

台湾産ゴミムシダマシ科解説〔I〕

益本 仁雄

Kamigo-chō 890-30, Totsuka-ku, Yokohama City, Kanagawa Pref. 247.

Tenebrionidae of Formosa (1) by Kimio MASUMOTO

著者は、1971年以来、台湾地区のゴミムシダマシ類について、現地での採集調査と分類の検討を行なってきた。

この一群は、分類が未整理である事、文献資料が不足している事などから、体系的な検討が比較的むずかしい甲虫類である。

しかしながら、このままにしておいては、指導・助言を下された方々や、標本・資料等の提供・協力をいただいた各位に相すまないという事もあり、逐次、研究発表を進めていくことにした。

他方、1975年には台湾省農業試験所の標本を検視する機会を得、さらに1980年にはハンガリー及びバリの博物館で、多くのホロタイプを検すると共に、資料提供を受けたので、今後は順調に研究を進められる見通しとなった。

この報文を発表するにあたり、当初より多大のご指導を賜った中根猛彦博士に、深く感謝申し上げたい。近藤茂昭氏は、標本・資料等の協力に加え、デスクッションのお相手をしていただき、黒沢良彦博士にはご指導と種々の便宜をはかっていただいた。また、Z. KASZAB, C. GIRARD, H. SILFVERBERG 博士各位、故野村鎮先生、横山創、酒井香、川田一之、福田惣一、石田正明、藤田宏、猪又敏男、露木繁雄、小宮次郎、今枝真弓、中村慎吾、河井道也、朱耀沂、邱瑞珍、杜欽竜、張秀香らの諸氏の各方面でのご協力に謝意を表する次第である。

1. 台湾地区のゴミムシダマシ類の主な研究

この地区の体系的な研究はまず、H. GEBIEN (1913, H. Sauter's Formosa=Ausbeute. Tenebrionidae) によってなされ、今日ハムシダマシ科に含まれている種も合わせ、既知種、新属・新種等合計70種のゴミムシダマシを記録している。

次は Z. KASZAB (1941, Tenebrioniden aus Formosa) で、前者と同様ハムシダマシの一部を含め、さらに新

属・新種を加えて70種を発表している。

中条道崇(1967~1968, A check list of Formosan Tenebrionidae) は、新種記載を含め約50種をリストアップしている。

新種記載を拾ってみると、M. PIC (1911, 1915等)、三輪勇四郎 (1939)、野村鎮 (1963, 1964) らの他に、前述の GEBIEN, KASZAB らが、別のモノグラフに発表している。最近では、芝田太一 (1978~) が新属の発表も含めて新種記載を行なっている。

三輪 (1931) は、台湾産昆虫目録で多くのゴミムシダマシを挙げているが、残念な事にリストのもとになっている標本は、他地域のものがかなり混入しているので、資料として使えない(注)。

楨原寛 (1972, 鹿児島大学生物研究会台湾甲虫採集目録) は、台湾本島及び紅頭嶼で得られたゴミムシダマシを記録している。

平山修次郎 (1940, 原色甲蟲図譜) は、台湾産ゴミムシダマシを数種図示している。

2. 台湾地区のゴミムシダマシ科解説

ゴミムシダマシの一般的特徴については、中根博士が日本のゴミムシダマシ (1974, 月刊むし36号) を解説され、台湾産の既知種もこの解説の範囲に含まれるので、論を先に進めることにする。

ゴミムシダマシ科は、通常、亜科または族に分けられるが、この段階での検索表は台湾の各種が出揃った時点で掲載する。

(注)台湾産食糞コガネムシ科解説 (1976~1977) ですすでに触れた様に、三輪のカタログに掲げられた標本は、現在でも台湾省農業試験所に保管されているが、明らかに他地区に分布すると考えられる種や、データの曖昧な標本がかなり混入している事が分っている。従って、本解説では混乱を避るため、この目録を分布の文献として使わないこととした。

また、本解説の検索表は、台湾に分布している種や属を、出来るだけ容易に検索する事を主眼としているので、他地域の種等にあてはまるとは限らない。

比較する近似種は、読者の大半が日本の研究者であるという事を考慮し、なるべく日本産の既知種との比較を行なった。

解説の順序は、都合により GEBIEN のカタログなどに採用されている配列とは反対に、Strongyliini ナガキマワリ族から始める。

なお、和名は従来から使われているものを尊重したが、著しく実体に合わないもの、および新種は、改称または新称を与え * 印を付けた。

1. Tribe Strongyliini ナガキマワリ族

体が細長く、両側は平行な種が多いが、中には肩部の発達が悪く、ヒョウタン型に近いもの、ずんぐりして後方に広がった体型の種もいる。

本邦には、*Strongylium japonum* MARSEUL シワナガキマワリ、*S. niponicum* LEWIS クロナガキマワリ等が分布し、比較的我々に馴みが深い。

従来、台湾から *Strongylium* ナガキマワリ属、*Crossoscelis* クロガネナガキマワリ属の2属が知られていたが、今般新たに *Ainu* ホソヒゲナガキマワリ属を記録する。

台湾産 Strongyliini の検索表

- | | |
|--|---------------------|
| 1. 前・中跗節は先方に広がる。触角は糸状。体は両側がほぼ平行。前胸背は上翅よりかなり幅が狭い… <i>Ainu</i> | |
| —前・中跗節は細い… | 2 |
| 2. 両眼は両側に突出せず、首は太い。後翅は退化し、肩部は狭まり前胸背後縁とほぼ同幅。転節に毛束あり | |
| …………… | <i>Crossoscelis</i> |
| —両眼は通常大きく突出し、頸部は強くくびれる。肩部はふつう狭まらず、前胸背よりかなり幅広い。転節に毛束なし | <i>Strongylium</i> |

1. Genus *Ainu* ホソヒゲナガキマワリ属

ハムシダマンに近い属で、前・中跗節は先方に広がる。

従来、日本の *Ainu tenuicornis* LEWIS ホソヒゲナガキマワリの一種が知られていたが、奄美大島から *A. masumotoi* NAKANE アマミノホヒゲナガキマワリが加えられ、中条 (1979) により後者が西表島からも記録された。台湾には次の一新種が分布している。本属については、次回に再度触れる。

1-1 *Ainu fukudai* sp. nov.

タカサゴホソヒゲナガキマワリ*

(*A. tenuicornis* LEWIS 1894:480, NAKANE 1963:233
A. masumotoi NAKANE 1968:21, M. T. CHÛJÔ 1979:47)

体長11~12.5mm. 黄褐色。緑~銅色の光沢がかなり強い。同属の既知2種によく似ているが、*A. tenuicornis* とは体色が異なり、より横長の前胸背をしており、肩部側方に短かい第九番目の条溝を具えていて、さらに触角の比や、aedeagus の形状も全く違う。

また、*A. masumotoi* とは、体格が小型でさらに光沢が強く、体表の点刻は少なく、上翅の条溝内の点刻は小さいが密である。以上の他、前胸背に浅い縦溝および二対の横溝を具え、各脛節の端刺は明瞭である点で区別がつく。

検視標本: 2 exs (南山溪, 梅峰)

分布: 台湾

2. Genus *Crossoscelis* クロガネナガキマワリ属

GEBIEN (1913) によって、台湾より創設された属である。後翅が退化していることから、肩部が著しく発達していない。後胸も短縮される。眼は小さく首が太いこと、転節に毛束があることなどが属の特徴とされている。属の創設は次の種によってなされている。

2-1 *Crossoscelis clauda* GEBIEN

クロガネナガキマワリ

(GEBIEN 1913:53, KASZAB 1941:72, M. T. CHÛJÔ 1968:397, *Eucrossoscelis broscosomoides* NAKANE 1963:29, 1963:233, KASZAB 1964:8, *E. michioi* M. T. CHÛJÔ 1978:78)

