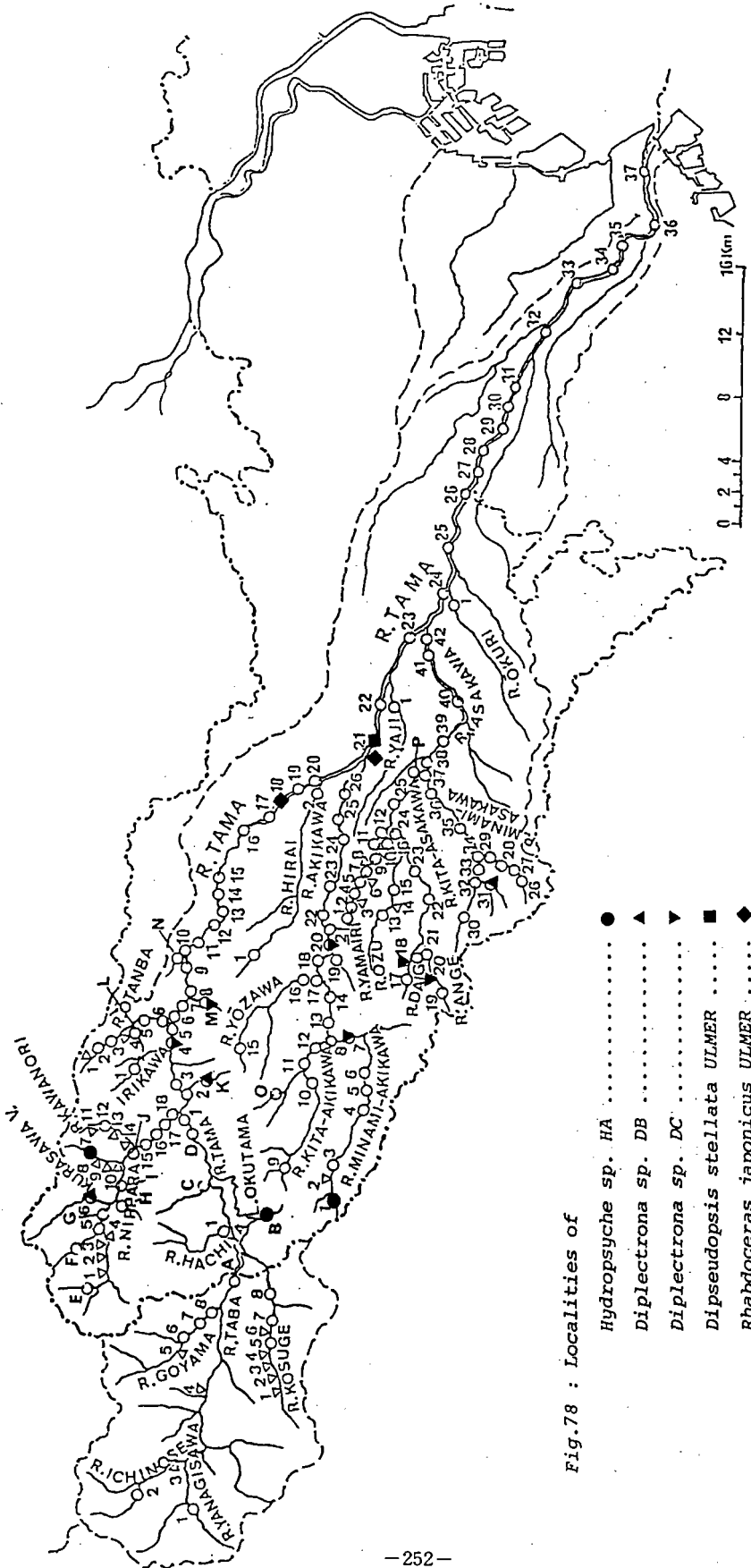


Fig.78 : Localities of

- Hypsocyche sp. HA ●
- Diploptera sp. DB ▲
- Diploptera sp. DC ▼
- Diploptera stellata ULMER ■
- Rhabdoceras japonicus ULMER ◆

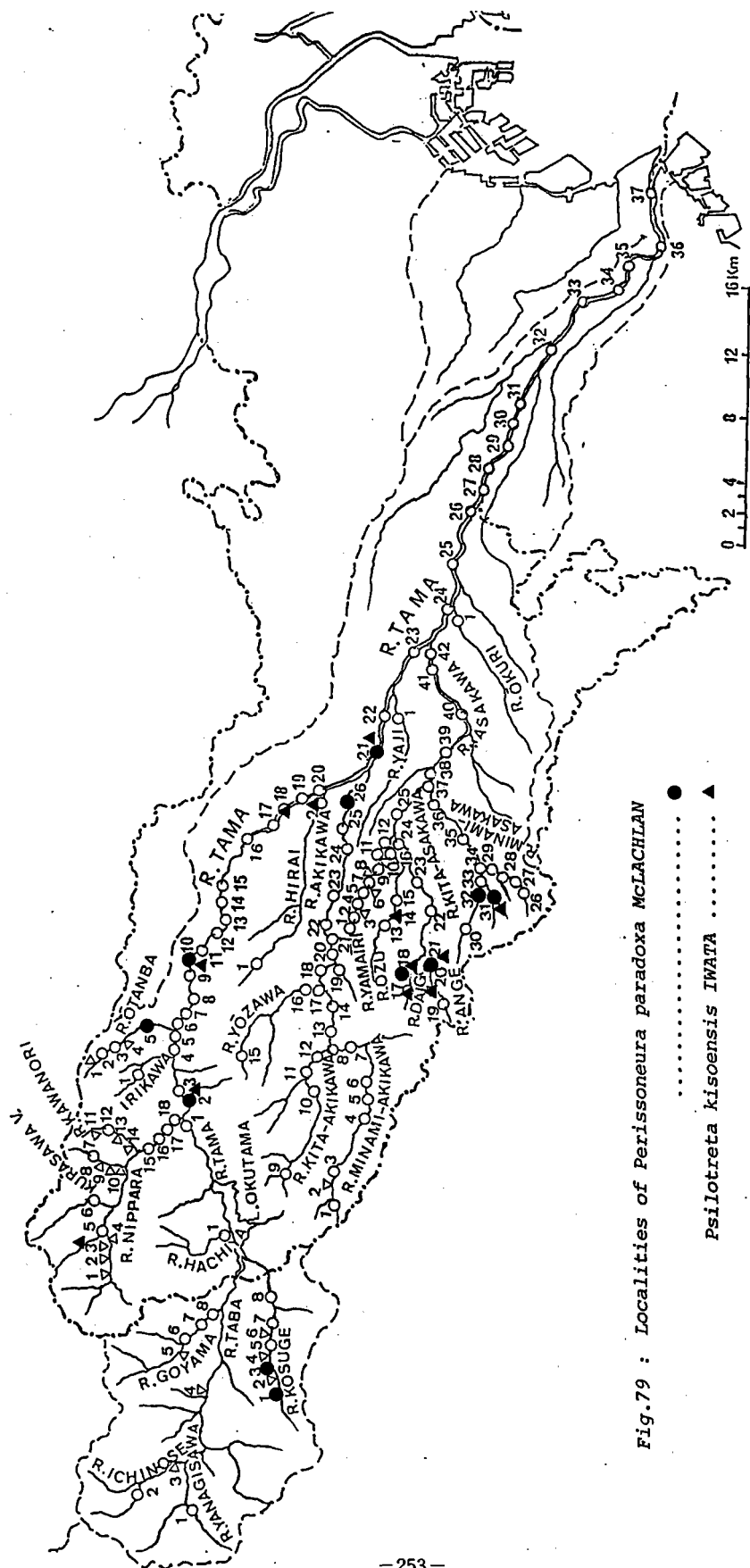


Fig.79 : Localities of *Perisoneura paradoxa* McLACHLAN

●

 ▲

 Psilotreta kisoensis IWATA

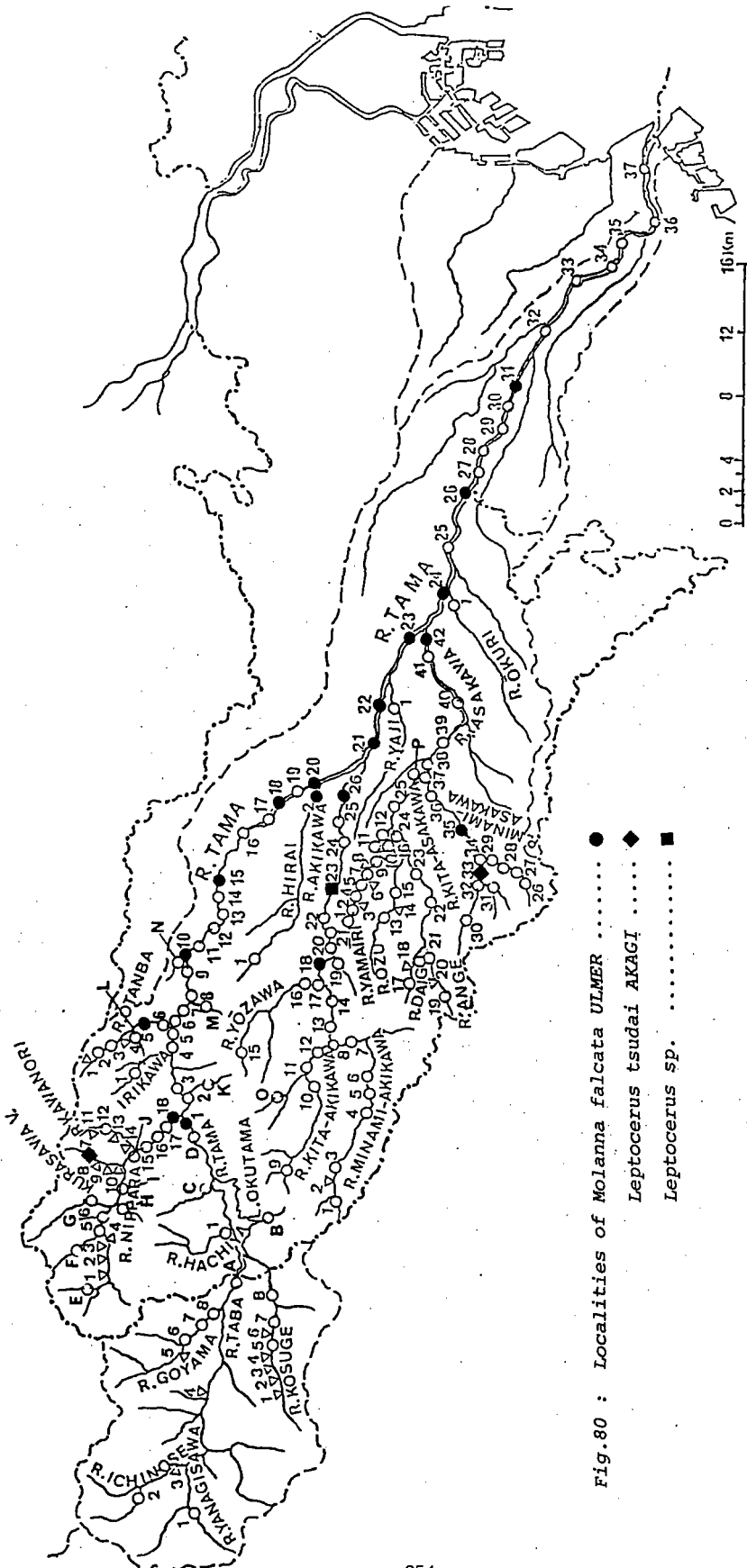


Fig.80 : Localities of *Molanna falcata* ULMER ●
Leptocercus tsudai AKAGI ◆
Leptocercus sp. ■

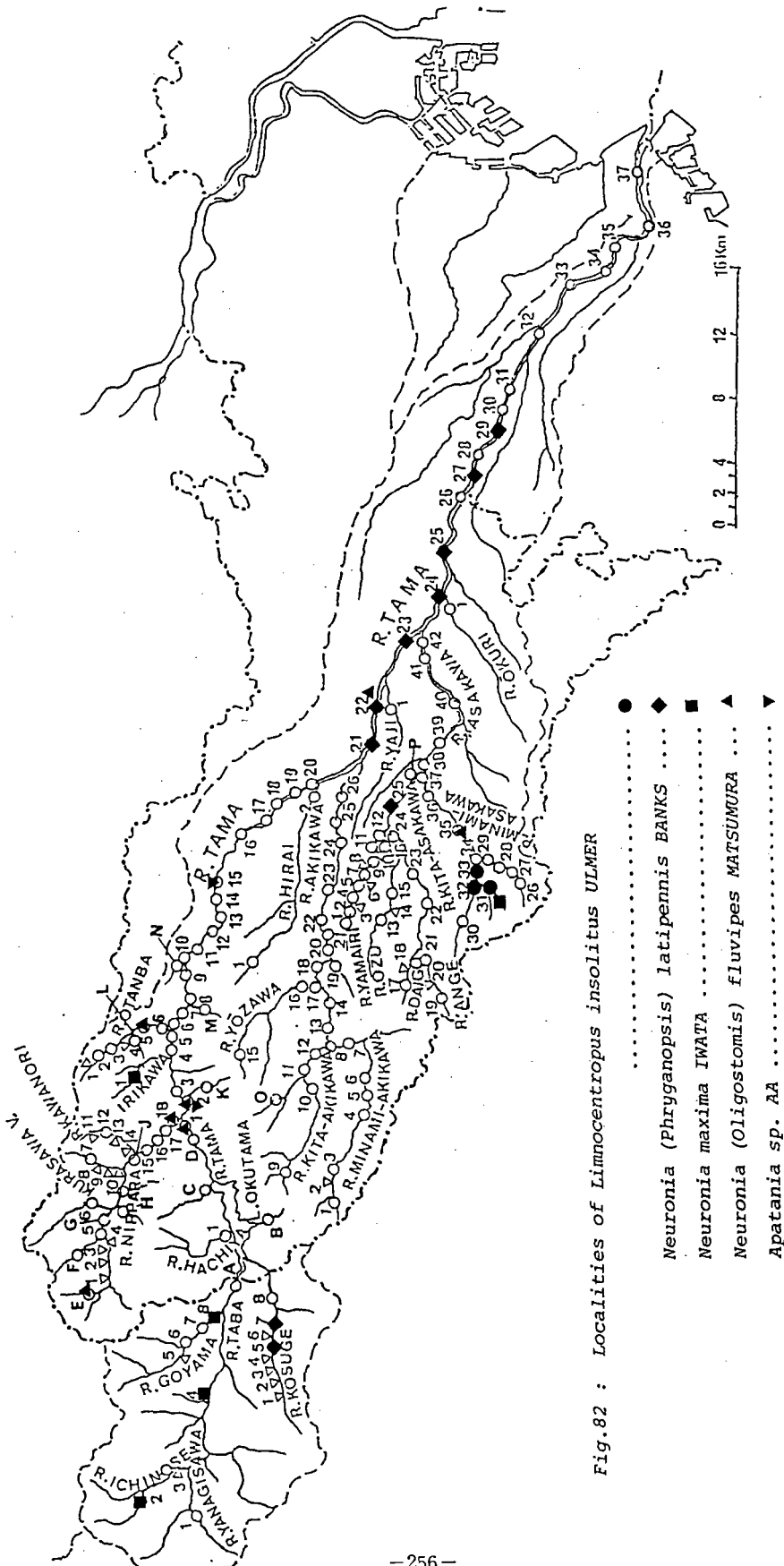


Fig. 82 : Localities of *Limnocentropus insolitus* ULMER

- ●
 - ◆
 - ■
 - ▲
 - ▼
- Neuronia (Phryganopsis) latipennis* BANKS
Neuronia maxima IWATA
Neuronia (Oligostomis) fluvipes MATSUMURA
Apatania sp. AA

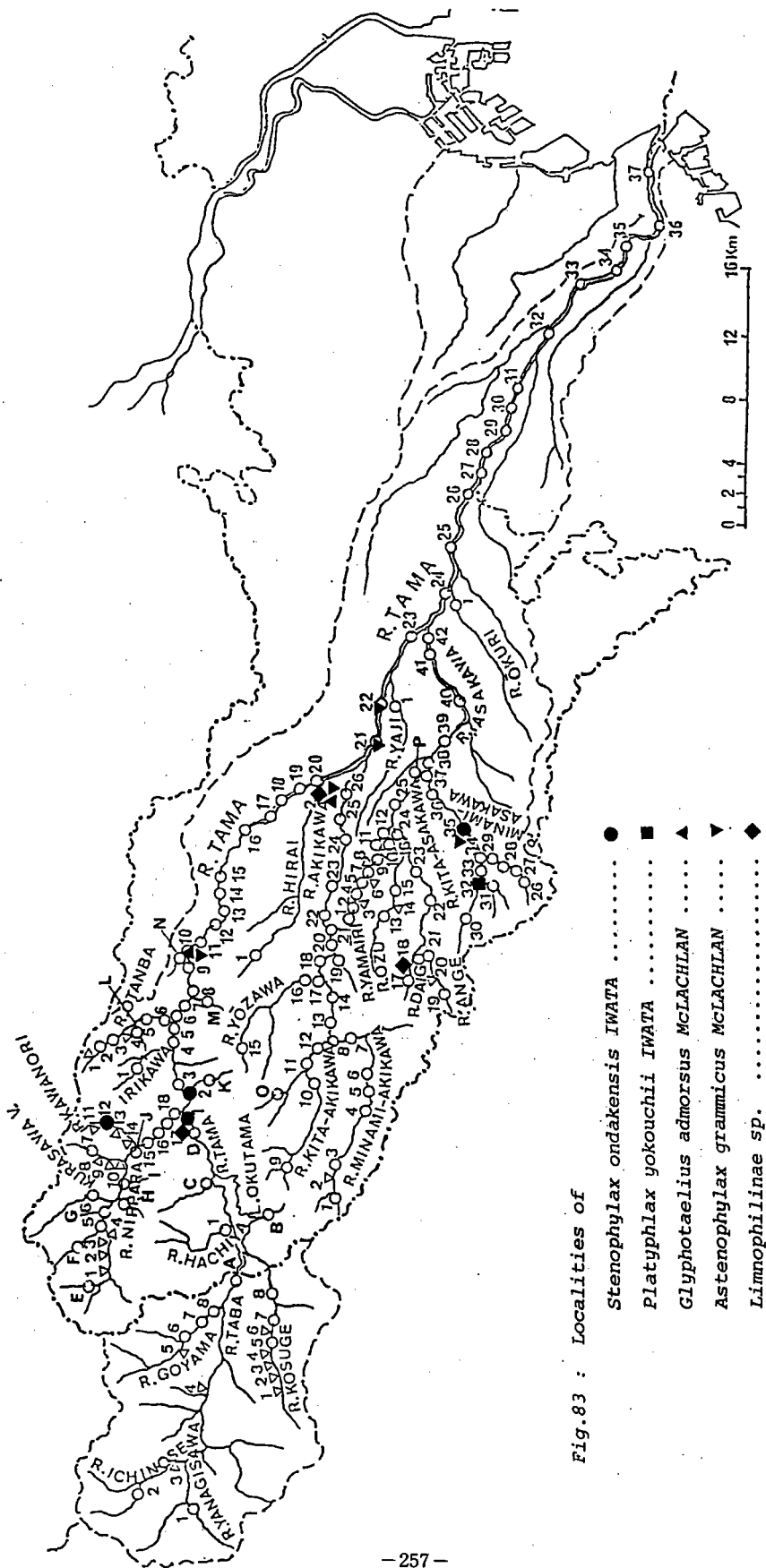


Fig.83 : Localities of

- Stenophylax ondakensis IWATA
- Platyphylax yokouchii IWATA
- ▲ Glyphotaellus admorsus McLACHLAN
- ▼ Astenophylax grammicus McLACHLAN
- ◆ Limnophilinae sp.

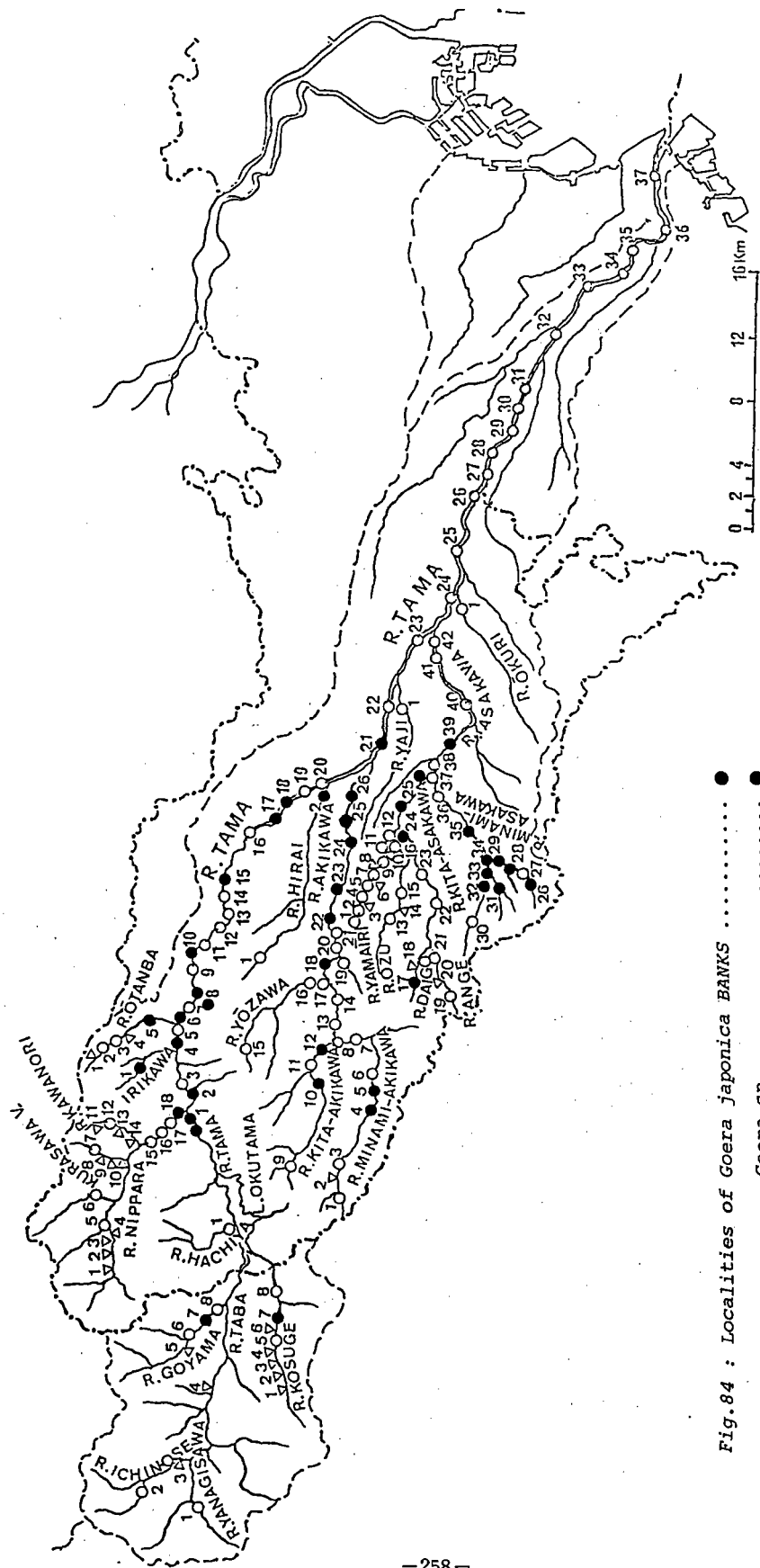


Fig. 84 : Localities of *Goera japonica* BANKS
 Goera sp.

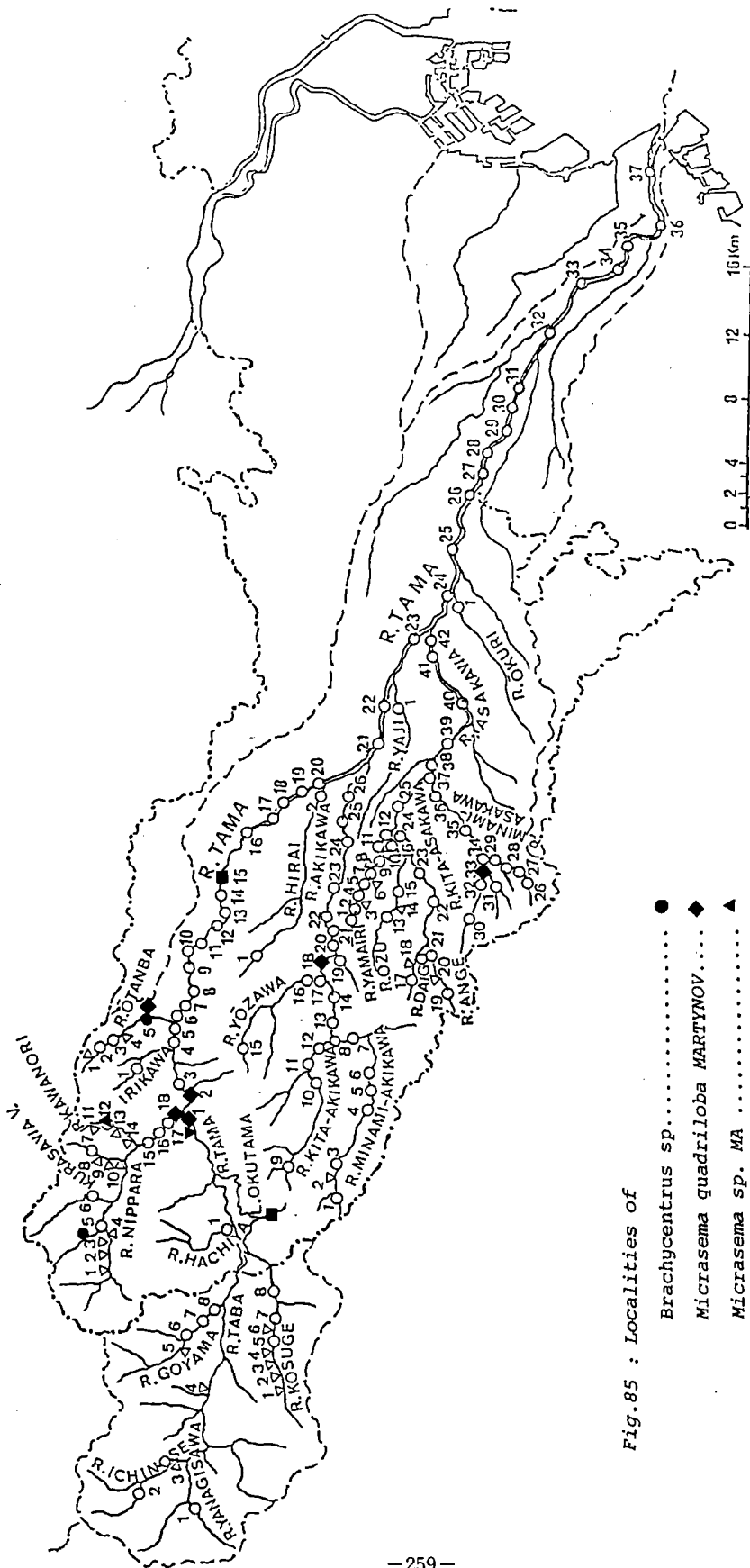


Fig.85 : Localities of

- Brachycentrus sp.
- ◆ Micrasema quadriloba MARTYNOV.
- ▲ Micrasema sp. MA.
- ▼ Micrasema sp. MB.
- Micrasema sp.

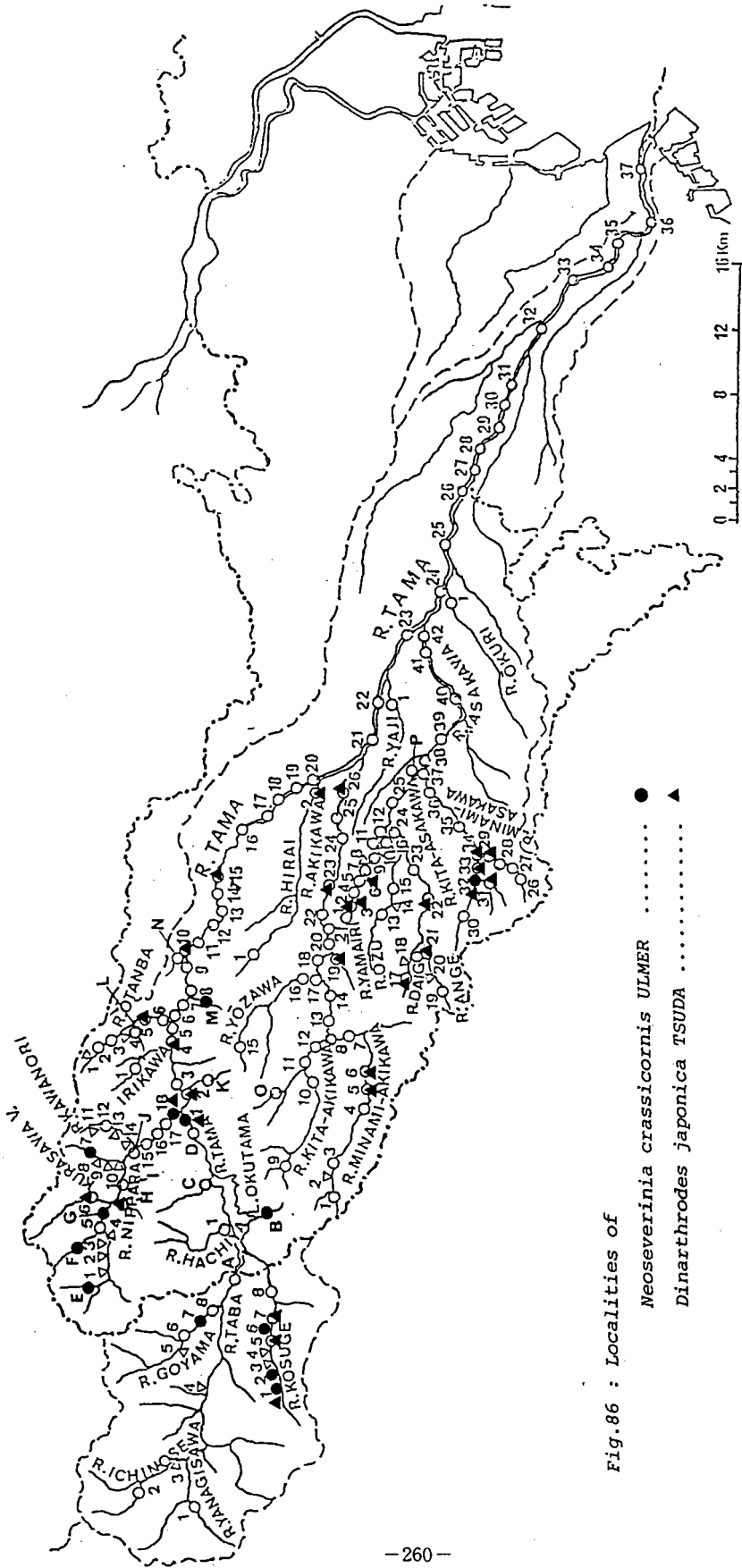


Fig. 86 : Localities of

Neoseverinia crassicornis ULMER

Dinarthodes japonica TSUDA

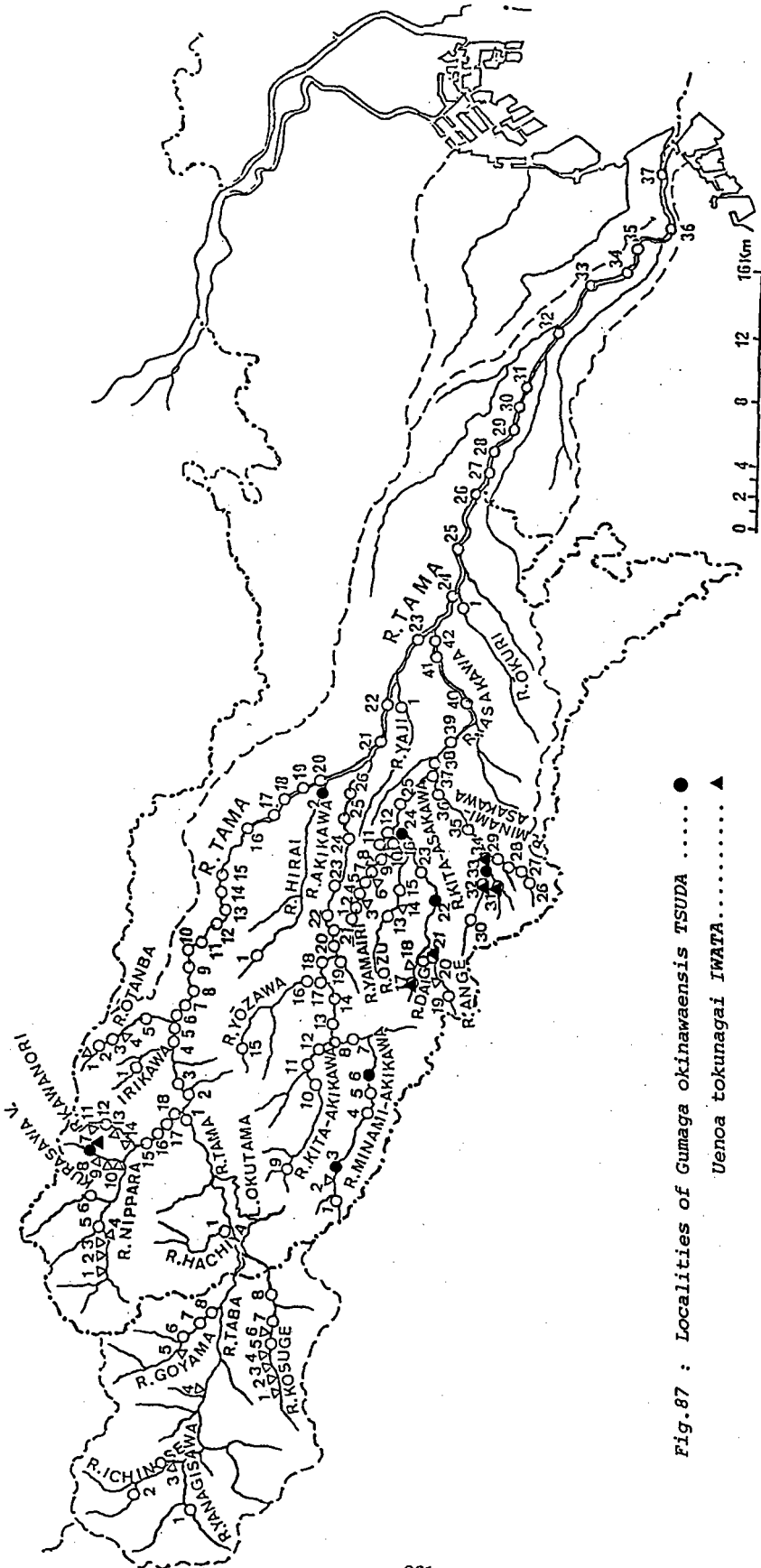


Fig.87 : Localities of *Gumaga okinawaensis* TSUDA ●
Uenoa tokunagai IWATA ▲

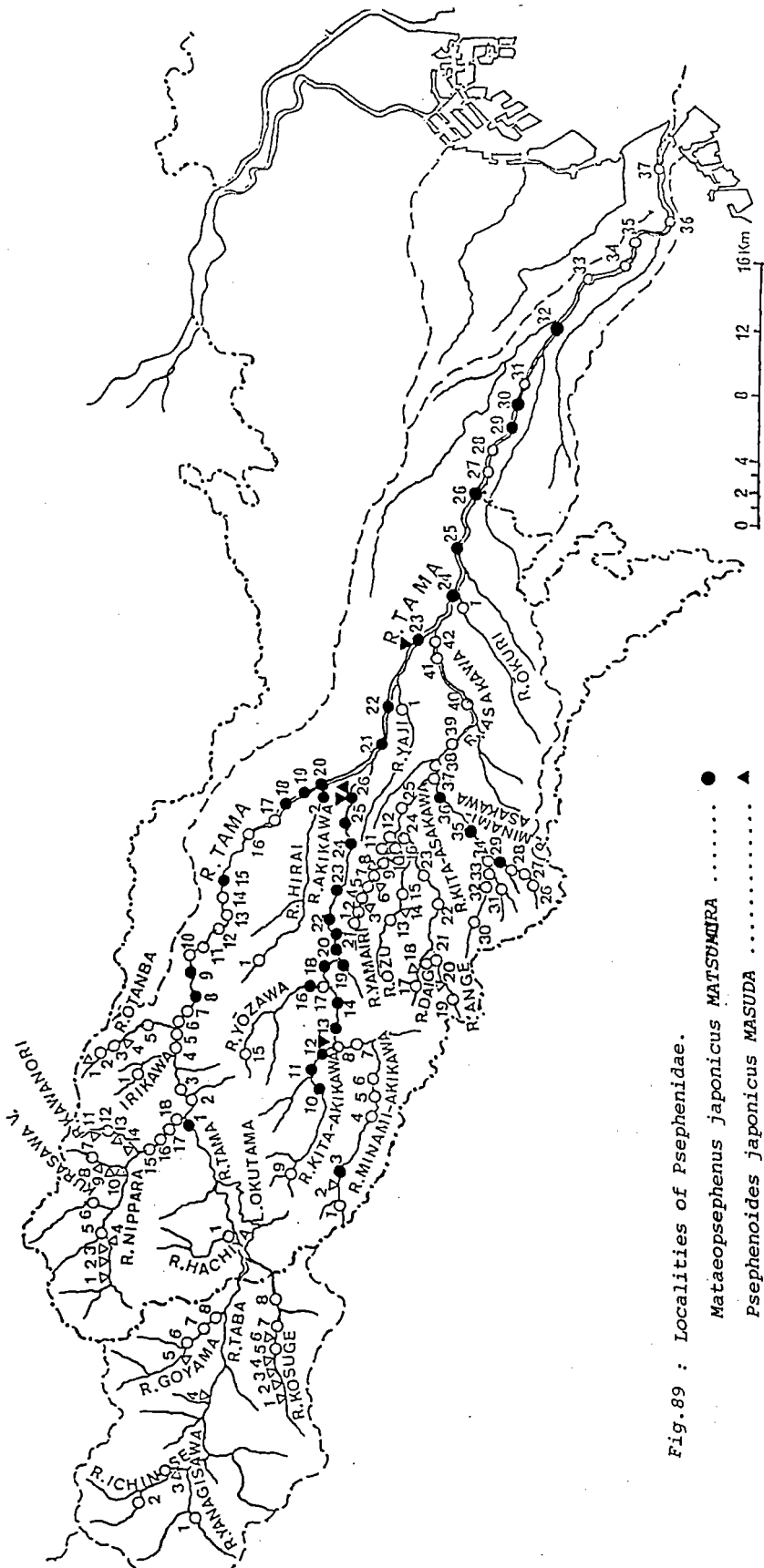


Fig. 89 : Localities of Psephenidae.

- Mataeopsephenus japonicus MATSUMURA
- ▲ Psephenoides japonicus MASUDA
- ▼ Psephenoides sp.

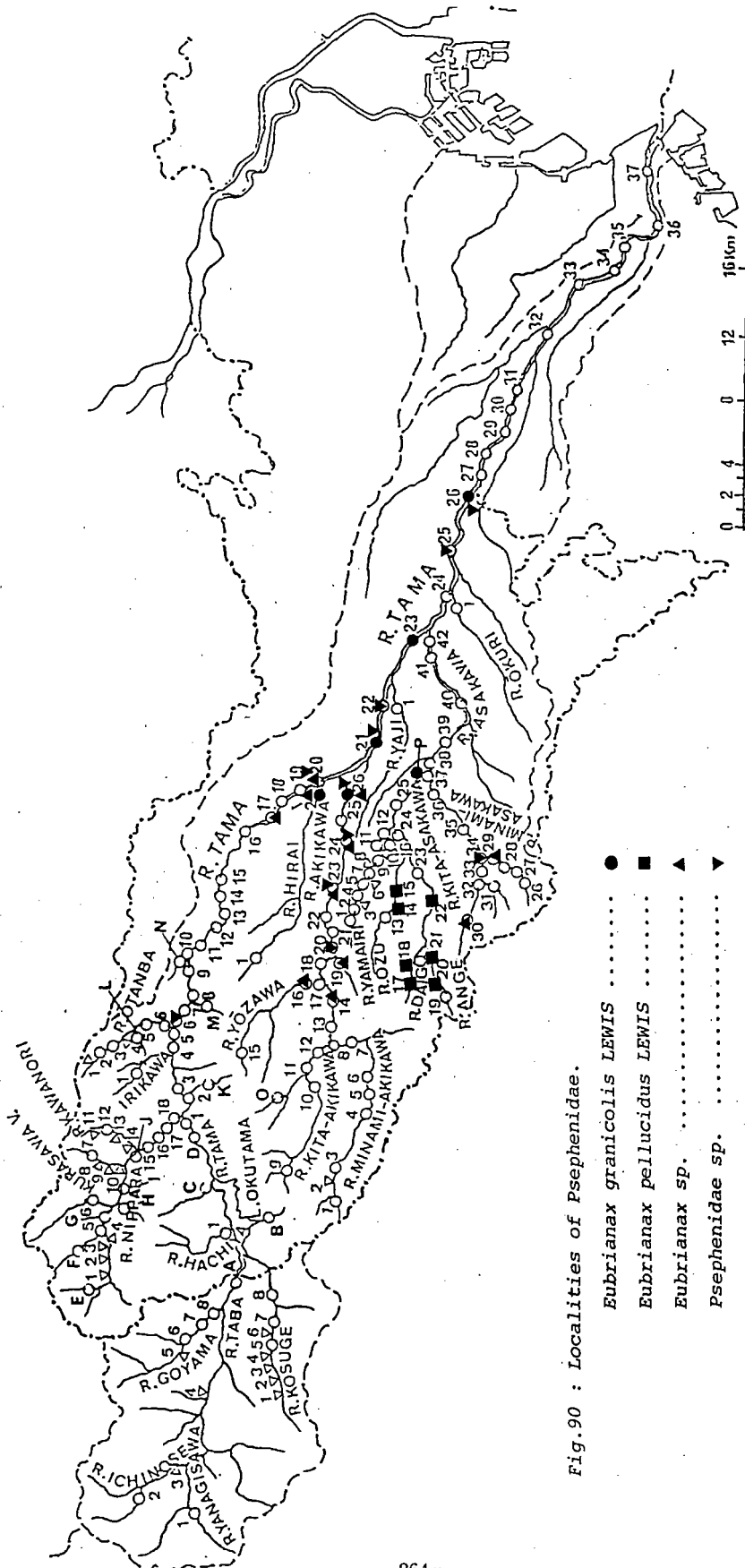


Fig. 90 : Localities of Psephenidae.