体長約11.5mm. 黒褐色で紫銅色の光沢があり、上翅の条溝中の点刻は縦長。

検視標本: 2 exs (梅峰)

分布: 台湾

3. Genus *Strongylium* ナガキマワリ属

本族の中核をなす属で、多数の種が含まれる。形体も多様で、数mmの小型種から30mm近くに達する種までいる。

最近 KASZAB (1977) が、バブア地区の Strongyliini の研究で新に4属を発表し、その内 *Holostrongylium*(注) が本地区にも分布しているが、取り扱いについては少しく慎重を期し、本解説では従来そのままとして、当該種は解説中に明記するにとどめた。

(注) *Holostrongylium* 属は、上翅外縁の側片部が胸部に沿ってふちどられていない点が最大の特徴とされている。しかしこの区分によるとかなり雑多な *Strongylium* が新属に含まれることになり、取り扱いについて慎重を期したい。

GEBIEN (1913) は台湾から7種(内, 5種が新種), 三輪(1939)は2種(2種とも新種), KASZAB (1941)は5種(1新種), 中条(1968)が7種(1新種, 1新記録種)を記録している。これらは10種に整理することが出来る。今般これらに新たに7種を追加した。なお, 嶺原(1972)は10種以外の *S. basifemoratus* MÄKLIN, と *S. impigrum* LEWIS? を挙げている。

3-1 *Strongylium formosanum* GEBIEN

タイワンドウイロナガキマワリ*

(GEBIEN 1913:15, KASZAB 1941:71, 1977:20 (*Holostrongylium*), M. T. CHÛJÔ 1968:15 *S. amamianum* NOMURA 1963:38)

体長11~15mm. 銅色で上翅は金緑色光沢があり, 体は黄褐色の毛を装う。前胸背は強く密に点刻され, 上翅の点刻列も極めて強く大きい。間室は弱く膨隆し, 微小点刻を散布する。

一見, *S. amamianum* によく似ているが, 本種は♂♀共触角が先広がり, 体毛も長い。

なお, 三輪(1931)は本種の和名としてセナミナガキマワリを使っているが, *S. sinuatipenne* と混同していたと思われる。KASZAB の創設した *Holostrongylium* に含まれる。

検視標本: 4 exs (墾丁)

分布: 台湾

3-2 *Strongylium albopilosum* GEBIEN

ムクゲナガキマワリ

(GEBIEN 1913:44, M. T. CHÛJÔ 1968: 15, 397, 平山 1940:108, MAKIHARA 1972:22)

体長13~16mm. 頭・胸背は青銅色, 上翅は紫銅色で, 黄白色の毛を装う。前胸背の点刻は前種にくらべ粗くない。上翅は後半がやや広がり, 点刻列は前種より弱い。間室はやや密にかなり強く点刻され, 横シワ状となる。

検視標本: 10 exs (南山溪, 廬山)

分布: 台湾

3-3 *Strongylium schenklingi* GEBIEN

キンイロナガキマワリ

(GEBIEN 1913:48, KASZAB 1941:71, 1977:20 (*Holostrongylium*), M. T. CHÛJÔ 1968:16)

体長12~13.5mm. 頭・胸背は金藍色, 上翅は紫藍色の美しい金属光沢を有する。体は短かく無毛で, 背面は強くもりあがり, 上翅基部附近に一对のコブ状隆起を具える。上翅の点刻列の点刻は強いが, 条溝を形成しない。なお, 平山(1940)が本種として図示しているものは, *S. sinuatipenne* の誤りである。(*Holostrongylium*)

検視標本: 11 exs. (南山溪, 蓮花池)

分布: 台湾

3-4. *Strongylium pseudogibbosipenne* sp. nov.

ニセセコブナガキマワリ*

(*S. gibbosipenne* NAKANE 1963:29)

体長 8.5mm, 黒褐色で無毛。すべての腿節に白黄色の部分がある。上翅は銅色の光沢があり, 一对のコブ状隆起を基部附近に具える。

一見, *S. gibbosipenne* に似ているが, 上翅は平滑で点刻列は条溝をなさない。

検視標本: 3 exs (梅峯, 三光, 奮起湖)

分布: 台湾

3-5 *Strongylium longissimum* GEBIEN

テツイロホソナガキマワリ*

(GEBIEN 1913:50, M. T. CHÛJÔ 1968:15)

体長10.5~12.5mm, 黒褐色でにぶい金属光沢がある。体は極端に細長く, 両側が平行。上翅の点刻列の点刻は強く四角形。

検視標本: 3 exs (南山溪, 蓮花池)

分布: 台湾

3-6 *Strongylium szent-iványi* KASZAB

クビアカホソナガキマワリ*

(KASZAB 1941:71, *S. kulzeri* KASZAB 1951:263)

体長10mm. 黒色で前胸背と腿節の一部が赤褐色。体は前種同様, 極めて細長い。触角の先端6節は同等で, 他の節より太く長い。

検視標本: 3 exs (六亀, 蓮花池)

分布: 台湾

3-7 *Strongylium sinuatipenne* MIWA

シワオオナガキマワリ*

(MIWA 1939:413, 平山 1940:108 (*S. schenklingi*), M. T. CHÛJÔ 1968:36 (*S. yasumatsui*=syn. nov.))

体長21~25mm. 黒色で強い金緑色の光沢がある。*S. japanum* MARSEUL シワナガキマワリに良く似るが大型で, 上翅のシワも大きい。

平山(1940)は, この種を *S. schenklingi* として図示している。また, 中条(1968)は本種を *S. yasumatsui* として新種記載している。

検視標本: 9 exs (南山溪, 蓮花池)

分布: 台湾

3-8 *Strongylium insolitus* MIWA

オオクロナガキマワリ*

MIWA 1939:414

体長24~27mm. 黒褐色でかなり光沢があり, 頭・胸背は強く点刻される。上翅は平滑で, 点刻列の点刻は細く, 著しく縦長。

検視標本: 9 exs (梅峯・梨山)

分布: 台湾

3-9 *Strongylium carbonarium* GEBIEN

タイワンクロナガキマワリ*

(GEBIEN 1913:47, KASZAB 1941:71, MAKIHARA 1972:22 *S. oshimanum* FAIRMAIR 1897:167)

体長22~26mm. 黒褐色で光沢がある. 両眼は大きい. 上翅の条溝は深く, 中の点刻は小さく密で, 間室はかるく膨隆し, 小点刻を散布. *S. oshimanum* FAIRMAIR オオシマナガキマワリにやや似ているが, 本種の方が細長い.

検視標本: 17 exs (陽明山, 南山溪, 蓮花池, 墾丁)

分布: 台湾

3-10 *Strongylium lishanum* sp. nov.

リサンナガキマワリ*

(S. *niponicum* LEWIS 1894:480, NAKANE 1963:233)

体長約21mm. 黒褐色で上翅には弱い銅色光沢がある. 前種にやや似るが小型で, 細長く, 前胸背が前方に一層狭まる. 上翅の間室はほとんど点刻がなく滑かで, 微細な横シワがある.

原産地は梨山であるが, 梅峯・松崗地区の個体は更に小型で細く, 触角や aedeagus の形状が若干異なる. 取り扱いについては, もう少し検討したい. また, 阿里山でも近似の新種が採られているが詳細は次回にゆずる.