- *Eubrianax granicolis* LEWIS
- *Eubrianax pellucidus* LEWIS
- ▲ *Eubrianax* sp.
- ▼ *Psephenidae* sp.

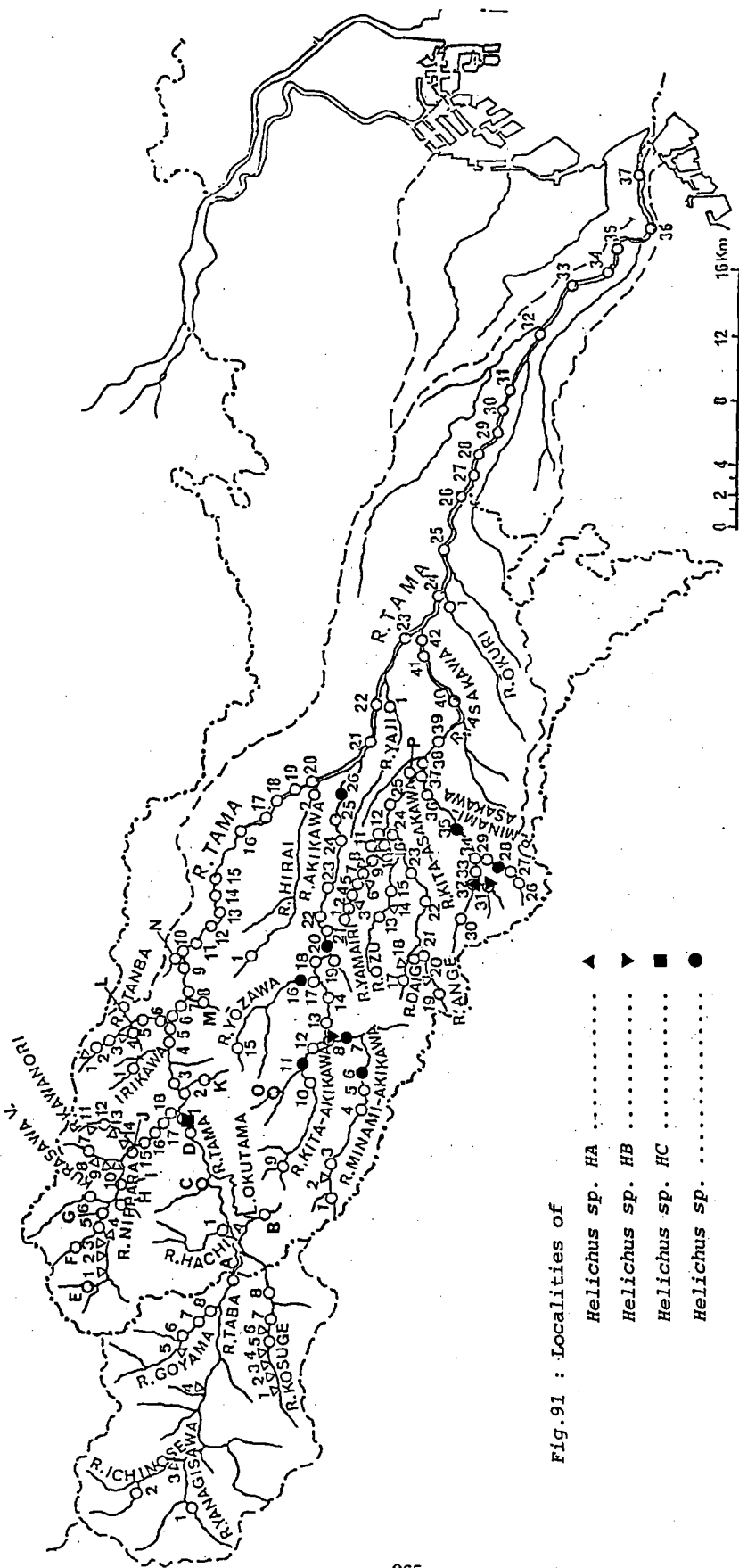


Fig. 91 : Localities of

- Helichus sp. HA ▲
- Helichus sp. HB ▼
- Helichus sp. HC ■
- Helichus sp. ●

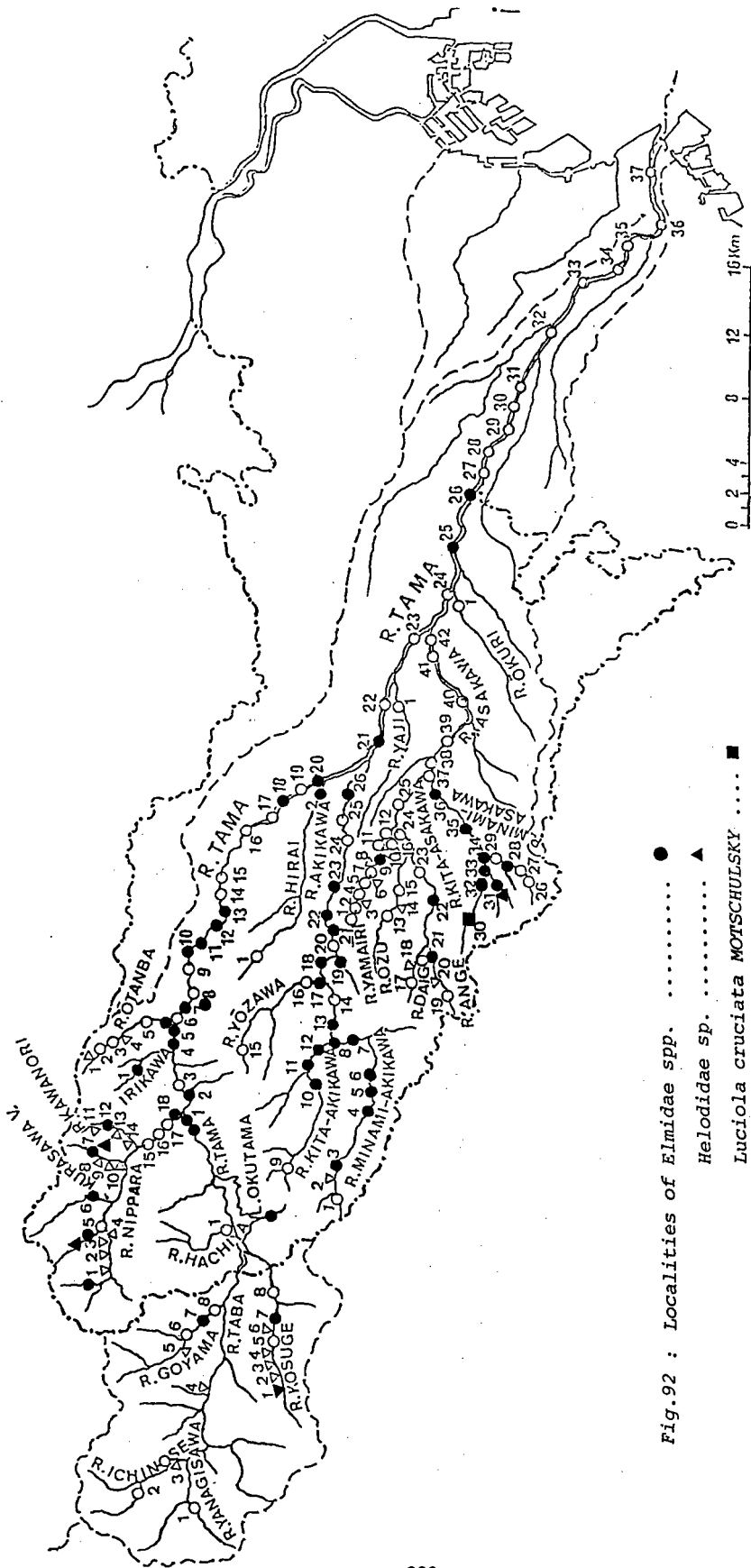


Fig. 92 : Localities of Elmidae spp. ●
 Helodidae sp. ▲
 Luciola cruciata MOTSCHULSKY ■

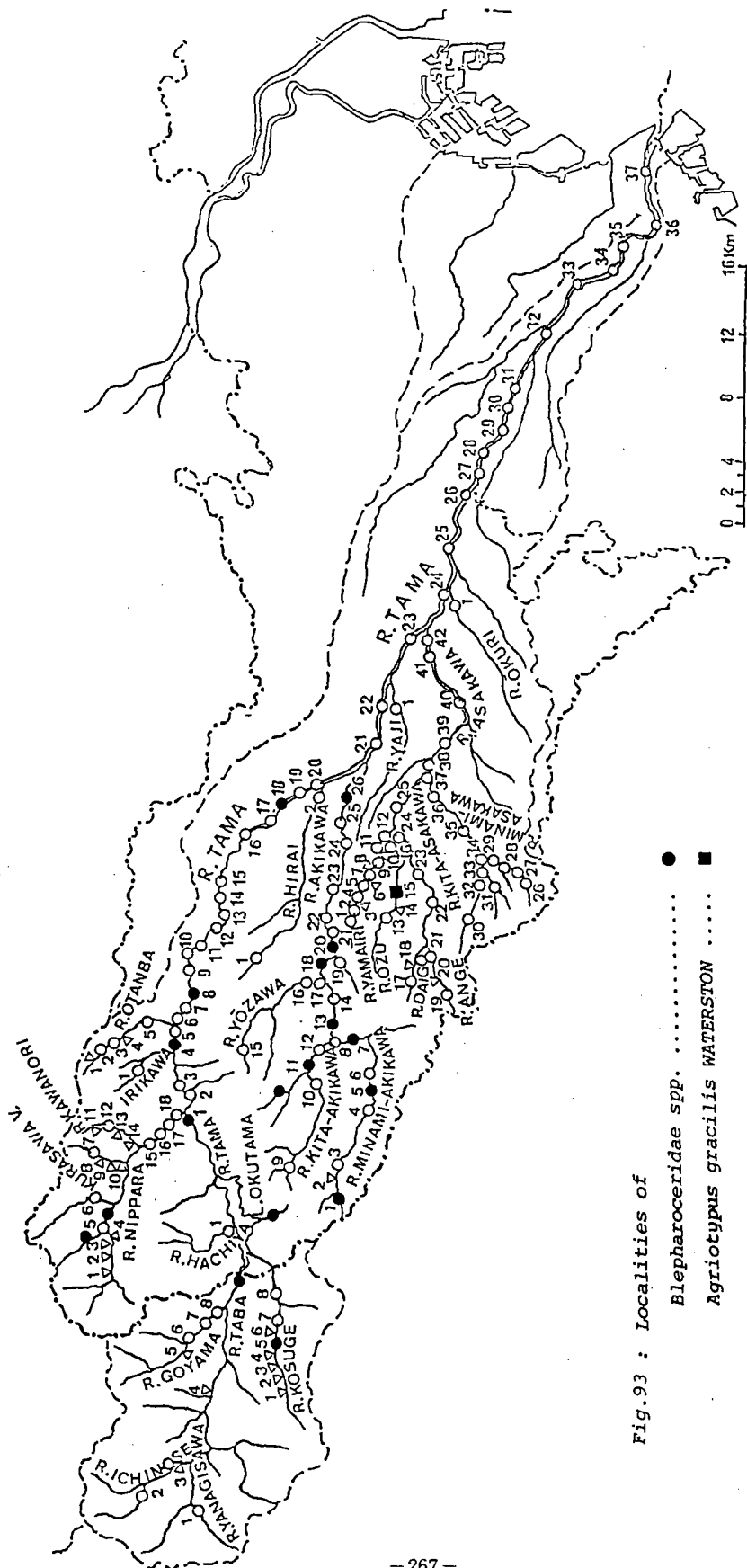


Fig.93 : Localities of

- Blepharoceridae spp.
- Agriotypus gracilis WATERSTON

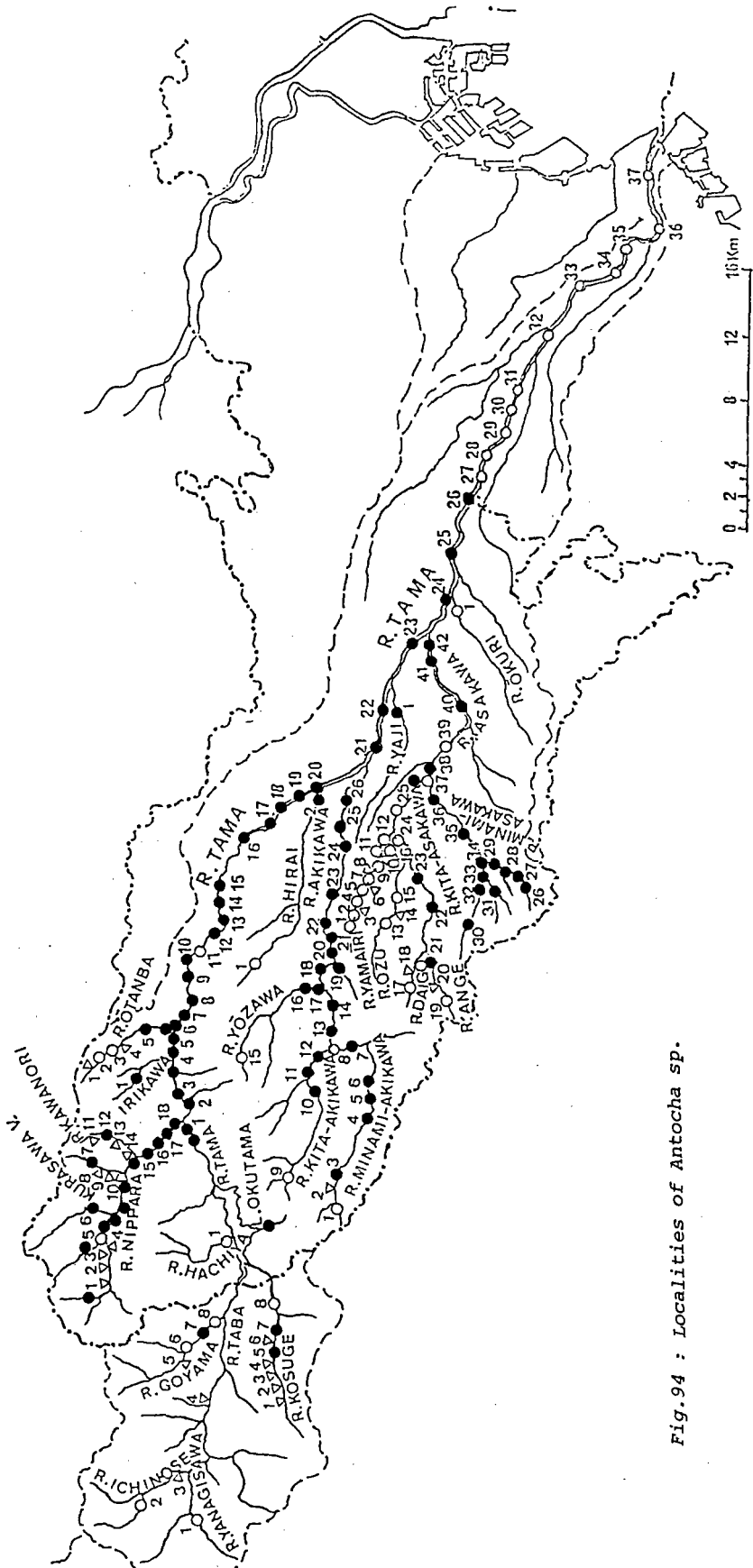


Fig.94 : Localities of *Antocha sp.*

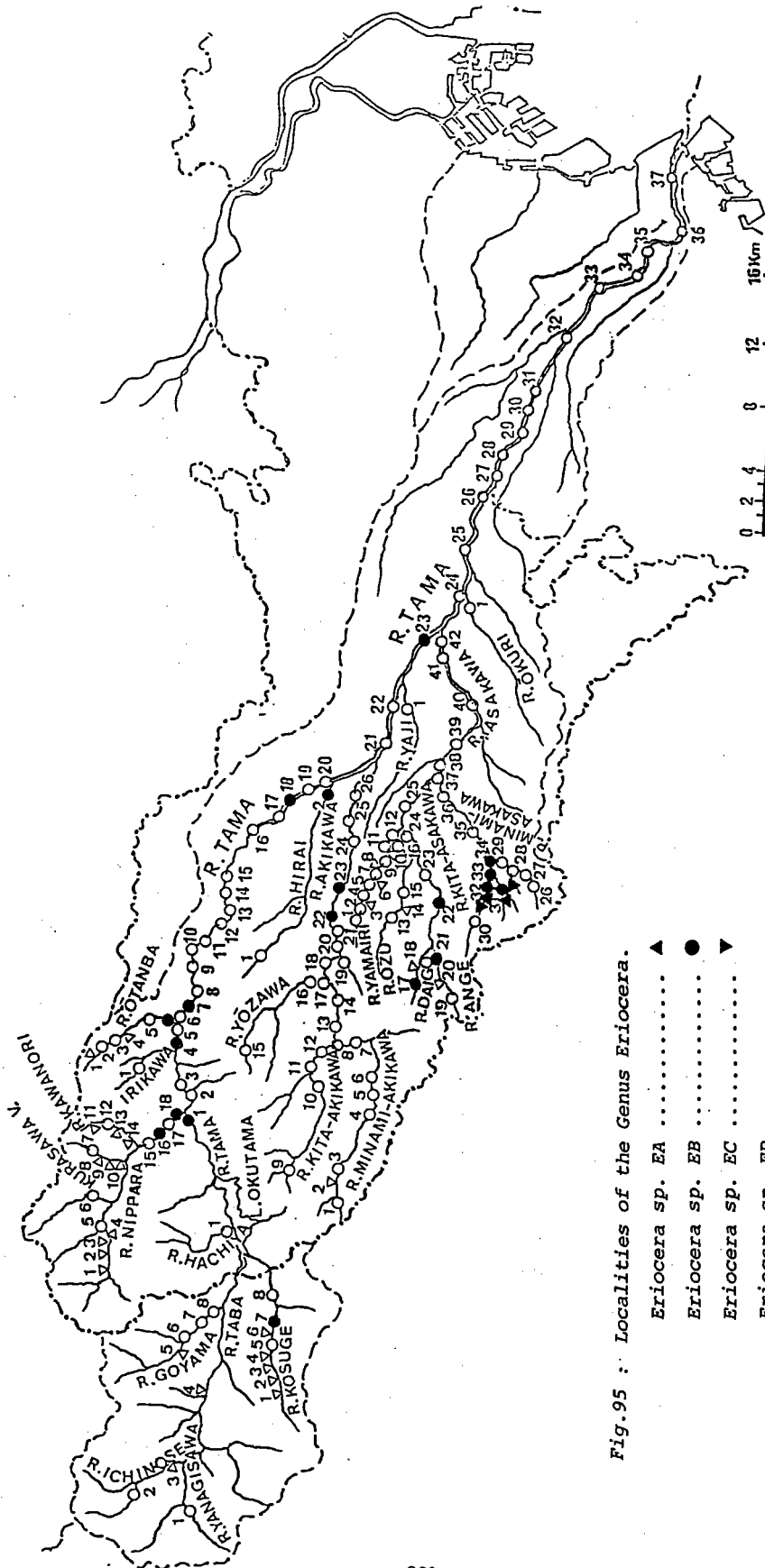


Fig.95 : Localities of the Genus Eriocera.

- Eriocera sp. EA ▲
- Eriocera sp. EB ●
- Eriocera sp. EC ▼
- Eriocera sp. ED ○
- Eriocera sp.

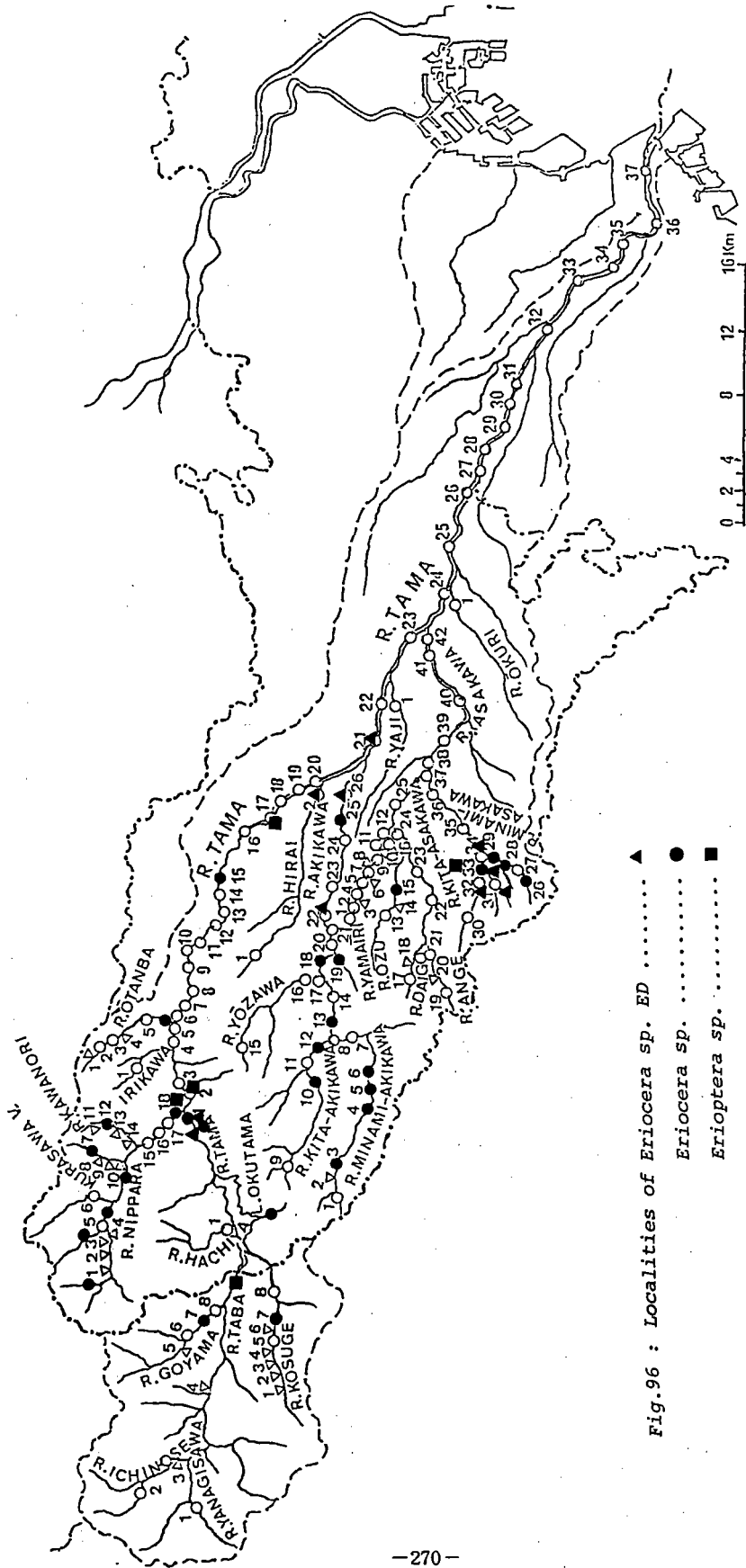


Fig.96 : Localities of *Eriocera sp. ED* ▲
Eriocera sp. ●
Erioptera sp. ■

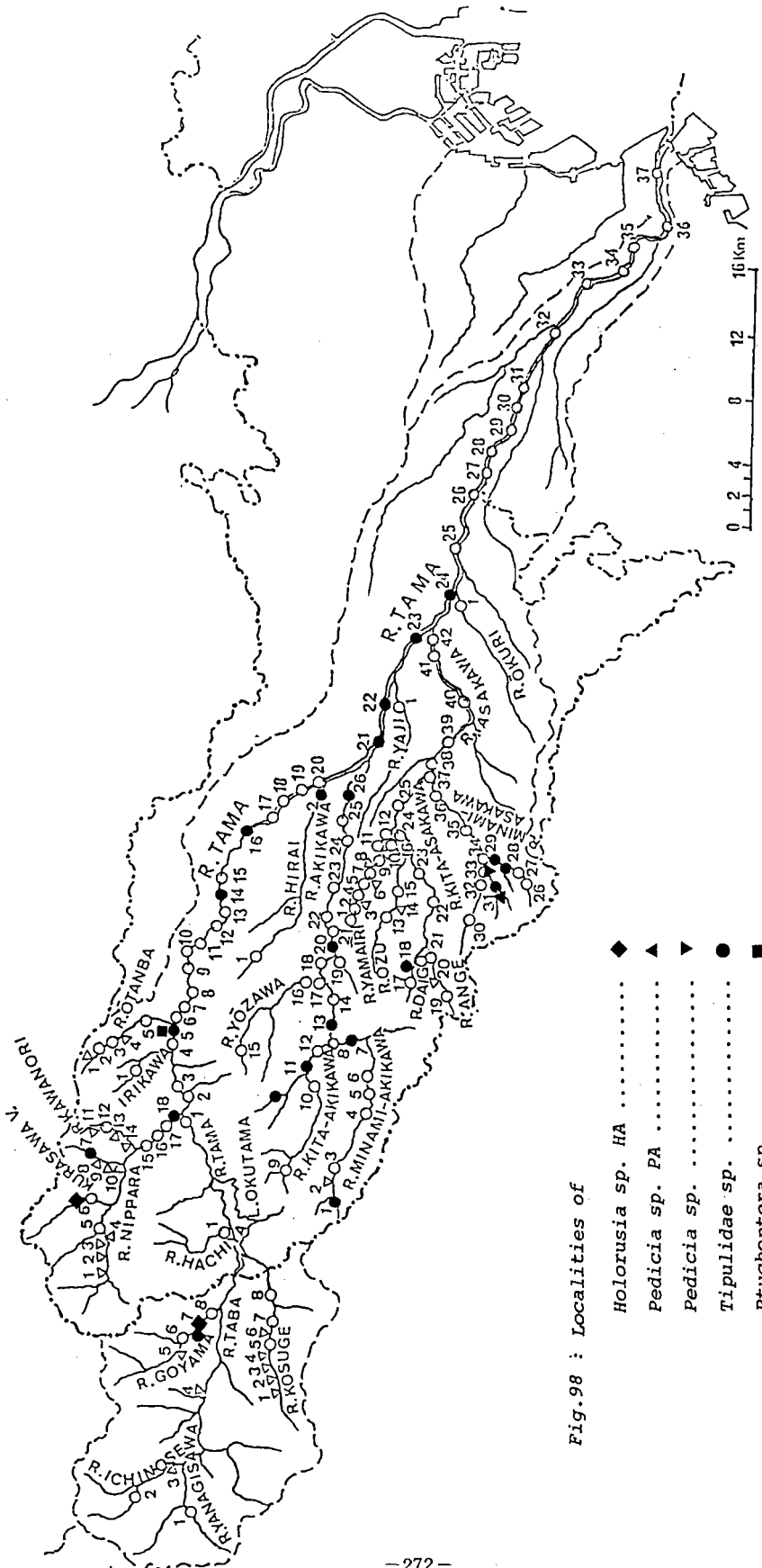


Fig.98 : Localities of

- ◆ Holorusia sp. HA
- ▲ Pedicia sp. PA
- ▼ Pedicia sp.
- Tipulidae sp.
- Ptychoptera sp.

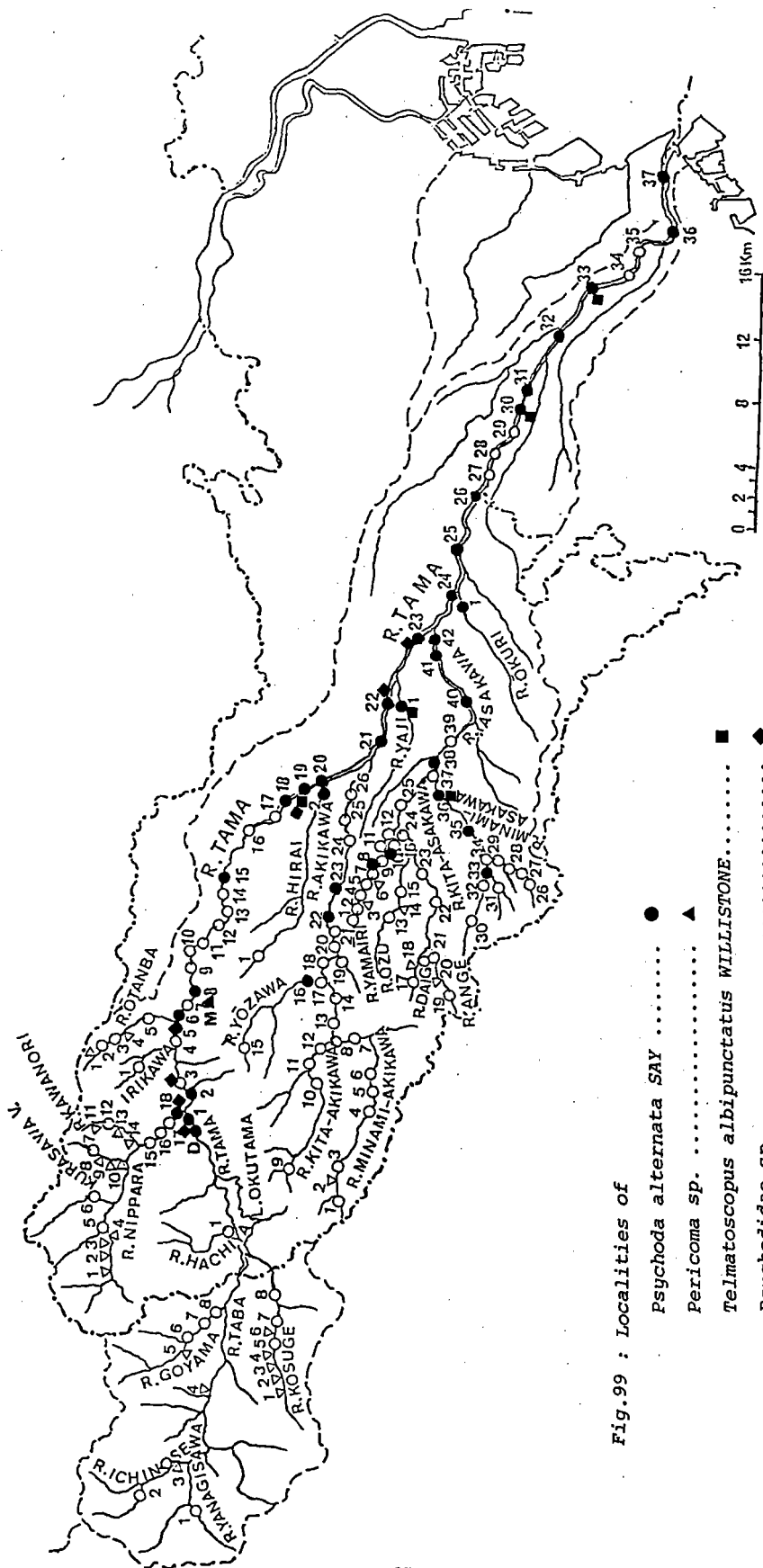


Fig.99 : Localities of

Psychoda alternata SAY ●

Pericoma sp. ▲

Telmatoscopus albipunctatus WILLISTONE ■

Psychodidae sp. ◆

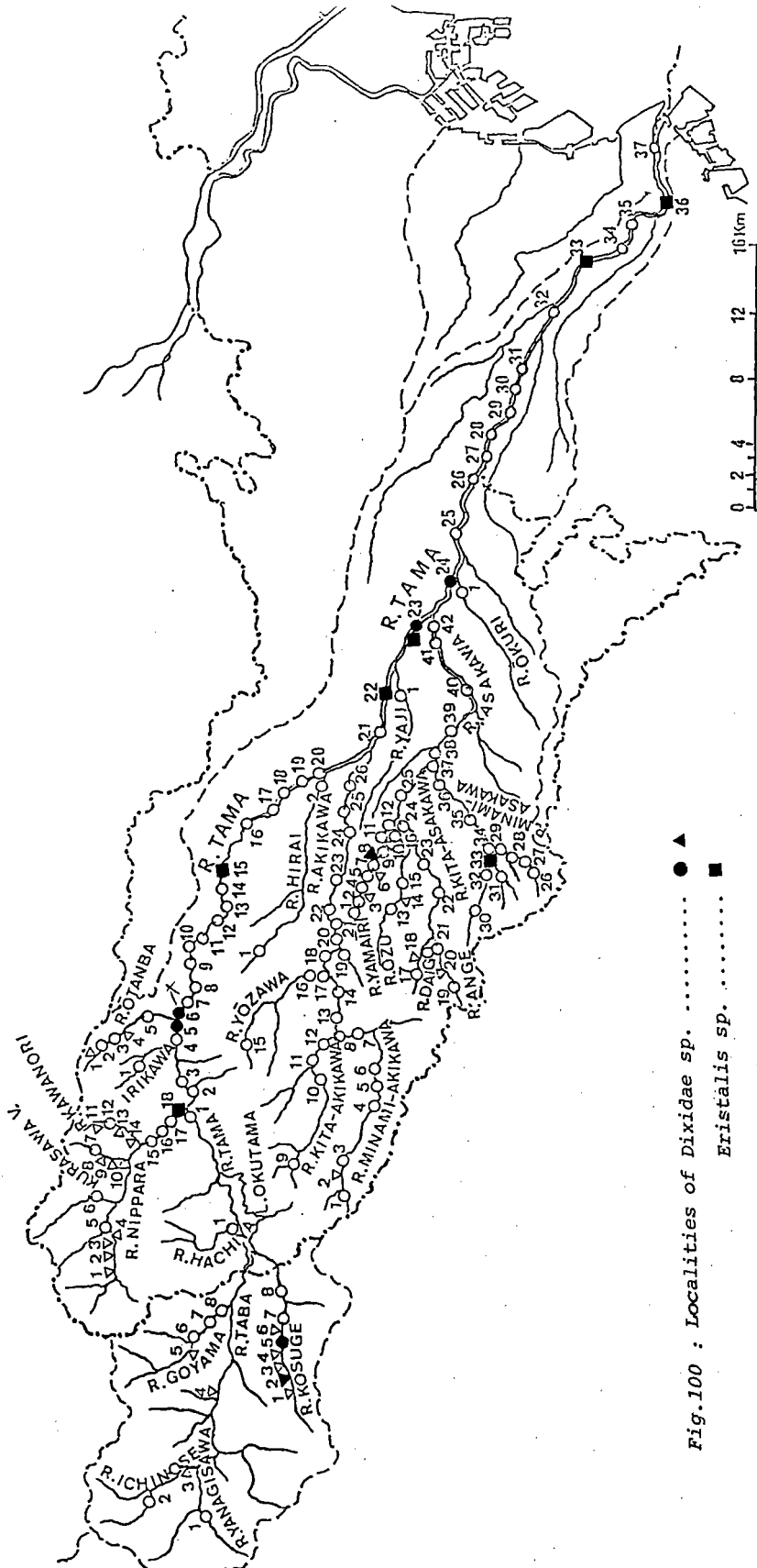


Fig.100 : Localities of *Dixidae* sp. ● ▲

Eristalis sp. ■

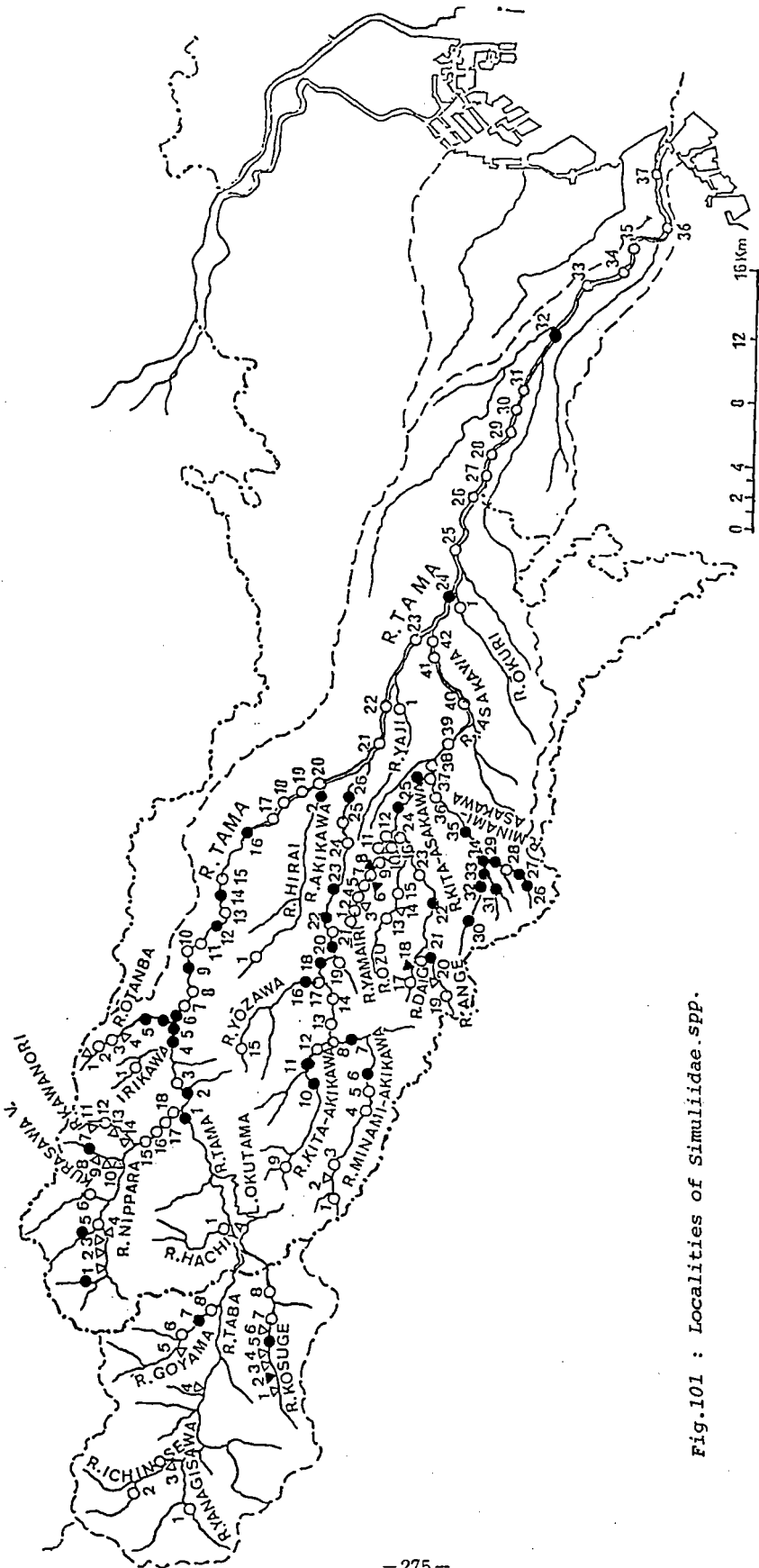


Fig.101 : Localities of Simuliidae spp.