検視標本: 4 exs (梨山)

分布: 台湾

3-11 *Strongylium erythrocephalum* FABRICIUS

アカアシルリナガキマワリ*

(FABRICIUS 1801:156, GEBIEN 1913:46, 平山 1940:107 KASZAB 1941:71, 1977:20 (*Holostrongylium*))

体長17mm. 光沢のある青藍色. 腿節は橙黄色の特徴ある種である. 東南アジアに広く分布する. フィリピンでは燈火に飛来したものを採集した.

(*Holostrongylium*)

検視標本: 2 exs (六龜, 霧社?)

分布: 台湾, 東南アジア

3-12 *Strongylium cultellatum taiwanum*

NOMURA タイワンセスジナガキマワリ*

(S. *cultellatum* MÄKLIN 1866:345 (453), S. *marseuli* LEWIS 1894:481, S. *marseuli taiwanum* NOMURA 1963:40, M. T. CHÛJÔ 1968:15, MAKIHARA 1972:23, NAKANE 1975:12)

体長11.5~14mm. 本邦に分布し従来 *S. marseuli* とされていたものの台湾亜種である.

検視標本: 9 exs (南山溪, 蓮花池, 墾丁)

分布: 台湾 (亜種)

3-13 *Strongylium okumurai* sp. nov.

ウライナガキマワリ*

(S. *japanum* MARSEUL 1876:320, KASZAB 1970:20)

体長16~18mm. 赤褐~黒褐色で弱い光沢がある. ♀♀共, 背部は強くもり上がる. 両眼は大きく, 眼間は隆起し, それが前方に伸び頬に達し, 前方の広がったY字状の隆起を形成する. 各翅端は後方へ伸び, 会合線は先端部で合わさらない. 近似種が南西諸島に分布している. 近いうちに新種として発行する予定である. (*Holostrongylium*)

検視標本: 3 exs (烏来, 霧社?)

分布: 台湾

3-14 *Strongylium fujitai* sp. nov.

タイワンコスジナガキマワリ*

(S. *uedai* NOMURA 1964:48)

体長 12~13.5mm. 黒褐色で光沢がある. 前胸背の前・後および両側縁はふち取られる. *S. uedai* に良く似るが, 体格が大型で, 頭部はより横長, 上翅の点刻列の点刻は縦長であることなどで区別がつく.

検視標本: 2 exs (烏来, 関刀溪)

分布: 台湾

3-15 *Strongylium kentingense* sp. nov.

コンテナナガキマワリ*

(S. *shibatai* NOMURA 1963:39, S. *impigrum* LEWIS 1894:481 MAKIHARA 1972:22)

体長11.5~14.5mm. 赤褐~黒褐色で光沢がある. ♀は早くくらべ, 小型で粗造, 両眼が大きく互に近接し, 眼間から前方両側にかへ, 先の広がったY字隆起となる. *S. shibatai* にやや似ているが, 体格は大きく, 頭部は幅広く, 前胸背の点刻は粗く, 上翅の条溝はより深い. 榎原 (1972) の *S. impigrum* LEWIS? の記録は, 本種の♀を指していると考える.

検視標本: 5 exs (墾丁)

分布: 台湾

3-16 *Strongylium yokoyamai* sp. nov.

メイホウナガキマワリ*

(S. *infans* GEBIEN 1920:485, KASZAB 1977:75)

体長 5.5~6mm. 黒褐色で, 上翅は銅色光沢を帯びる. 点刻列の点刻は強大で, 条溝をなさない. 間室はしばしば横につながら. 跗節が良く発達し, 特に中跗節は長い. *S. infans* (ニューギニア産) に近いようであるが, 上翅の点刻列や触角の形状等で区別できる.

検視標本: 9 exs (梅峯)

分布: 台湾

3-17 *Strongylium nakanei* sp. nov.

ナカネナガキマワリ*

(S. *brevicorne* LEWIS 1894:482 M. T. CHÛJÔ 1968:15)

体長 8.5~10mm. 黄褐~黒褐色で, 光沢がある. 本邦に分布する *S. brevicorne* に酷似するが, 一般的に言って体色がうすく, 両眼はやや小さく, 前胸背の点刻はより強く, 密で, aedeagus の形状も異なる.

検視標本: 60 exs (南山溪, 松崗, 梅峯, 翠峯)

分布: 台湾

—台湾地区 *Strongylium* 属の検索表—

1. 体はずんぐりしている. 触角は先端に行くに従い, 明らかに幅広くなる…………… 2
- 体は長形. 触角は糸状か, わずかに先端に向い太くなる…………… 5
2. 体の背面に黄白~黄褐色のやや長い毛を装う… 3
- 背面は無毛, 滑らかで光沢がある. 前胸背は中央両側が膨隆する. 上翅基部附近はコブ状隆起を有する.
3. 上翅には強い点刻列がある. 間室は弱く膨隆し, 微小点刻を散布する……………*S. formosanum*
- 上翅の点刻列は中ようで, 間室は平らだが, かなり強い点刻がやや密にあり, 横シワ状となる……………*S. albopilosum*
4. 頭・胸背は金藍色, 上翅は紫藍色の金属光沢を有する……………*S. schenklengi*
- 黒褐色で上翅は銅色光沢があるが, 頭・胸背は光沢が鈍い. すべての腿節に白黄色の部分がある……………*S. pseudogibbosipenne* sp. nov.
5. 体の両側は平行で, 極端に細長い体格である… 6
- 体側は多少なりとも後方に広がり, 極端に細長い体格でない…………… 7
6. 体色は黒褐色で鈍い金属光沢がある. 前胸背は他の部分と同色……………*S. longissimum*
- 前胸背と腿節の一部は赤褐色. 前種より小型……………*S. szent-iványi*
7. 大型種 (20 mm 以上) …………… 8
- 中~小型種 (15 mm 以下) …………… 11

8. 金緑色の強い金属光沢がある. 上翅は三波状のシワがある……………*S. sinuatipenne*
- 上翅は正常. 黒褐色…………… 9
9. 上翅の条溝は破線状, 間室は平滑. 頭・胸背は粗い点刻を有する……………*S. insolitus*
- 上翅は点刻をともなった条溝を有する. 間室は多少なりとも膨隆する. 頭・胸背の点刻はそれほど粗くない…………… 10
10. 大型 (22~26 mm) で強壯. 前胸は前方にかかるく狭まる. 間室は小点刻を散布……………*S. carbonarium*
- 前種より小型 (21 mm). 前胸は前方でかなり狭まる. 上翅の間室は平滑でこまかい横シワ状……………*S. lishanum* sp. nov.
11. 体色は青藍色, 腿節は橙黄色……………*S. erythrocephalum*
- 体色は赤褐~黄褐~黒褐色…………… 12
12. 眼は大きく, 両眼間の距離は狭い…………… 13
- 眼は中ようで, 両眼間の距離もかなり広い…………… 16
13. 上翅の間室は龍骨状になっている……………*S. cultellatum taiwanum*
- 上翅の間室は正常…………… 14
14. 体は後方にかなり強くふくらむ. 翅端は二叉状になる……………*S. okumurai* sp. nov.
- 体はそれほど強く後方にふくまない. 翅端の会合部は正常…………… 15
15. 上翅の条溝は細く, その中の点刻は縦長. 間室はかるく膨隆……………*S. fujitai* sp. nov.
- 条溝は幅広く, その中の点刻は前種にくらべはるかに横位……………*S. kentingense* sp. nov.
16. 小型 (5.5~6 mm), 上翅の点刻列は極めて強く大きい……………*S. yokoyamai* sp. nov.
- 中型 (8.5~10 mm). 上翅の点刻列は正常……………*S. nakanei* sp. nov.

Ainu fukudai sp. nov. (Fig. 1)

Yellowish brown with tibiae, antennae, and undersurface paler, bearing rather strong greenish or coppery luster. Elongate and moderately convex longitudinally.