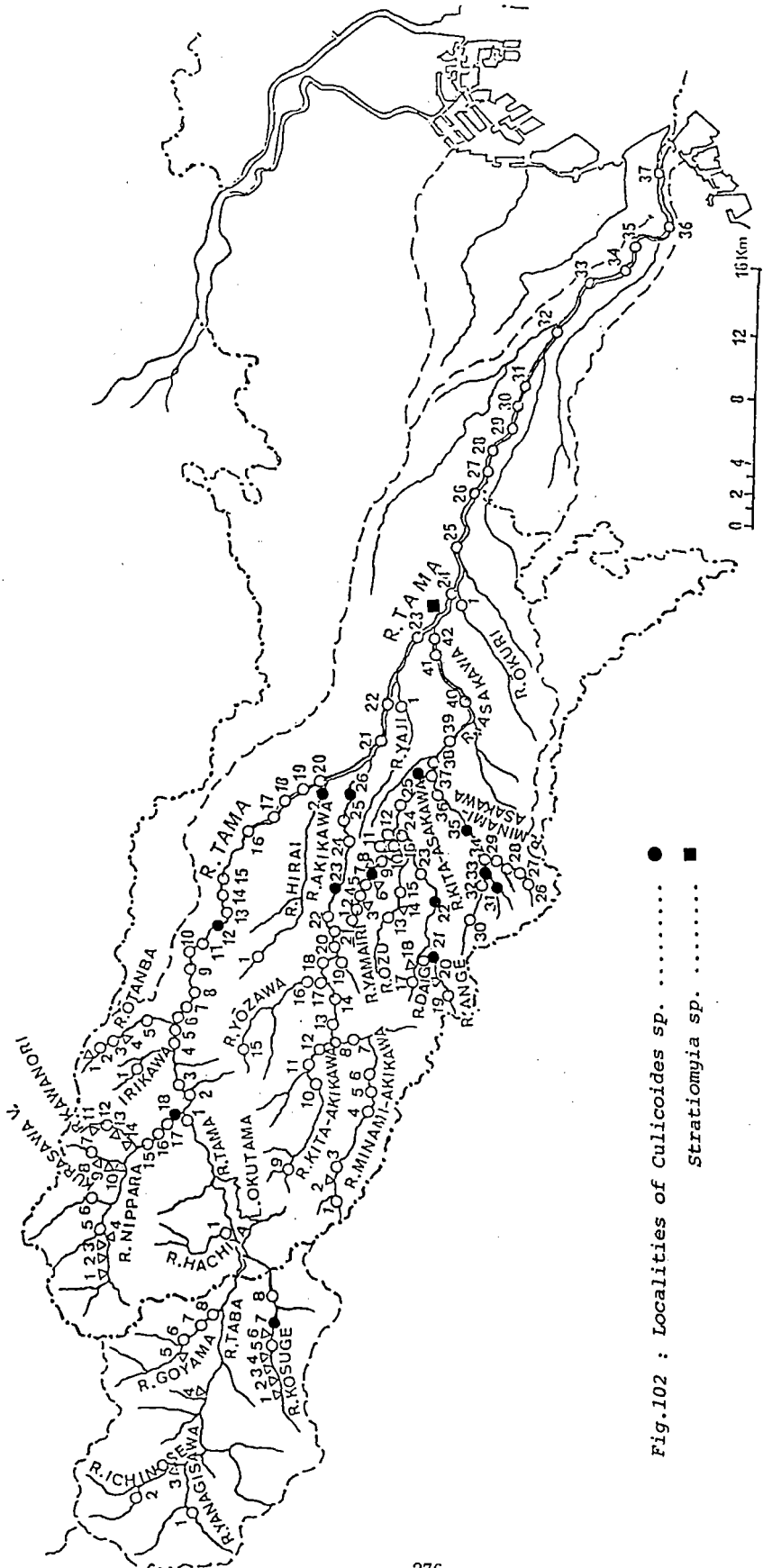


Fig.102 : Localities of *Culicoides* sp. ●
Stratiomyia sp. ■

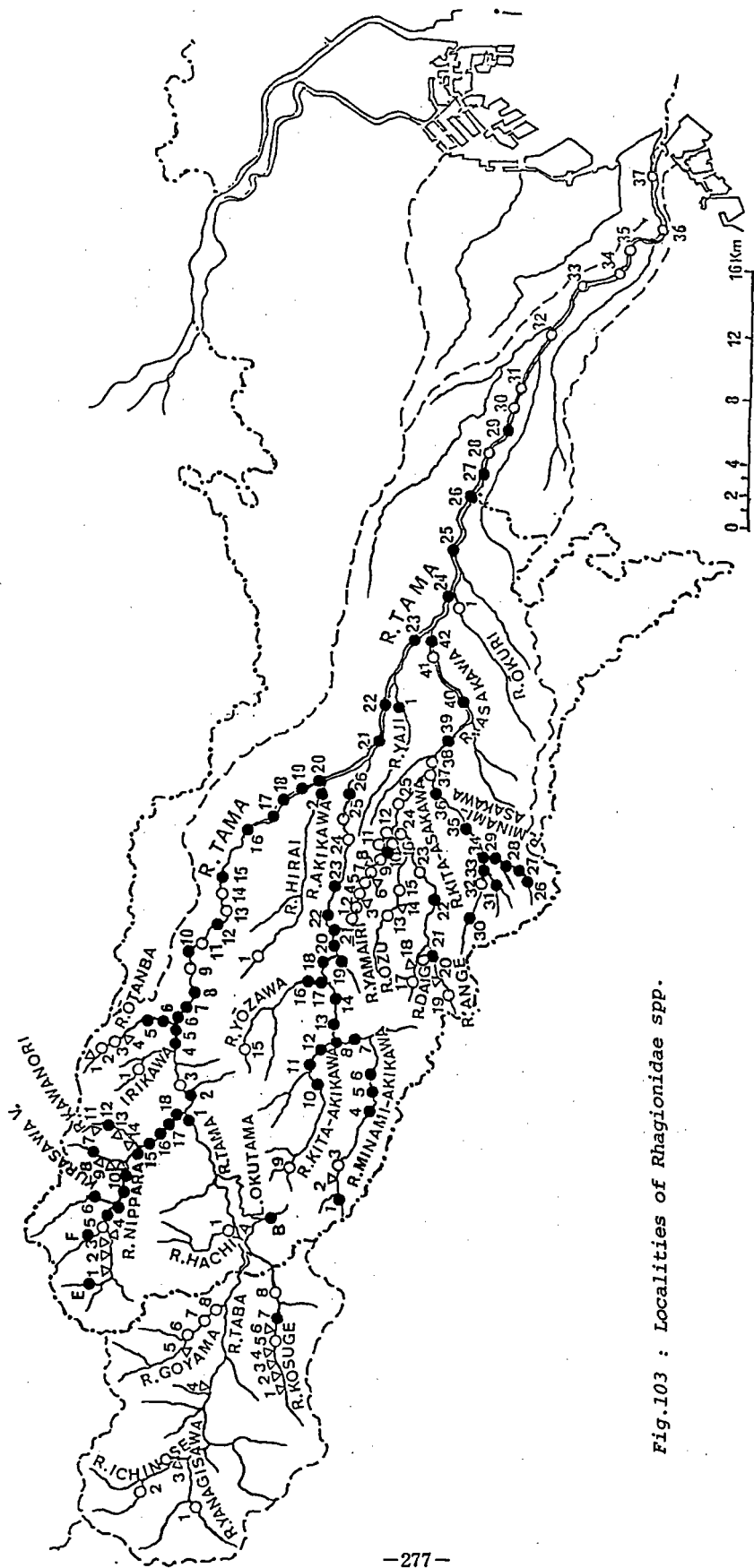


Fig.103 : Localities of *Rhagionidae* spp.

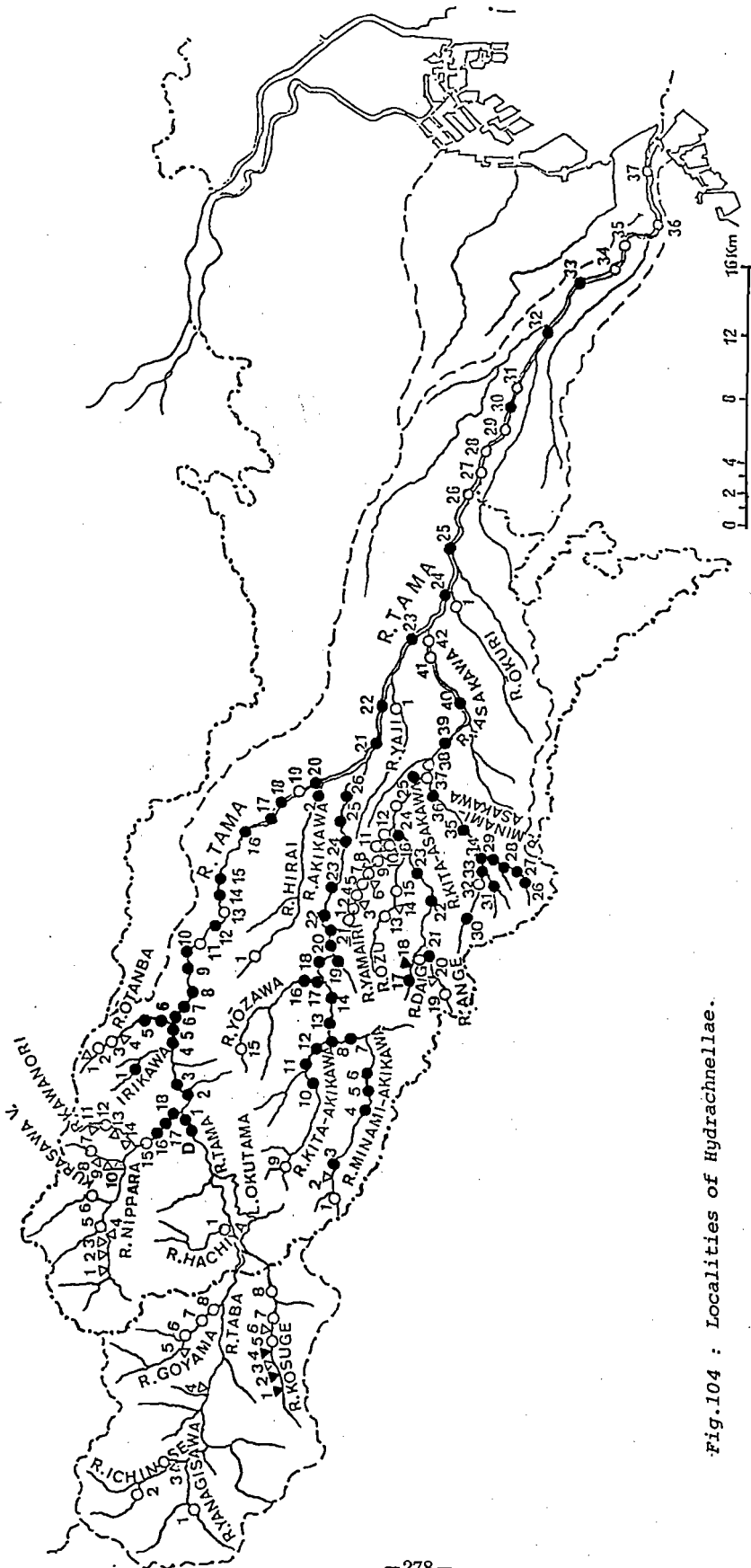


Fig.104 : Localities of Hydrachnellae.

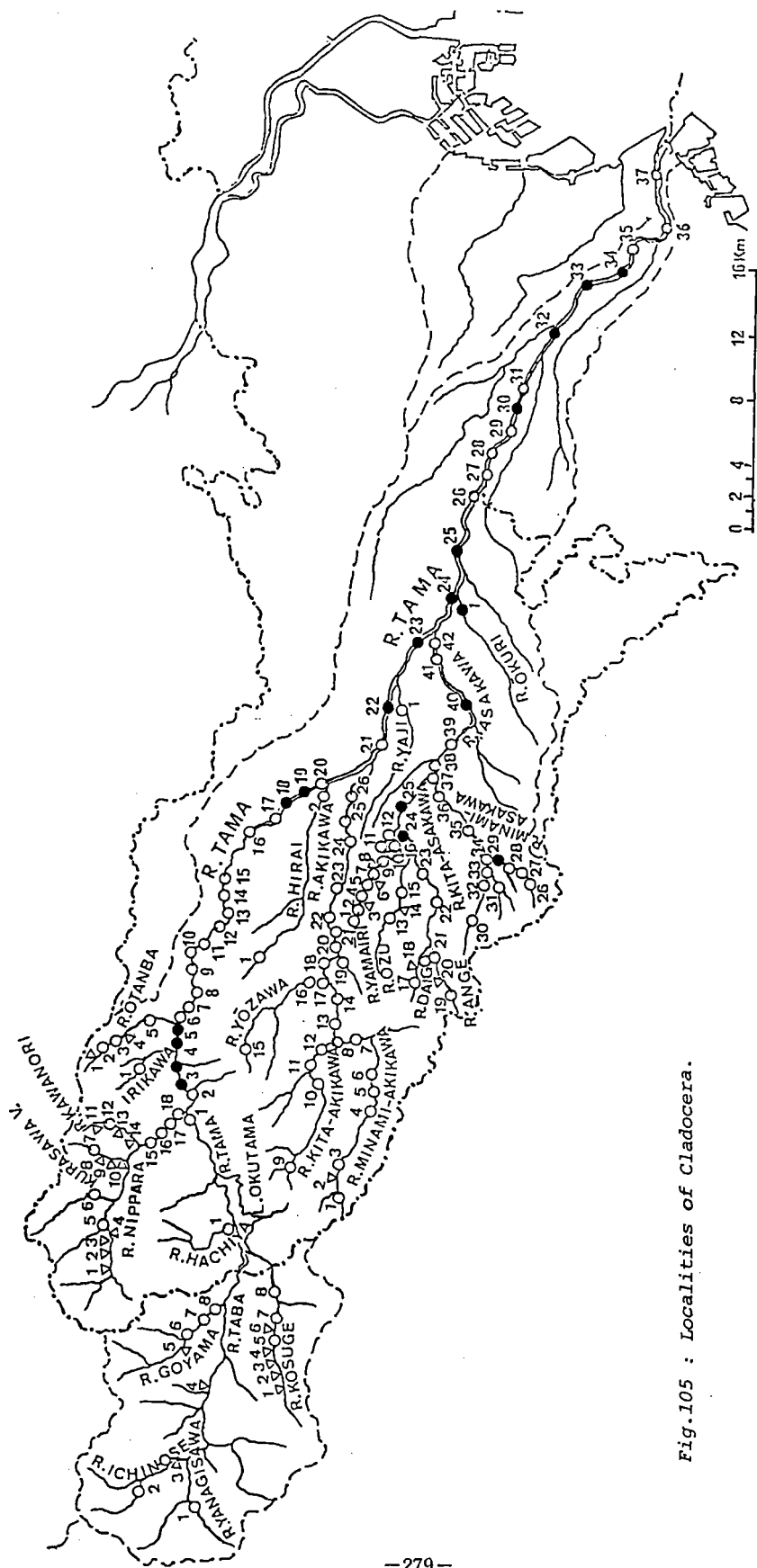


Fig.105 : Localities of Cladocera.

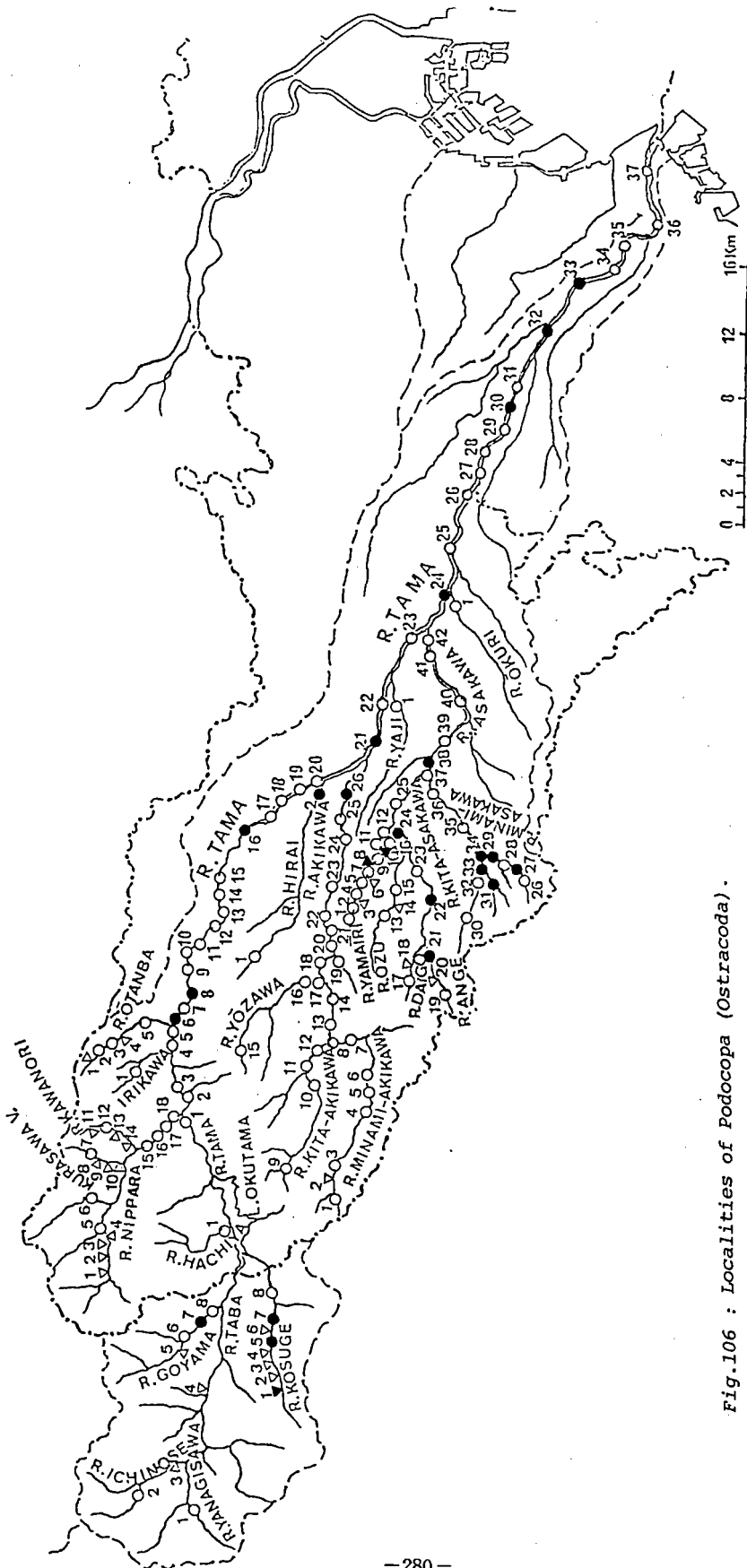


Fig.106 : Localities of Podocopa (Ostracoda).