Head transverse, weakly convex above, distinctly and rather closely punctate, clypeus about 1.6 times as broad as long, strongly flattened posteriorly, punctures small, frons gradually then steeply sloping toward sublinear frontal suture, both ends of which bent forward and reaching outer

margin, genae not so well-raised, with outer margin oblique anteriorly and rounded posteriorly, sparsely and minutely punctate, eyes of moderate size, roundly produced laterally, distance between them a little wider than eye, neck weakly narrowed, antennae filiform, relative length of each joint from basal to apical as follows: 3.5, 1.5, 7.5, 5.0, 4.8, 5.0, 5.0, 5.0, 5.0, 5.5.

Pronotum transversely subquadrate (18 : 14), with both sides nearly parallel but broadest before middle in dorsal view, front and basal border margined, former almost straight and thicker, latter slightly bisinuate, lateral border strongly declined and distinctly margined, disc with vague median groove at frontal third, and two pairs of shallow transverse impressions before and after middle on both sides, deeply and rather closely punctate, punctures slightly larger and sparser than those on head, scutellum wide-tongue-shaped, slightly convex, finely and sparsely punctate.

Elytra approximately 2.5 times as long as broad, with basal third subparallel, broadest at apical third, finely punctate-striate, stria punctures small but distinct and very close to each other, 3rd stria and 4th, 5th and 6th, 1st and 10th united with each other respectively before apex of elytra, short 9th stria united with 10th at basal fourth, intervals without punctures, only slightly transversely reticulated.

Prosternum finely margined in front, slightly rugose, strongly elevated between coxal cavities, prosternal process small and triangular, mesosternum very finely and rather closely punctate, elevated before and between coxal cavities, metasternum somewhat coriaceous, with sparse and minute punctures on both sides, abdomen finely and sparsely punctate throughout, very smooth in middle and apical portion, depressed and coriaceous on both sides.

Legs slender, femora elongate, sparsely and minutely punctate, tibiae slightly thickened apically, each with small end-thorn at inner-upper corner, rather closely and setaceous punctate, 4 anterior tibiae bearing tufts of yellowish hairs at inner face near apex, tarsi with 4 basal joints dilated and padded beneath in 4 anterior legs, those of hind ones slender, relative length of each joint of pro-, meso-, metatarsi as follows: 4.0, 3.0, 2.5, 2.0, 7.0; 4.0, 3.0, 2.5, 2.0, 5.5; 8.5, 4.5, 3.0, 7.0, claws without any peculiarities. Terminal joint of maxillary palpi ax-shaped, with inner angle subrectangular, length of outer side being about twice that of inner.

Body length: 11~12.5 mm.

Holotype: ♂ Nanshanchi, Nantou Hsien, Formosa, 15 VI 1968, S. FUKUDA leg., paratype: 1 ex, Meifeng, Nantou Hsien, 18 VI 1976, T. MATSUMOTO leg.

This new species is closely allied to *Ainu masumotoi* NAKANE from the Ryukyu Is., and also to *A. tenuicornis* LEWIS from Japan, but it differs from the former in having a smaller body, a vague median groove on pronotum, smaller and closer punctures in elytral striae, and remarkable tibial end-thorns. From the latter in having a more transverse pronotum, a short ninth stria on each elytron and shorter third joint of antennae.

***Strongylium pseudogibbosipenne* sp. nov.** (Fig. 6)

Blackish brown, with two basal joints of antennae, palpi, tarsi reddish brown, each femur yellowish near apex, strong bronzy luster on elytra. Oblong and convex above.

Head a little broader than long, moderately convex, longitudinally impressed medially, closely punctate, punctures coarser posteriorly, each elevation above antennal insertion roundly produced, clypeus finely and closely punctate, pubescent in front, flattened posteriorly and gradually bent downward anteriorly, frons rather steeply sloping toward arched frontal suture, impunctate in anterior-middle portion, eyes moderate-sized, distance between them relatively wide, about 1.5 times as wide as eye, antennae short, with 5 apical joints dilated, 8th widest, relative length of each one about 2.5, 1.0, 3.5, 1.5, 2.0, 2.0, 2.5, 2.5, 2.0, 2.0, 2.5, respectively.

Pronotum entirely margined, about 9:7 as broad as long, broadest after middle, narrowed and rather strongly sinuate posteriorly, deeply grooved medially, convex on each side of anterior part, with small shallow impression at middle and large deep one posteriorly. Scutellum triangular with rounded apex, somewhat convex in middle, finely and closely punctate.

Elytra a little less than twice as long as broad, broadest at 6/11 from base, gradually narrowed posteriorly, apical portion rounded, disc with rows of punctures, becoming coarser and sparser toward outer portion, intervals flat with few rows of fine punctures, sutural intervals moderately elevated except near base, each elytron with gibbose elevation between 2nd and 6th interval behind base, and obliquely depressed just after it.

Body length: ca. 8.5 mm.

Holotype: ♀ Meifeng, Nantou Hsien, Formosa, 9 VI 1973, H. YOKOYAMA leg., paratypes: Sankuang, Hualien Hsien, 7 V 1978, T. KAMAKARI leg.; 1 ex, Fenchihu, Chiayi Hsien, 24 V 1975, K. AKIYAMA leg.

This new species is allied to *S. gibbosipenne* NAKANE from Japan, but in the new one the body is larger and stocky, each elytron is not striate but strongly punctate, and the intervals (except for the sutural) are flat.

***Strongylium lishanum* sp. nov.** (Fig. 12)

Blackish brown with 4 apical joints of antennae, tarsi, mouth organs reddish brown, claws more reddish, bearing feeble coppery luster on elytra. Elongate and subcylindrical.

Head subhexagonal, moderately convex, rather closely punctate throughout (except for small areas just before eyes and posterior portion of interocular space), with shallow longitudinal median impression before vertex, clypeus transverse and a little divergent anteriorly, punctures closer and finer in front, genae well-produced and subrectangular, eyes large-sized, distance between

them narrow and a little longer than length of 2nd antennal joint, antennae filiform, reaching basal fourth of elytra, 1st joint bold, 2nd very short, 3rd extremely long, 5 apical joints a little thickened, 10th thickest, relative length of each joint from basal to apical; 6.0, 2.5, 12.0, 9.0, 8.0, 7.0, 6.5, 6.2, 6.0, 6.0, 6.0.

Pronotum about 1.3 times as broad as long, broadest both at middle and base, moderately convex above, rather closely punctate, punctures somewhat ocellate, impunctate along shallow median groove, with spot-like impression after middle and oblique one near base on both sides, front and basal border margined, former disappearing at rear of front angles, latter thicker and slightly bisinuate, sides arched laterally and weakly sinuate before base, front angles obtuse, hind ones acute. Scutellum tongue-shaped, with minute punctures.

Elytra about 3 times as long as broad, broadest at basal two-thirds, gradually narrowed to round apical portion, disc finely striated with close but fine punctures, intervals slightly convex and very finely transversely reticulated.

Prosternum scarcely punctate, margined in front, convex between procoxal cavities, depressed medially, prosternal process triangular with rounded and margined tip, convex in middle, mesosternum strongly punctate anteriorly, longitudinally wrinkled posteriorly, metasternum smooth, sparsely punctate on both sides, abdomen with minute punctures throughout and finely pubescent apically.

Femora slender without any peculiarities, tibiae long and slightly curved inward, with fine short hairs, inner edge of front tibiae slightly indented from basal 2/5 to apex, middle and hind ones gradually thickened toward apex, front tarsi with dense hairs beneath, relative length from 1st joint to apical, 6.0, 3.5, 3.5, 3.5, and 14.0, middle and hind tarsi both slender and without any peculiar features (except for sparser hairs), and relative length from basal joint to apical: 19.0, 7.5, 6.0, 5.5, 14.0, and 22.0, 10.0, 8.0, 14.0, respectively, claws simple. Apical joint of maxillary palpi large and securiform with outer margin subequal in length to apical, about twice as long as inner.

Body length: ca. 21 mm.

Holotype: ♂ Lishan, Taichung Hsien, Formosa, 7 VI 1973, H. YOKOYAMA leg., paratypes: 3 exs, ditto.

This species is somewhat similar to *S. niponicum* LEWIS from Japan, but the body is larger, the elytral striae are shallower and the intervals are less convex, and the shape of the aedeagus is quite different.

***Strongylium okumurai* sp. nov.** (Fig. 15, 16)

Reddish brown to blackish brown, feebly shining. Elongate and well-convex above.

Head transverse and moderately convex, clypeus divergently produced forward and bent

downward, closely punctate, punctures small and setaceous, sparsely pubescent in front, genae obliquely and subrectangularly well-produced from anterior third of eyes with minute punctures, frons short and transverse, closely punctate, frontal suture straight and short, eyes very large, roundly produced laterally, interocular space very narrow and elevated like ridge, increasing to anterior part of each gena, thus forming wide Y-shaped elevation, with deep groove occurring just before it, vertex closely and coarsely punctate with weak longitudinal median impression, scarcely punctate around it, antennae slender, 2nd very small, 6 apical slightly thickened, relative length of each joint from basal:—*, 3.0, 15.0, 11.0, 11.0, 9.0, 8.0, 7.5, 6.5, 6.5, 7.5. (*1st joint lost)

Pronotum a little broader than long, broadest at middle, moderately convex above, strongly and rather closely punctate, punctures rather sparse in middle, with shallow longitudinal median groove, area around it impunctate, faint impression after middle on both sides, front and basal borders almost straight and remarkably margined, sides broadly rounded and finely but entirely margined, not sinuate before base, front angles rounded, hind ones subrectangular. Scutellum triangular, slightly elevated, almost smooth.

Elytra about 2.5 times as long as broad, broadest at apical third in dorsal view, strongly convex, thickest at middle in lateral view, acuminate toward apex and dehiscent at tip, with fine punctate-stiae, punctures small and close to each other, intervals moderately convex, scarcely punctate, feebly transversely reticulated. Epipleuron margined opposite abdomen.

Prosternum finely margined in front border, sparsely punctate anteriorly and closely so posteriorly, elevated between procoxal cavities but shallowly depressed in middle, tongue-shaped prosternal process convex medially, projected backward and rimmed, mesosternum coriaceous, sparsely and shortly pubescent, elevated in crescent-shape surrounding front-inner portion of mesocoxal cavities, and also triangularly elevated near anterior border, metasternum scarcely punctate, especially so in middle, abdomen minutely and rather closely punctate, much closer in apical portion, anal sternite finely pubescent, roundly depressed near apex, emarginate at tip.

Legs slender, with inner portions from base to basal 2/3 of femora and from apex to apical 2/3 of tibiae pubescent, both slightly indented in these areas, front tibiae weakly incurved, middle and hind tibiae in male shorter and simply incurved, in female somewhat prolonged S-shaped in dorsal view, front tarsi relatively short with dense golden hairs beneath, middle and hind tarsi slender also with dense hairs, relative length of front, middle and hind tarsal joints as follows: 4.5, 3.0, 2.5, 2.2, 8.0; 16.0, 9.0, 6.0, 3.5, 9.0; 17.0, 7.0, 4.0, 9.5, and claws normal. Apical joint of maxillary palpi large and securiform. Compared with female, body of male smaller and shorter.

Body length: 16~18 mm.

Holotype: ♂ Ulai, Taipei Hsien, Formosa, 17~19 VI 1971, T. OKUMURA leg., paratype:

1 ex, ditto, 27 V 1965, K. MORIMOTO leg.

This remarkable species may belong to Genus *Holostrongylium* KASZAB. Another new species allied to this captured from the Ryukyu Is. will be described by the author in the near future.

***Strongylium fujitai* sp. nov.** (Fig. 17)

Blackish brown, with mouth organs, apical joint of antennae, tarsi and claws reddish brown, head and pronotum feebly and elytra moderately shining. Elongate and moderately convex.

Head subhexagonal, moderately convex, finely and rather closely punctate, with shallow longitudinal median groove between eyes, clypeus transverse, flattened posteriorly and bordered from frons by deep slightly arched impression, genae obtusely produced and finely punctate, frons rather steeply sloping downward anteriorly, sparsely punctate, eyes large-sized, well-convex laterally, interocular space narrow and about twice length of 2nd joint of antennae, vertex rather coarsely punctate, antennae filiform, reaching basal fifth of elytra, 1st joint bold and oblong-oval, 2nd smallest, 7th to 10th a little dilated to apex, 7th widest, last joint oblong-oval, relative length of each joint from basal to apical as follows: 4.0, 1.5, 6.5, 5.0, 4.0, 3.7, 3.5, 3.5, 3.5, 3.5, 3.7.

Pronotum a little broader than long (21 : 18), broadest at middle in dorsal view, moderately convex, closely punctate throughout, with shallow longitudinal median groove nearly reaching front and basal borders, feeble transverse impression before middle on both sides and also short oblique groove-like impression at base near hind angles, front border and each side rather finely margined, basal border rather thickly margined, both borders with minute punctures, sides gradually narrowed anteriorly, sinuate before hind angles, front angles rounded and hind ones angulate. Scutellum triangular, a little elevated, with minute punctures.

Elytra about 2.4 times as broad as long, subparallel at basal half, broadest at apical third, well-convex, with faint depression around scutellar intervals, each elytron with rather fine punctate-striae, striae punctures lengthwise, intervals moderately convex, without any visible punctures.

Prosternum finely margined in front, rather closely and obsoletely punctate, intercoxal space elevated, but deeply depressed medially, prosternal process triangular with obtuse tip, projected and feebly margined posteriorly, mesosternum closely and shallowly punctate, elevated at front-inner areas surrounding coxal cavities and also near median of front border, metasternum shallowly and rather closely punctate in front and lateral portion, a little rugosely anteriorly, rest almost smooth, abdomen finely and rather closely punctate.

Legs medium-sized, with rather short protarsi, relative length of each joint of pro-, meso-, metatarsi as follows: 2.0, 1.3, 1.3, 1.0, 6.0; 7.5, 4.5, 3.5, 2.0, 7.0; 9.0, 4.0, *- , -. (*2 apical joints of metatarsi lost), claws simple, strongly bent downward. Terminal joint of maxillary

palpi ax-shaped, subequilateral triangular.

Body length: 12~13.5 mm.

Holotype: Ulai, Taipei Hsien, Formosa, 27. V. 1977, H. FUJITA leg.; paratype: 1 ex, Kuantao-chi, 29 IV 1980, A. TANAKA leg.

This new species is nearly allied to *S. uedai* NOMURA, but it differs from the latter in having a larger body, a broader head, an entirely margined pronotum, and lengthwise strial punctures.

***Strongylium kentingense* sp. nov.** (Fig. 18)

Reddish brown to blackish brown, with 6 or 7 apical joints of antennae darker, but apical joint often paler. Rather strongly shining. Elongate, subparallel and moderately convex.