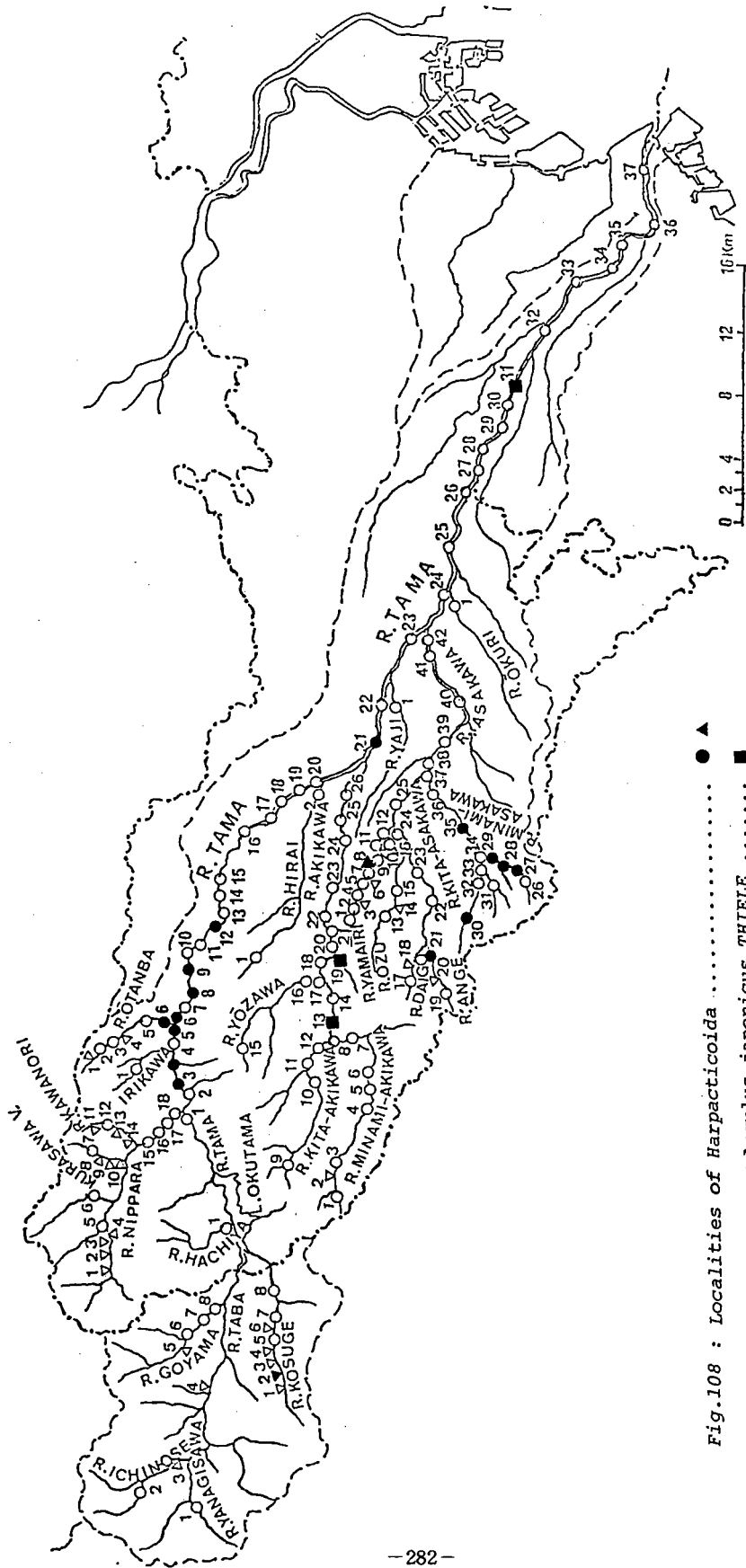


Fig.108 : Localities of Harpacticoida ● ▲
 Argulus japonicus THIELE ■

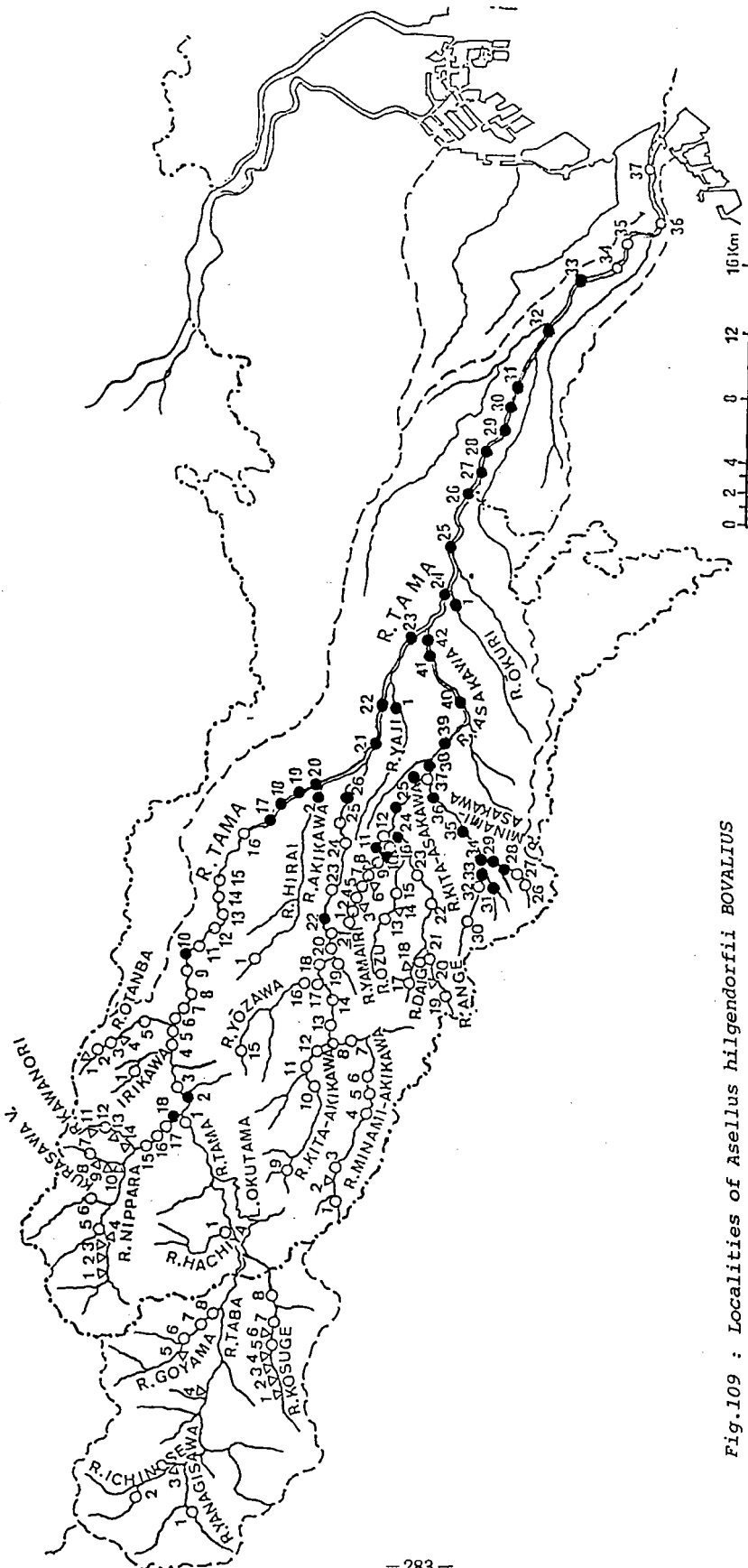


Fig.109 : Localities of *Asellus hilgendorffii* BOVALIUS

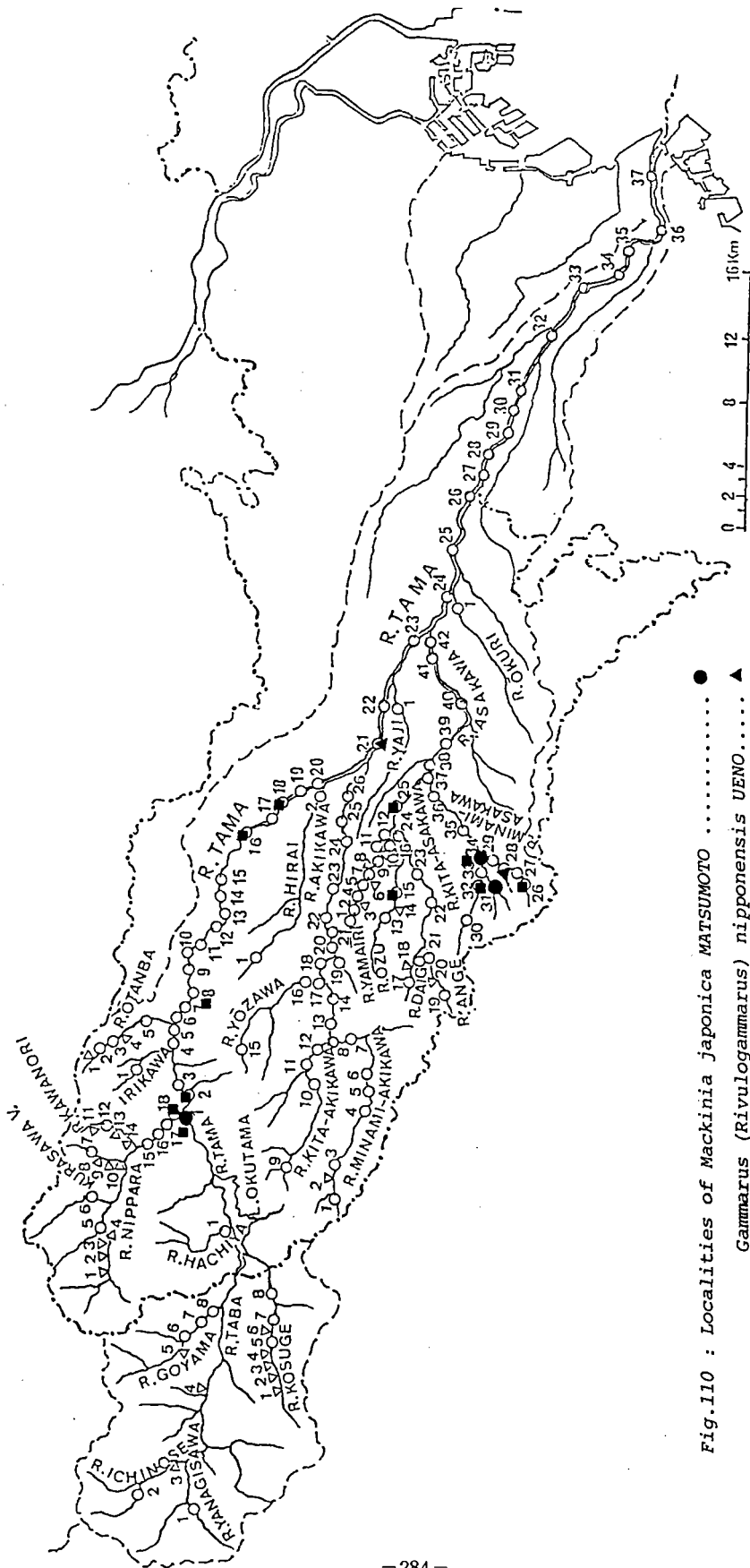


Fig.110 : Localities of *Mackinia japonica* MATSUMOTO ●
Gammarus (Rivulogammarus) nipponensis UENO..... ▲
Pseudocrangonyx sp. ■

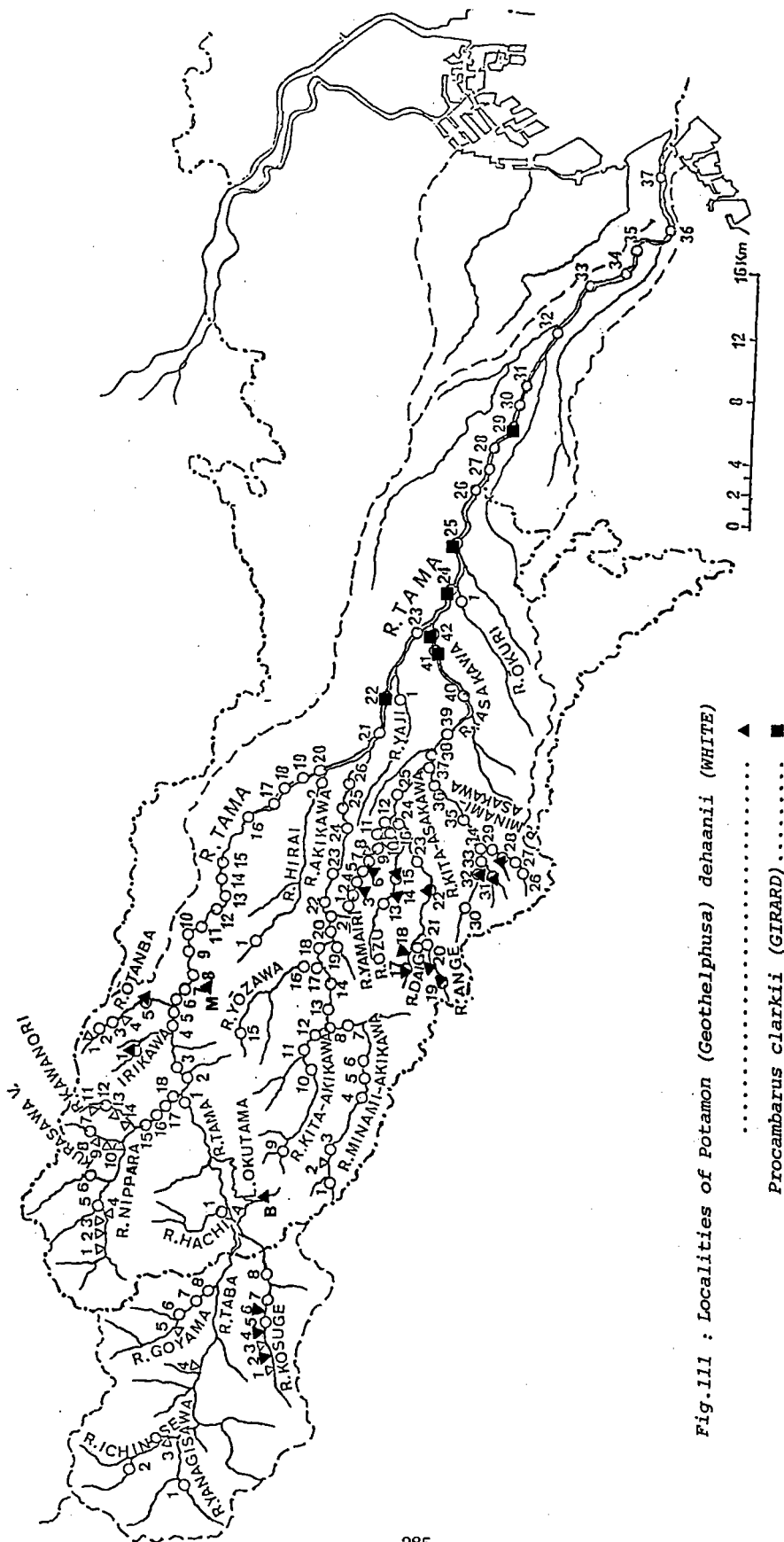


Fig.111 : Localities of Potamón (*Geothelphusa dehaanii* (WHITE)
▲.....
 Procambarus clarkii (GIRARD).....■.....

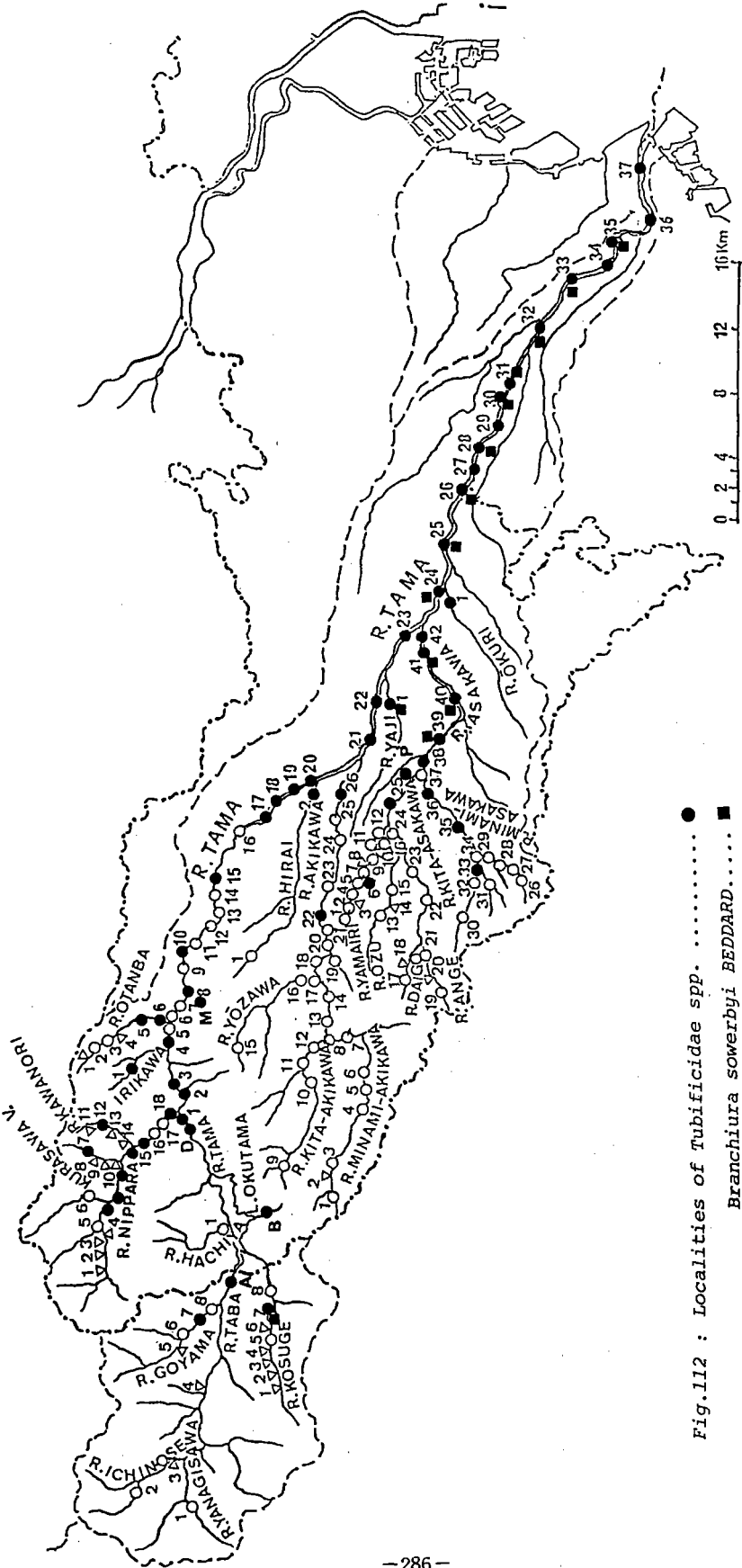


Fig.112 : Localities of *Tubificidae* spp.●.....
Branchiura sowerbyi BEDDARD.....■

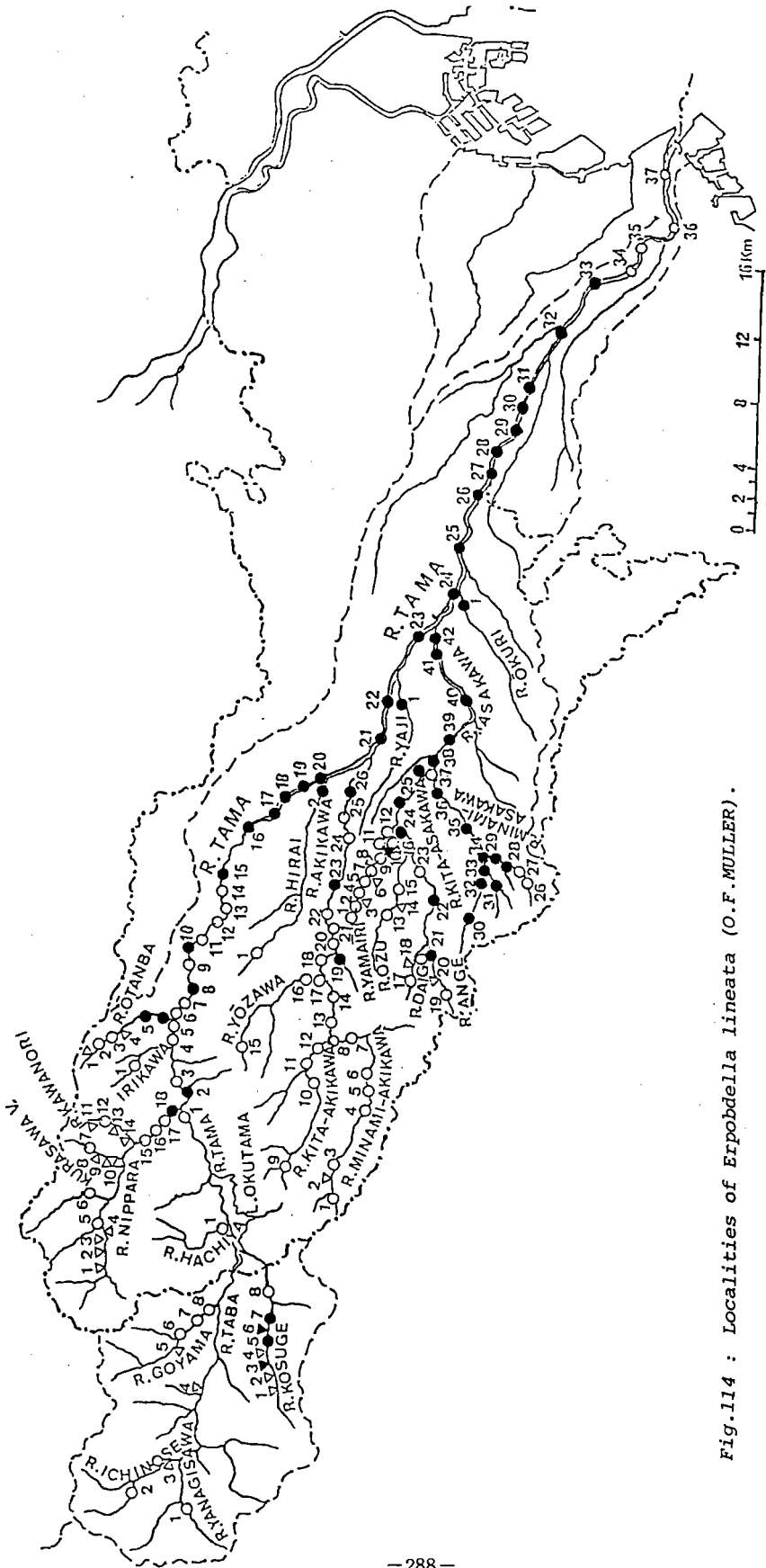


Fig.114 : Localities of *Erpobdella lineata* (O.F.MULLER).