Head subhexagonal, finely and rather closely punctate, with longitudinal impression medially, clypeus transverse, broadly flattened posteriorly, bent downward anteriorly, genae obliquely and subrectangularly raised, eyes very large and convex laterally, interocular space very narrow, longitudinally elevated and reaching genae, thus forming wide Y-shaped ridge, antennae slender, 1st joint oblong-oval, 2nd smallest, 6th to 10th thickened, 11th ovoid, relative length from basal to apical: 4.0, 1.5, 6.0, 5.0, 4.5, 3.5, 3.0, 2.5, 2.5, 2.5, 3.0, respectively.

Pronotum entirely margined, a little broader than long, broadest at middle, rather closely punctate, with sparsely punctate median impression at posterior half, front margin almost straight and a little thickened in middle in dorsal view, front angles rounded, sides roundly arched but slightly sinuate before hind angles, basal margin thicker and feebly bisinuate. Scutellum triangular, a little elevated, faintly depressed at middle, with fine and close punctures.

Elytra about 2.4 times as long as broad, with distinct punctate-striae, intervals moderately convex, minutely punctate, sutural intervals softly depressed near base.

Prosternum with fine margin in front, rugosely punctate, intercoxal space convex but depressed and bisulcated, with obtuse-tipped triangular prosternal process, mesosternum rugosely punctate, wrinkled longitudinally in middle, triangularly elevated near median of front border and more strongly elevated at front-inner areas surrounding both cavities, metasternum rugosely punctate in anterior portion and finely so in posterior, abdomen finely and rather closely punctate, more finely so apically.

Legs simple, without any peculiar features, relative length of front, middle, and hind tarsal joints from basal to apical: 2.5, 1.5, 1.5, 1.5, 5.0; 9.0, 4.5, 4.0, 2.5, 4.5; 12.0, 4.5, 2.5, 6.0, claws also simple. Apical joint of maxillary palpi large and subsecuriform, with apical edge slightly arched.

Female usually larger and stout, interocular space wider and not having wide Y-shaped ridge.

Body length: 11.5~14.5 mm.

Holotype: ♂ Kenting, Pingtung Hsien, Formosa, 14 IV 1972, H. CHANG leg., paratypes: 3 exs, ditto, 17 IV 1972, H. CHANG leg., 1 ex, ditto, 19 V 1973, K. MASUMOTO leg., 1 ex. ditto, 31 V 1973, H. YOKOYAMA leg.

This species is nearly related to *S. shibatai* NOMURA, but it may easily distinguished from the latter in having a larger body, a broader clypeus, coarser punctures on the pronotum, deeper punctate-striae, and more convex intervals of the elytra. The new species also resembles *S. impigrum* LEWIS from Japan. But we can separate it from the latter since the body is shorter, eyes larger, the pronotum broader, and elytral punctures stronger. In female, general features are quite different.

***Strongylium yokoyamai* sp. nov.** (Fig. 19)

Blackish brown, with antennae, mouth parts, legs, front and basal margins of pronotum lighter in color, claws yellowish brown, head and pronotum weakly shining, elytra with rather strong bronzy luster. Small, elongate, moderately convex longitudinally.

Head a little broader than long, moderately convex with spot-like faint impression between eyes, closely punctate throughout (except for interocular space where punctures sparse and coarse), clypeus flattened but strongly bent downward in front, closely and finely punctate, frons steeply sloping toward arcuate front-clypeal border, genae well-produced and subrectangular with close and fine punctures, eyes rather large and reniform, diameter same as width of interocular space, antennae somewhat short, gradually thickened, reaching base of elytra, basal joint stout, 2nd smallest, 3rd longest, last one elongate-oval and widest, relative length from 1st joint to 11th about 2.0, 1.0, 3.0, 1.3, 1.8, 1.8, 1.5, 1.5, 1.5, 1.5, 2.5, respectively.

Pronotum a little transverse (11.5 : 10.0), broadest at middle, gradually narrowed anteriorly, slightly sinuate posteriorly, moderately convex above, closely and ocellately punctate, front border nearly straight and raised in median half, basal one very feebly bisinate and margined, sides finely bordered, front angles round and hind ones subrectangular in dorsal view. Scutellum tongue-shaped, slightly depressed, with sparse and minute punctures.

Elytra about 2.5 times as long as broad, basal two-thirds subparallel, then narrowed to apex, disc very faintly and transversely depressed at basal fifth, with rows of punctures, which very large and somewhat lengthwise but not forming striae, intervals moderately convex and often united with each other transversely, 3rd interval conspicuous especially near base.

Prosternum finely margined with yellowish short hairs in front, sparsely punctate, intercoaxal space raised but softly depressed in middle, prosternal process scarcely projected, mesosternum rugosely punctate, elevated in crescent-shape surrounding anterior-inner portion of coxal cavities,

metasternum smooth, sparsely punctate in front and on both sides, sparsely pubescent in middle, abdomen with rather close, minute and setaceous punctures, anal sternite softly depressed medially and shortly truncate at tip.

Legs slender with long tarsi, middle tarsi especially longer than tibiae, each joint of pro-, meso-, metatarsi approximately, 1.5, 1.0, 1.0, 1.0, 3.5; 4.0, 2.0, 1.5, 1.0, 4.5; 4.5, 2.0, 1.5, 4.0, in relative length respectively, claws normal. Terminal joint of maxillary palpi nearly ax-shaped, strongly dilated with outer side arched and twice as long as inner one.

Body length: 5.5~6.5 mm.

Holotype: ♂ Meifeng, Nantou Hsien, Formosa, 30 VI 1974, H. YOKOYAMA leg., paratypes: ditto, 1 ex, 14 VI 1974, 5 exs, 30 VI 1974, H. YOKOYAMA leg.

This new species may be nearly allied to *S. infans* GEBIEN from New Guinea, but it differs from the latter in having a larger body, with conspicuous rows of elytral punctures, and more dilated antennal joints.

***Strongylium nakanei* sp. nov.** (Fig. 20)

Yellowish brown to blackish brown, elytra, legs, antennae and mouth parts more or less lighter in color, with weak bronzy or greenish luster on pronotum and elytra. Elongate and moderately convex longitudinally.

Head subhexagonal, rather strongly convex, closely and strongly punctate, with shallow short longitudinal groove between eyes, clypeus flattened posteriorly and bent downward in front, where more finely and closely punctate, genae roundly and obliquely produced before large and reniform eyes, frons rather steeply sloping toward arched frontal suture, interocular space strongly and somewhat rugosely punctate, distance between eyes same as total length of 2nd and 3rd antennal joint combined, antennae gradually thickened toward apex, reaching basal part of elytra, with 1st joint bold and subrectangular, 2nd shortest and oval, 3rd longest, 7 apical joints more or less dilated, 8th to 10th widest, last one large and oblong-oval, relative length of each joint from basal to apical, 2.5, 1.2, 3.5, 3.0, 2.8, 2.7, 2.7, 2.5, 2.5, 2.2, 3.0, respectively.

Pronotum a little broader than long (5 : 4), broadest at middle, strongly and closely punctate, with shallow median groove and large oblique impression on both sides, front and basal borders straightly and rather widely margined, front margin bent backwards and disappearing around both sides of anterior third of pronotum, front angles obtuse, hind ones subrectangular, sides rounded, slightly sinuated before base in dorsal view. Scutellum triangular, a little elevated posteriorly, with minute, sparse punctures.

Elytra subparallel and approximately 2.5 times as long as broad, roundly narrowed from basal two-thirds to apex, with distinct punctate-striae, intervals slightly convex with very minute and

sparse punctures, 4th stria and 5th, 3rd and 6th, 2nd and 7th united with each other before apex and 8th not reaching apex.