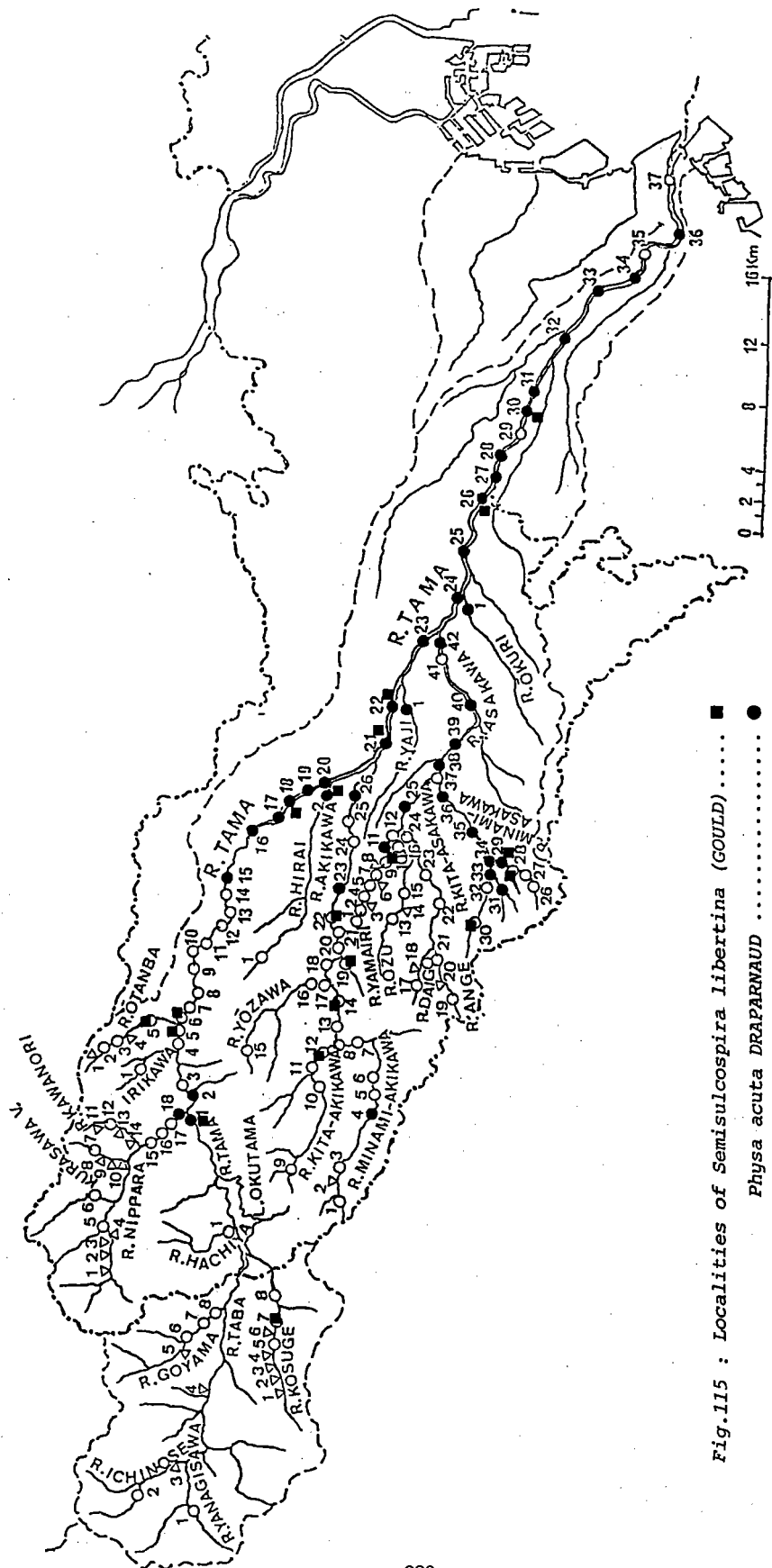


Fig.115 : Localities of *Semisulcospira libertina* (GOULD)..... ■
Physa acuta DRAPARNAUD ●

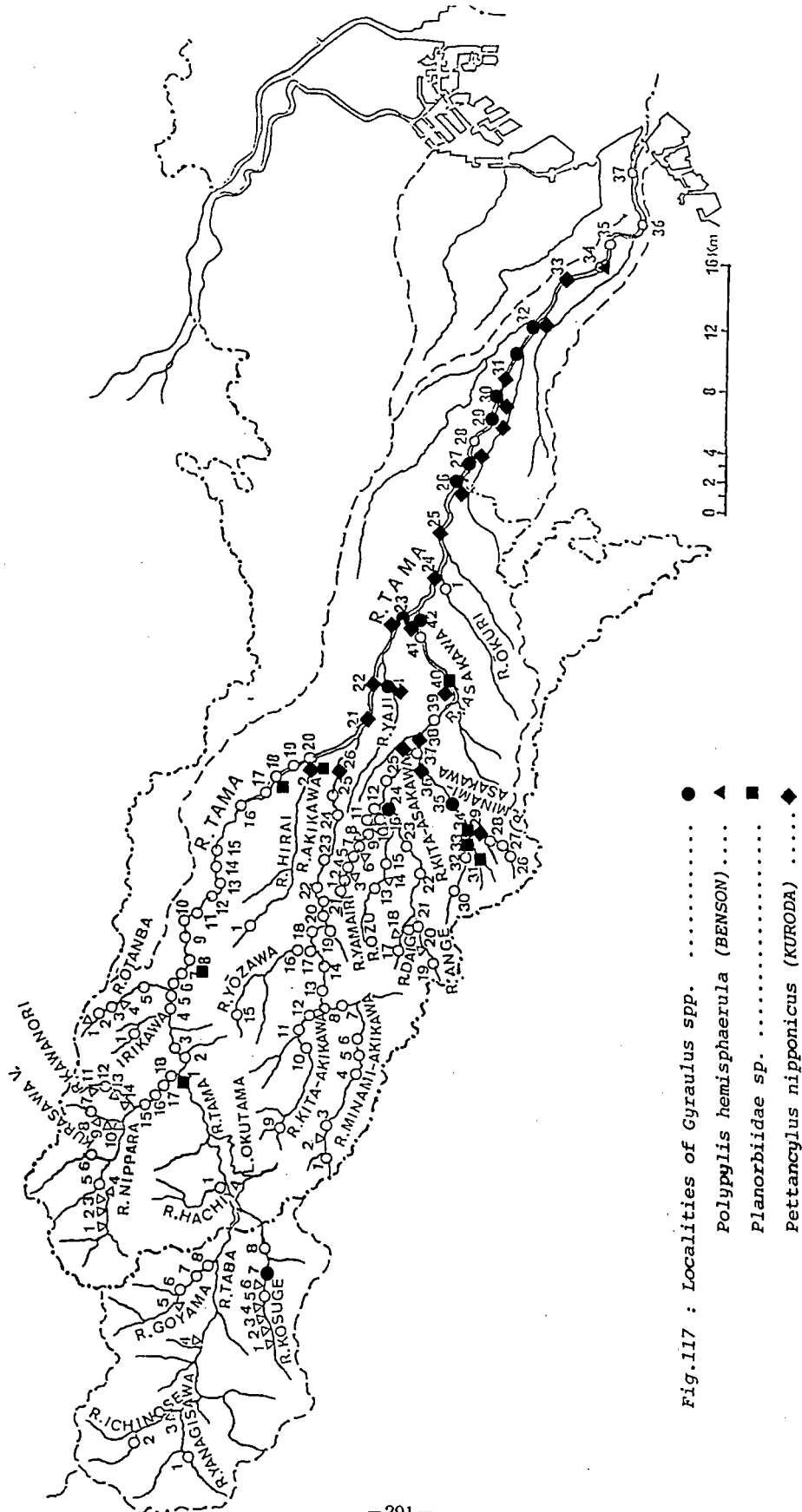


Fig.117 : Localities of *Gyraulus* spp. ●
Polypylis hemisphaerula (BENSON) ▲
Planorbidae sp. ■
Pettancylus nipponicus (KURODA) ◆

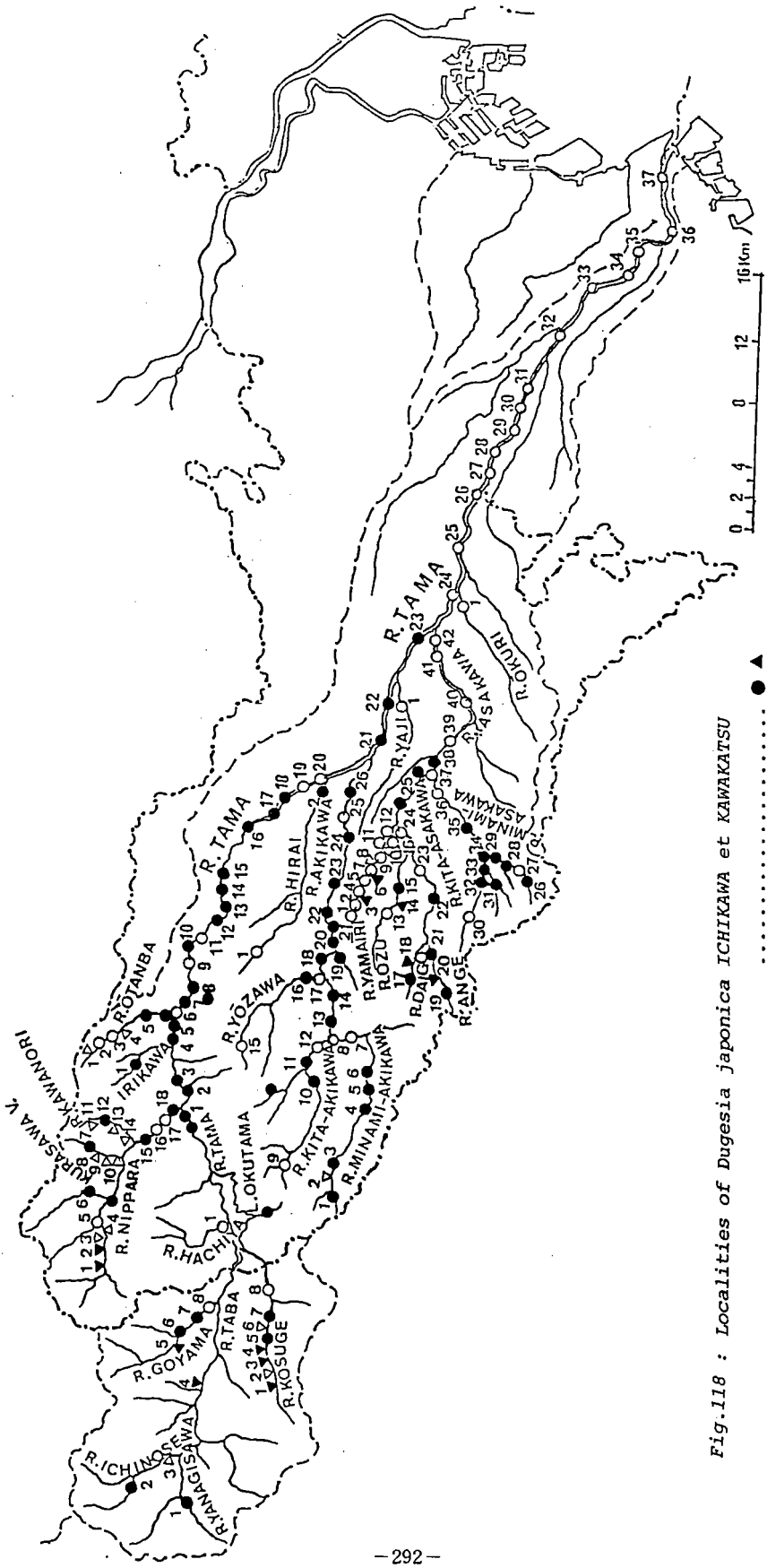


Fig.118 : Localities of *Dugesia japonica* Ichikawa et Kawakatsu

主要底生大型無脊椎動物の標本図版



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Plate I : fig.1 --- *Ephoron shigae* (TAKAHASHI); fig.2 --- *Ephemera japonica* McLACHLAN ; fig.3 --- *Ephemera orientalis* McLACHLAN ; fig.4 --- *Ephemera strigata* EATON.

Plate II : fig.5 --- *Potamanthus kamonis* IMANISHI ; fig.6 --- *Paraleptophlebia spinosa* UENO ; fig.7 --- *Choroterpes trifurcata* UENO ; fig.8 --- *Ephemerella* (Torleya) *japonica* GOSE.



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Plate III : fig.9 --- *Ephemerella (Drunella) cryptomeria* IMANISHI ;fig. 10 --- *Ephemerella (Drunella) basalis* IMANISHI ; fig.11 --- *Ephemerella (Drunella) trispina* UENO ; fig.12 ---*Ephemerella (Cincticostella) tschernova* BAJKOVA.

Plate IV : fig.13 --- *Ephemerella (Cincticostella) orientalis* TSCHERNOVA ; fig.14 --- *Ephemerella (Serratella) rufa* IMANISHI ; fig.15 ---*Ephemerella (Serratella) setigera* BOJKOVA ; fig.16 --- *Caenis* sp.



Plate V : fig.17 --- *Baetis yamatoensis* GOSE ; fig.18 --- *Baetis sahoensis* GOSE ; fig.19 --- *Baetis* sp. (dorsal view) ; fig.20 --- *Baetis* sp. (side view).

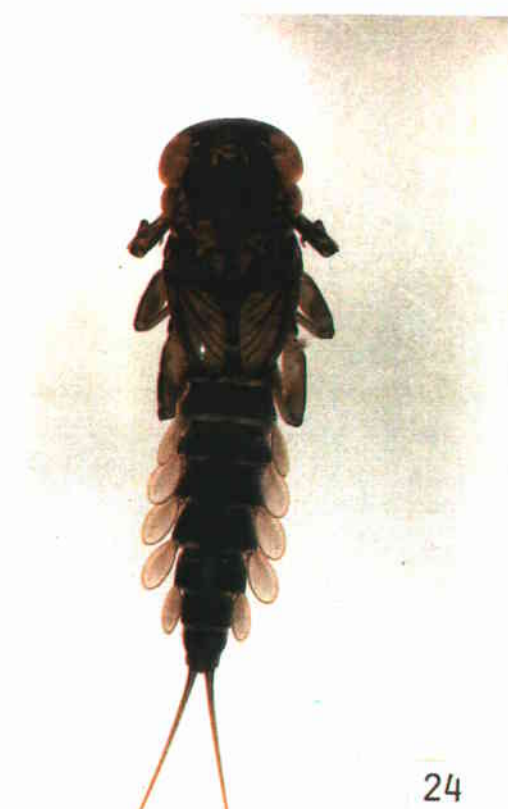
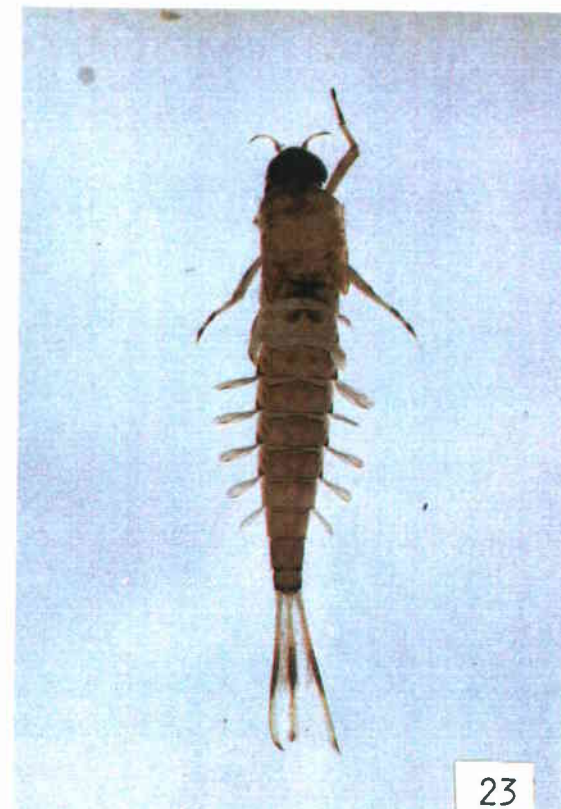


Plate VI : fig.21 --- *Isonychia japonica* ULMER ; fig.22 --- *Siphonurus binotatus* EATON ; fig.23 --- *Ameletus costalis* MATSUMURA ; fig.24 --- *Bleptus fasciatus* EATON.

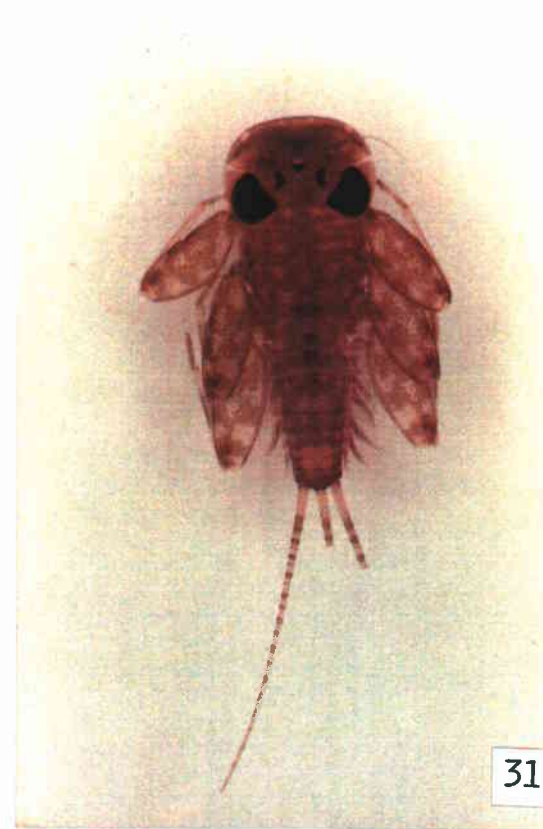
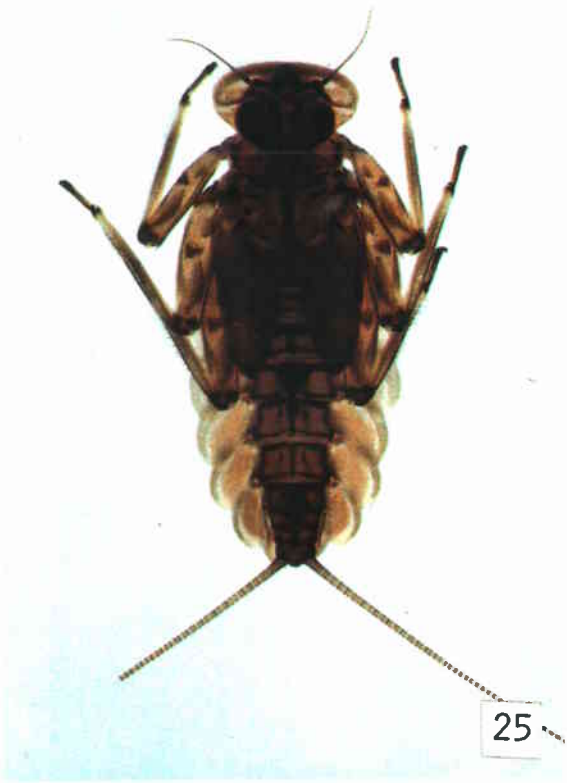
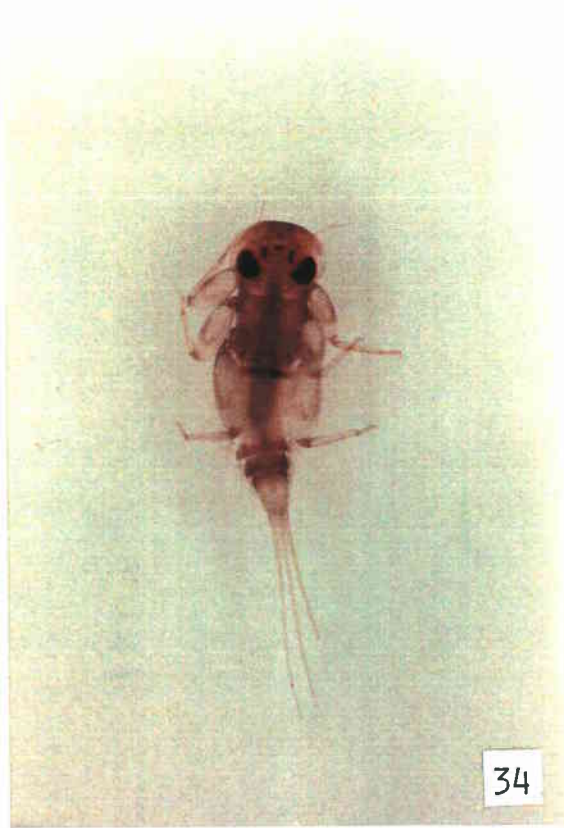


Plate VII : fig.25 --- *Epeorus uenoi* MATSUMURA ; fig.26 --- *Epeorus latifolium* UENO ; fig.27 --- *Epeorus curvatulus* MATSUMURA ; fig.28 --- *Epeorus* sp.

Plate VIII : fig.29 --- *Epeorus* sp. ; fig.30 --- *Ecdyonurus tobiironis* TAKAHASHI ; fig.31 --- *Ecdyonurus yoshidae* TAKAHASHI ; fig.32 --- *Ecdyonurus kibunensis* IMANISHI.



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Plate IX : fig.33 --- *Cinygma* sp. ; fig.34 --- *Rhithrogena* sp. ; fig.35 --- *Mnais strigata* SELYS ; fig.36 --- *Epiophlebia superstes* SELYS.

Plate X : fig.37 --- *Sieboldius albardae* SELYS ; fig.38 --- *Lanthus fijiacus* FRASER ; fig.39 --- *Onychogomphus viridicostus* OGUMA ; fig.40 --- *Davidius nanus* SELYS.