Undersurface lighter in color and shining, sparsely pubescent, prosternum finely margined in front, rather rugosely punctate, intercoxal space elevated but softly depressed in middle, prosternal process semicircular and depressed, with sparse small punctures, mesosternum rather closely and rugosely punctate, moderately elevated in crescent-shape at anterior-inner portion just before coxal cavities, metasternum very smooth with sparse punctures in anterior half, abdomen less shining, with rather close, minute and setaceous punctures.

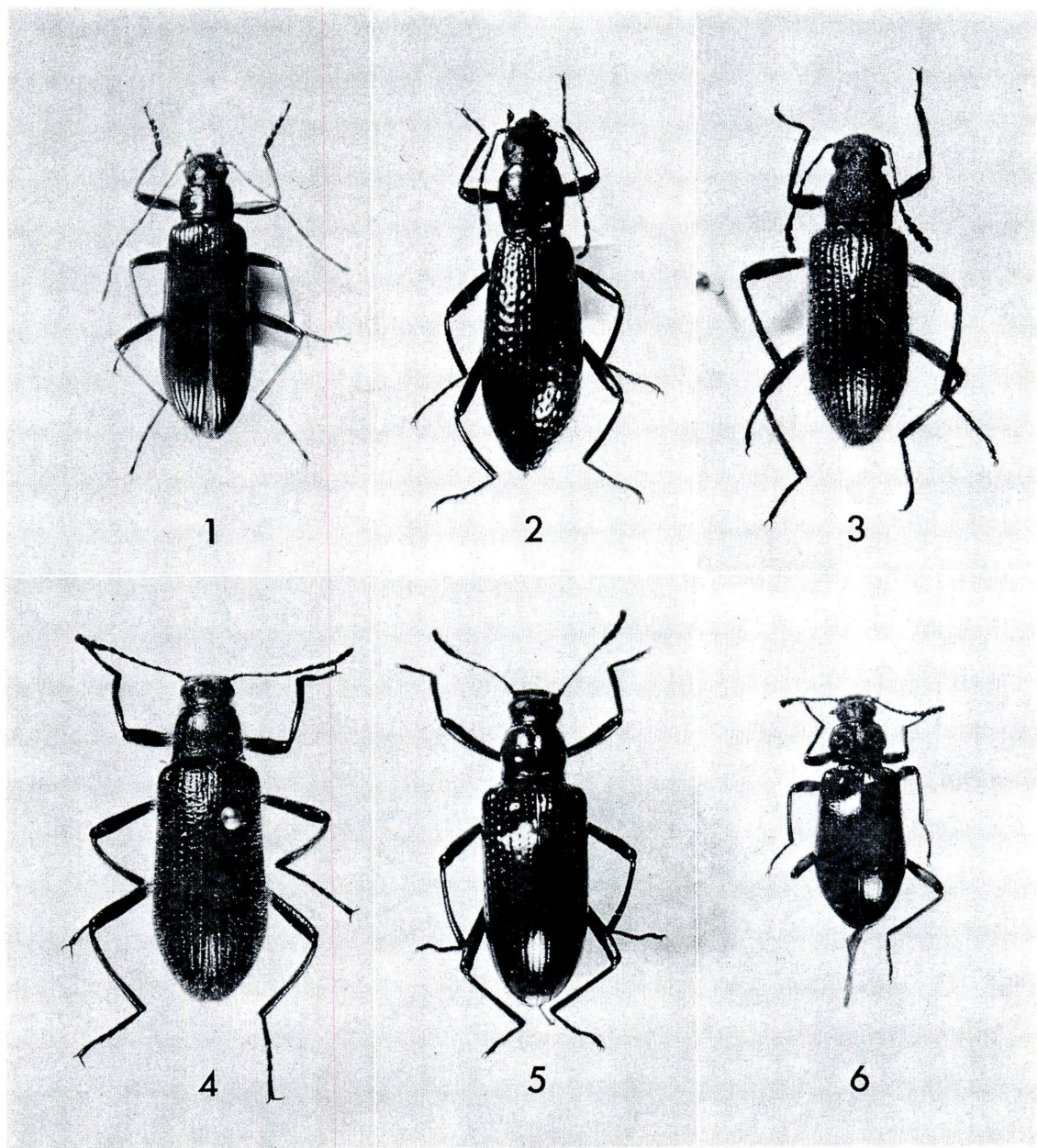
Legs slender, femora rather closely punctate, tibiae also closely punctate with rather dense and short yellowish hairs inside, tarsi long, with yellowish hairs beneath, total length of protarsi a little shorter than protibiae, 5 joints from base to apical: 2.0, 1.0, 1.0, 1.0, 5.5, in relative length, mesotarsi a little longer than mesotibiae, relative length of each joint: 4.0, 2.5, 2.3, 2.0, 6.5, metatarsi slightly shorter than metatibiae: 5.5, 2.5, 2.0, 6.0, in ratio of length, claws large. Terminal joint of maxillary palpi large and strongly dilated, with outer and apical edge same length and nearly twice as long as inner side.

Body length: 8.5~10.5 mm.

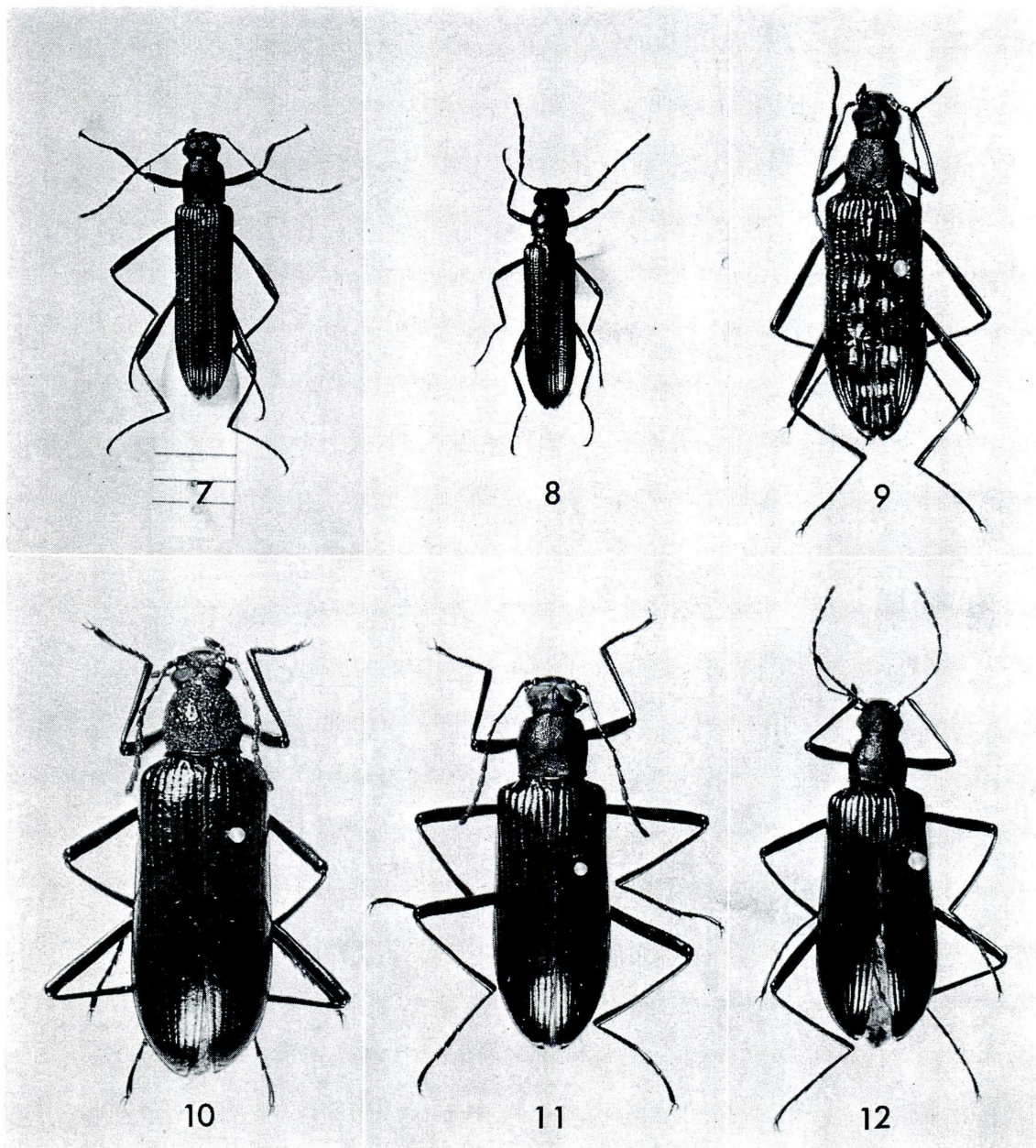
Holotype: ♂ Sungkang, Nantou Hsien, Formosa, 11 VI 1974, H. YOKOYAMA leg., paratypes: 2 exs, Sungkang-Tsuifeng, Nantou Hsien 29 VI 1965, T. NAKANE leg.; 3 exs, Nanshanchi, Nantou Hsien 15 VI 1970, S. FUKUDA leg.; 1 ex, ditto, 16 V 1971, 1 ex, 20 V 1971, K. SAKAI leg.; 5 exs, Meifeng, Nantou Hsien, 1 VI 1974, 3 exs, 11 VI 1974, 2 exs, 14 VI 1974, 3 exs, 30 VI 1974, H. YOKOYAMA leg.

This species very closely resembles *S. brevicorne* LEWIS in general features, but the body is usually lighter in color, the eyes are smaller, the claws are well-developed, the punctures on the head and the pronotum are stronger and closer, and the shape of the aedeagus is different.

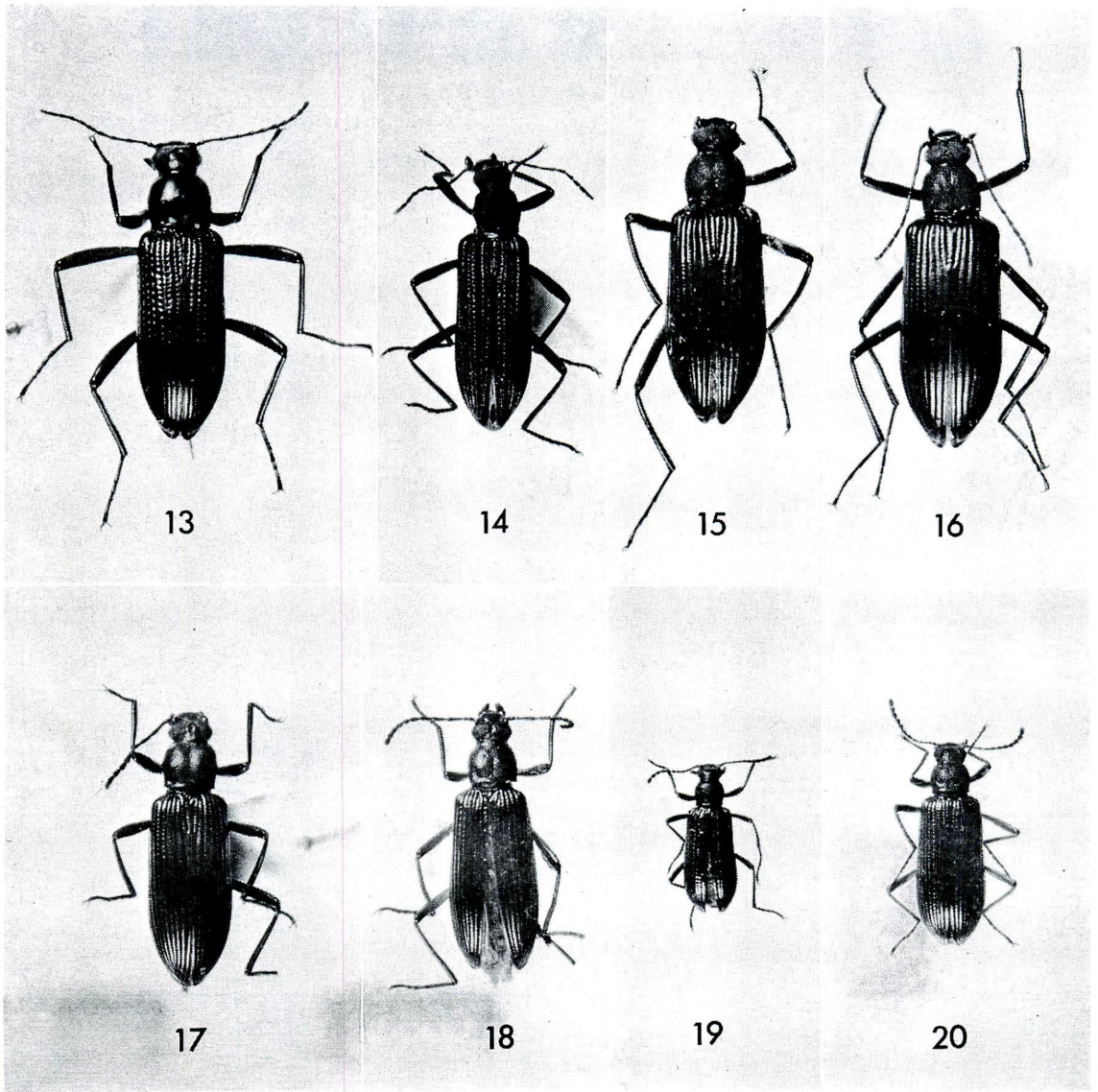
※) All holotypes are deposited in the National Science Museum, Tokyo.



写真：1. タカサゴホソヒゲナガキマワリ *Ainu fukudai* sp. nov., ♂ 2. クロガネナガキマワリ *Crossoscelis clauda* GEBIEN 3. タイワンドウイロナガキマワリ *Strongylium formosanum* GEBIEN 4. ムクゲナガキマワリ *Strongylium albopilosum* GEBIEN 5. キンイロナガキマワリ *Strongylium schenklingi* GEBIEN 6. ニセセコブナガキマワリ *Strongylium pseudogibbosipenne* sp. nov., ♀



写真：7. テツイロホソナガキマワリ *Strongylium longissimum* GEBIEN 8. クビアカホソナガキマワリ *Strongylium szent-ivanyi* KASZAB 9. シワオオナガキマワリ *Strongylium sinuatipenne* MIWA 10. オオクロナガキマワリ *Strongylium insolitus* MIWA 11. タイワンクロナガキマワリ *Strongylium carbonarium* GEBIEN 12. リサンナガキマワリ *Strongylium lishanum* sp. nov., ♂



写真：13. アカアシルリナガキマワリ *Strongylium erythrocephalum* FAERICIUS 14. タイワン
 セスジナガキマワリ *Strongylium cultellatum taiwanum* NOMURA 15. ウライナガキマワリ
Strongylium okumurai sp. nov., ♂ 16. 同, ♀ 17. タイワンコスジナガキマワリ *Strongylium*
fujitai sp. nov., ♀ 18. コンテナガキマワリ *Strongylium kentingense* sp. nov., ♂ 19. メ
 イホウナガキマワリ *Strongylium yokoyamai* sp. nov., ♂ 20. ナカネナガキマワリ *Strongylium*
nakanei sp. nov., ♂