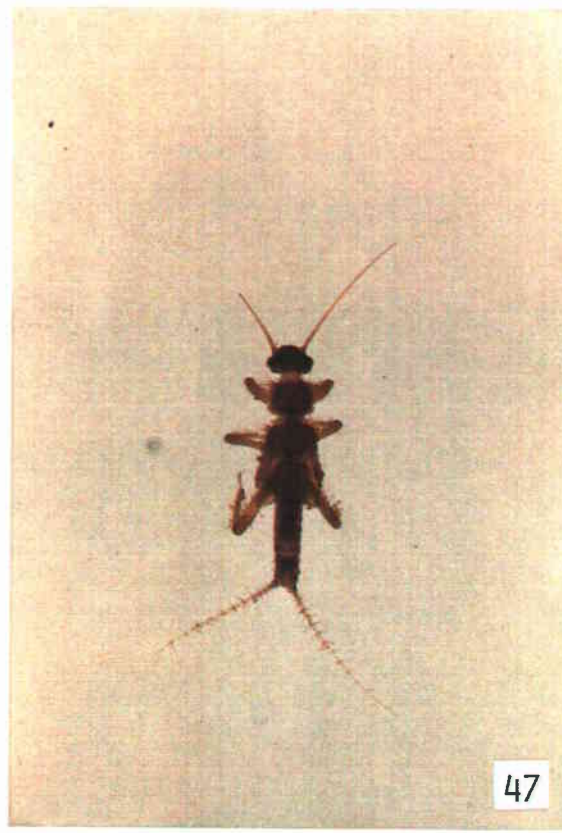
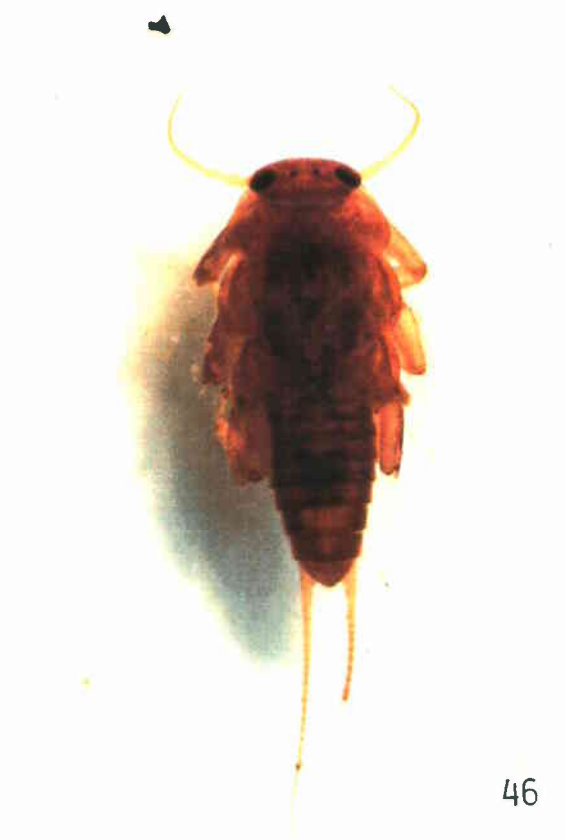


Plate XI : fig.41 --- *Stylogomphus suzukii* OGUMA ; fig.42 --- *Boyeria maclachlani* SELYS ; fig.43 --- *Macromia amphigena* SELYS ; fig.44 --- *Planaeschna milnei* SELYS.

Plate XII : fig.45 --- *Scopra longa* UENO ; fig.46 --- *Nogiperla japonica* OKAMOTO ; fig.47 --- *Amphinemura* sp. ; fig.48 --- *Nemoura* sp.



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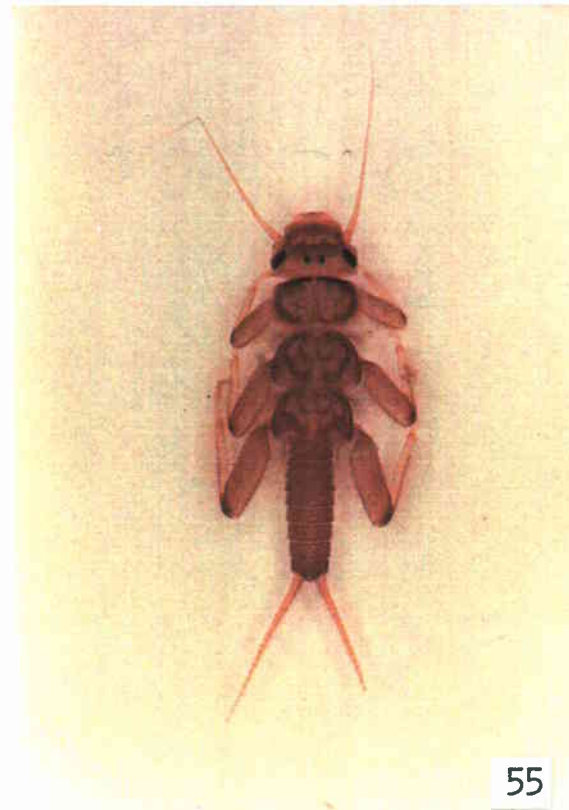
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Plate XIII : fig.49 --- *Isoperla towadensis* OKAMOTO ; fig.50 --- *Neoperla nipponensis* (MCLACHLAN) ; fig.51 --- *Gibosia* sp. ; fig.52 --- *Caroperla pacifica* KOHNO.

Plate XIV : fig.53 --- *Paragnetina tinctipennis* (McLACHLAN) ; fig.54 --- *Oyamia gibba* KLAPALEK ; fig.55 --- *Kamimuria quadrata* (KLAPALEK) ; fig.56 --- *Chloroperlidae* sp.



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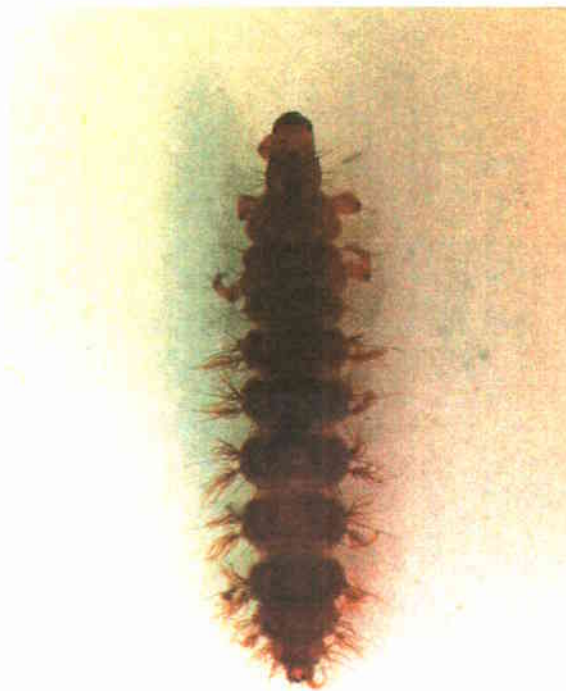
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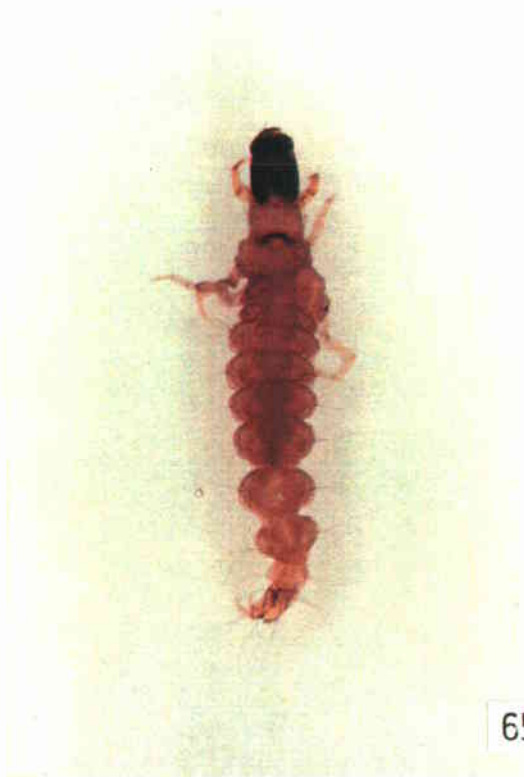
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Plate XV : fig.57 --- *Protohermes grandis* THUNBERG ; fig.58 ---
Parachauliodes japonicus McLACHLAN ; fig.59 --- *Aphelochilus*
vittatus MATSUMURA ; fig.60 --- *Rhyacophila articulata* MORTON.

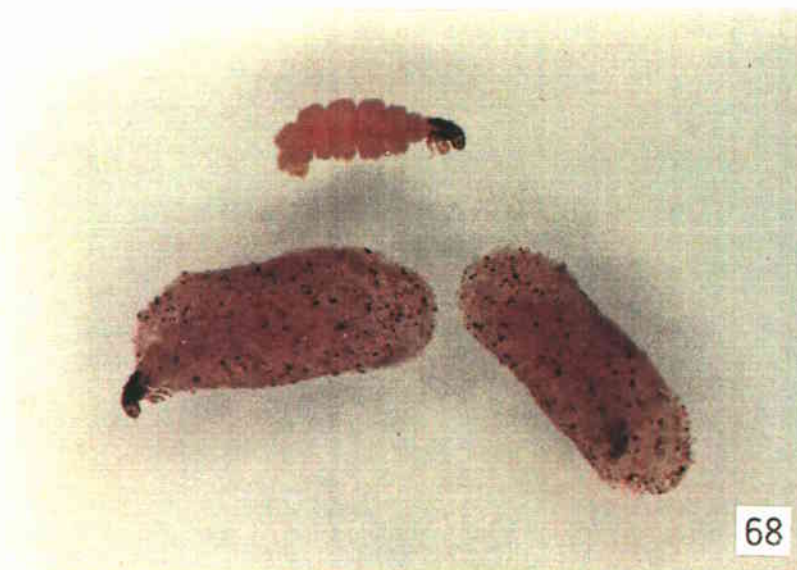
Plate XVI : fig.61 --- *Rhyacophila yamanakensis* IWATA ; fig.62 ---
Rhyacophila nigrocephala IWATA ; fig.63 --- *Rhyacophila clemens*
TSUDA ; fig.64 --- *Rhyacophila* sp. RE.



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Plate XVII : fig.65 --- *Rhyacophila tranquilla* TSUDA ; fig.66 --- *Rhyacophila brevicephala* IWATA ; fig.67 --- *Mystrophora inops* TSUDA.

Plate XVIII : fig.68 --- *Hydroptila* sp. ; fig.69 --- *Stenopsyche griseipennis* McLACHLAN ; fig.70 --- *Psychomyia* sp.



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Plate XIX : fig.71 --- *Hydropsychodes brevilineata* IWATA ; fig.72
--- *Hydropsyche ulmeri* TSUDA ; fig.73 --- *Perissoneura paradoxa*
McLACHLAN ; fig.74 --- *Limnophilus flscovittatus* MATSUMURA.

Plate XX : fig.75,76 --- *Limnocentropus insolitus* ULMER ; fig.77,78
--- *Neuronia maxima* IWATA.



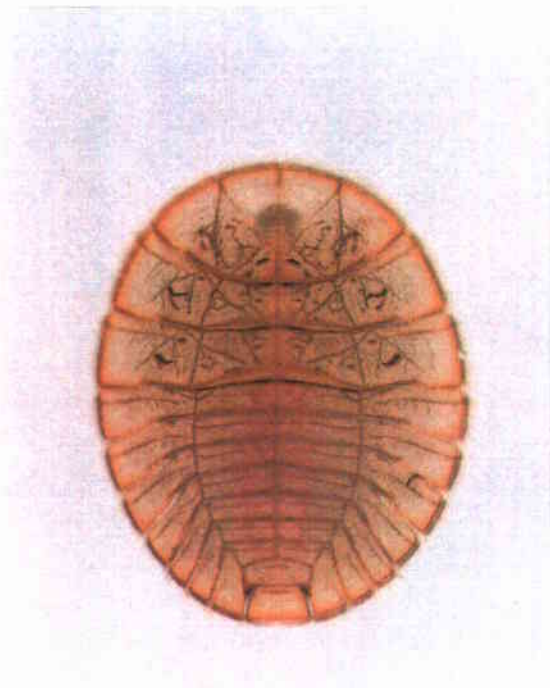
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Plate XXI : fig.79 --- *Goera japonica* BANKS ; fig.80 --- *Mataeopsephenus japonica* MATSUMURA ; fig.81 --- *Eubrianax granicolis* LEWIS.

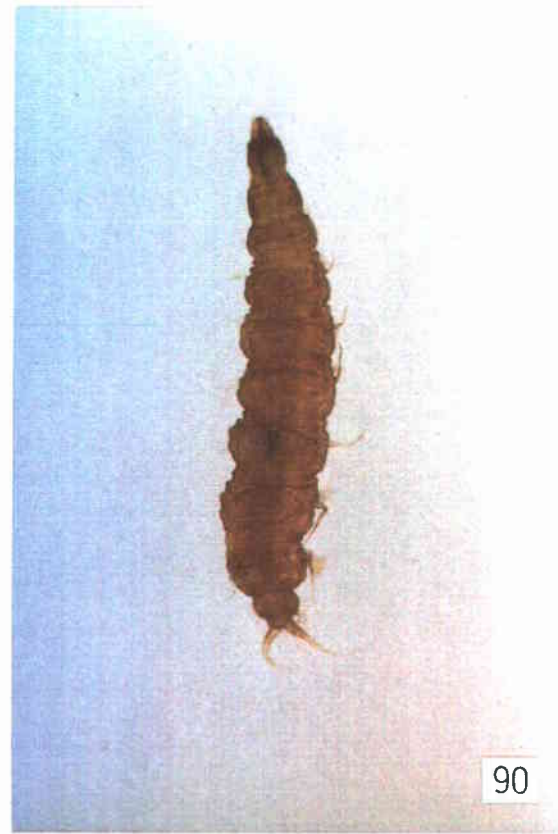
Plate XXII : fig. 82 --- *Orectochirus* sp. ; fig.83 --- *Hydrophilidae* sp. ; fig.84 --- *Luciola cruciata* MOTSCHULSKY ; fig.85 --- *Elmidae* sp.



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Plate XXIII : fig.86 --- *Amika infuscata minor* KITAKAMI (Pupa) ;
fig.87 --- *Eriocera* sp. EB ; fig.88 --- *Holorusia* sp. HA ; fig.89
--- *Antocha* sp.

Plate XXIV : fig.90 --- *Atherix (Suragina) kodamai* NAGATOMI ; fig.91
--- *Simuliidae* sp. ; fig.92 --- *Chironomus* sp. fig.93 ---
Chironomidae sp.



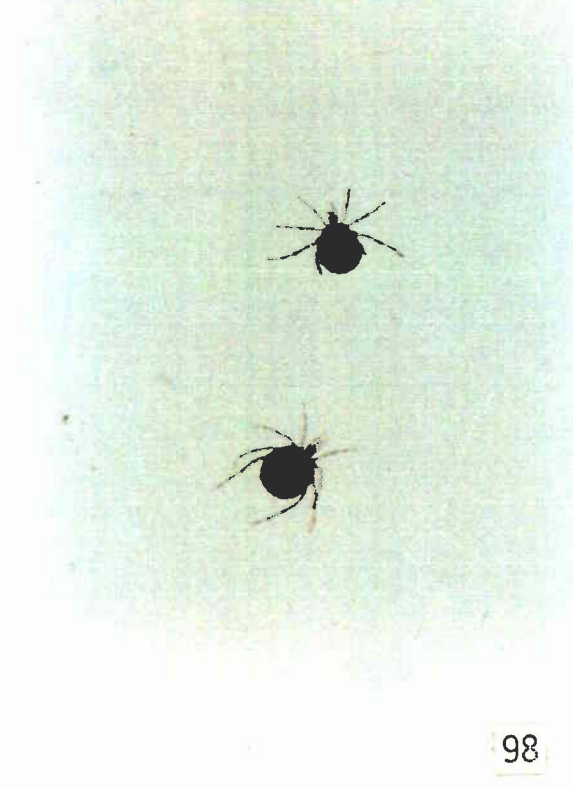
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Plate XXV : fig.94 --- *Procamburus clarkii* (GIRARD) ; fig.95 --- *Asellus* (*Asellus*) *hilgendorffii* BOVALLIUS ; fig.96 --- *Potamon* (*Geothelphusa*) *dehaanii* (WHITE).

Plate XXVI : fig.97,98 --- *Hydrachnellae* spp. ; fig.99 --- *Physa acuta* DRAPARNAUD ; fig.100 --- *Radix auricularia japonica* JAY.



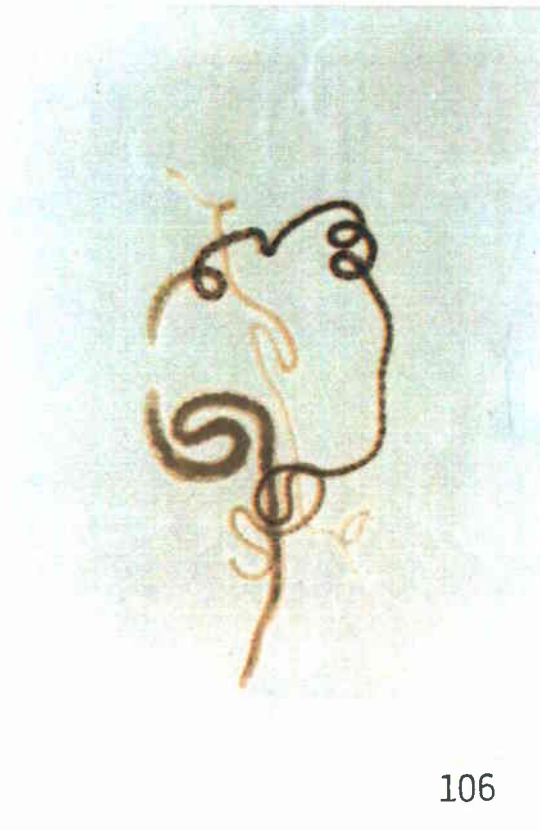
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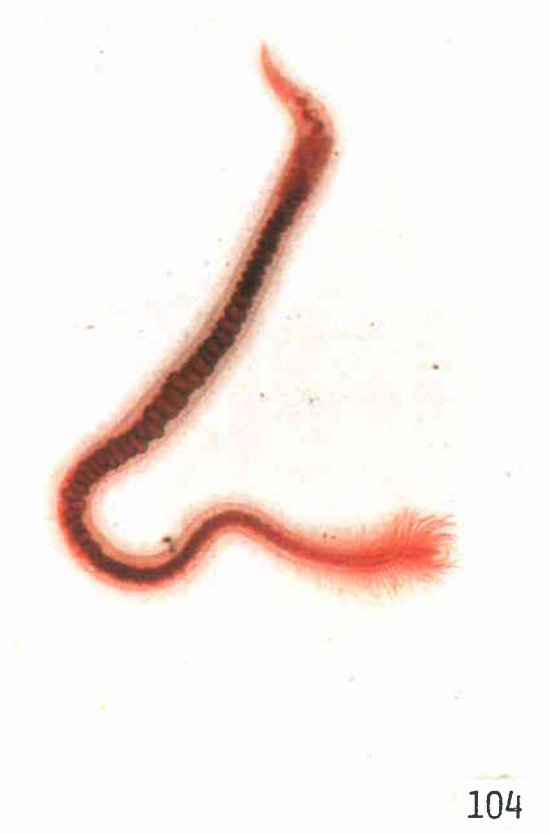
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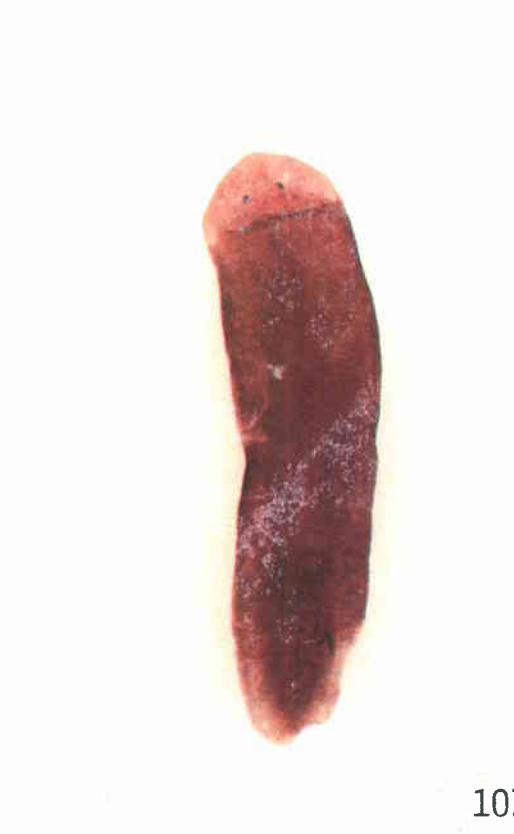
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Plate XXVII : fig.101 --- *Pelecypoda* sp. ; fig.102 --- *Semisulcospira* sp. ; fig.103 --- *Erpobdella lineata* (O.F.MULLER) ; fig.104 --- *Branchiura sowerbyi* BEDDARD.

Plate XXVIII : fig.105,106 --- *Oligochaeta* spp. ; fig.107 --- *Dugesia japonica* ICHIKAWA et KAWAKATSU ; fig.108 --- *Plumatella emarginata* ALLMAN.