

台湾産ゴミムシダマシ科解説〔Ⅳ〕

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Tenebrionidae of Formosa (4) by Kimio MASUMOTO

(Tribe Amarygmini の続き)

今回は Tribe Amarygmini キマワリ族の各属および種について、主として外部形態を中心に解説する。

1. Genus *Amarygmus* マルキマワリ属

本族の中核をなす属で、*Amarygmus micans* FABRICIUS が属の模式種になっている。一般に体は卵形で膨隆し、前頭は変化があり(幅広いものから狭いものまである)、前胸背基部はふち取られず(パプア・ニューギニア地区にはふち取りのある種もいるらしい)、跗節は単純(細くて広がらない)。

本邦からは、*A. callichromus* FAIRMAIR ニジマルキマワリが知られているが、他に未記載の新種がいる。

台湾からこれまで次の6種が知られ、ほかに*A. micans* に似た種(おそらく新種)がいるが詳細は追って発表する。

1-1 *Amarygmus pilipes* GEBIEN

ヨツモンマルキマワリ

GEBIEN, 1913, Arch. Nat. 79, A 9:42

= *A. formosanus* PIC, 1915, Mel. Ent., 16:21

体長7~9mm。やや長卵形で背面は強く膨隆。肩部はわずかに狭まる。黒~黒褐色で上翅に鮮やかな黄色の波状紋を前後に二対(4個)装う。複眼は大きく、深く頭部内側に入り、眼間距離は複眼の横直径の4/5程度。背面は、小さいが明瞭な点刻がかなり密。♂の前脛節内縁の先方半分は太まり、内縁には毛を密に装う。跳躍する性質がある。

台湾各地に産するほか、東南アジアにも広く分布するらしい。なお、KASZAB (1980) は本種を *Platolenes* 属に移している。

1-2 *Amarygmus cuprarius* WEBER

ニセニジマルキマワリ*

WEBER, 1801, Obs. Ent., 40

体長10~12.5mm。卵形。黒色で背面は虹状光沢を装う。複眼は極めて大きく、眼間距離は横直径の約1/2。前胸背は小点刻がかなり密。上翅も同様だが、点刻はさらにこまかい。

本邦の *A. callichromus* に酷似するが、本種はより大きく幅広く、前胸背前方はより強く狭まり、眼間距離はわずかたが幅広く、♂の交尾器は細長く、とくに先方部(lateral lobes)は短かいが反対に基部(basal piece)は長い。*A. callichromus* の台湾の記録は本種と混同していると思われる。

スンダ、パプア、台湾(南部・蘭嶼等)から記録されている。

1-3 *Amarygmus sakaii* MASUMOTO

サカイマルキマワリ*

MASUMOTO, 1981, Elytra, 9(1):29

体長9~10.5mm。やや長卵形。赤褐~黒褐色で背面は銅光沢を帯びる。複眼はかなり大きく、眼間距離は横直径にくらべいくぶん短かい。前胸背には小さいが深い点刻がかなり密、後縁両側は短かく斜に刻せられる。上翅の点刻列の点刻はやや細長く、しばしば細い条溝により連なる。間室は前胸背より細かい点刻をやや密に装う。原産地は墾丁、瑞穂、巴陵。

1-4 *Amarygmus trichopus* KASZAB

タカサゴマルキマワリ*

KASZAB, 1941, Stett. Z., 102:69

体長9.3mm。体は細長く前胸背はやや緑色で両側と細い中央部は弱く金色。上翅は黒色で銅色光沢がある。複眼は大きく、前頭はかなり狭く触角の第2節+第3節より狭い。頭胸背は細かい点刻が疎に、上翅間室は一層疎に点刻される。上翅の点刻列の点刻はかなりあらく間隔がある。前胸は脛節間が深く窪む。次属と関係があり

そうだ。

原産地は台南。

1-5 *Amarygmus taiwanus* MASUMOTO (注1)

タイワンマルキマワリ*

MASUMOTO, 1981, Elytra, 9(1):31

体長6.5~7.5mm. 卵形. 黒褐色で背面は暗緑色. 複眼はかなり大きく, 眼間距離は横直径より少し短い. 前胸背は小点刻がかなり密. 上翅の条溝は極めて細く, 条溝内の点刻は小さいが明らか. 間室は平たんで, 前胸背より細かい点刻をやや密に装う.

原産地は烏来, クラル.

1-6 *Amarygmus micans cyaneipennis* PIC

チビマルキマワリ*

Amarygmus micans var. *cyaneipennis* PIC, 1938, Mel. Ent., 70:10

体長5mm. 卵型で背面は強く膨隆. 青藍~青緑色. 触角は糸状で長い. 複眼は大きく強く頭部の内側に入り, 眼間距離は横直径の2/5ぐらい. 頭楯の前半は広い. 前胸背は細かい点刻がかなり密. 上翅は細い条溝と間隔のあいた点刻列を装う. 間室は平たんで微小点刻をやや密に散布.

台湾では蘭嶼から得られているが, 楨原 (1972) の *A. viridipes* GEBIEN? の記録は恐らく本種であろう.

2. Genus *Elixota* コマルキマワリ属

体は長卵形で, 体側がしばしば平行~直線的にわずかに後方に向け狭まる. 頭楯は幅広く, 前胸背基部はふち取られない. 上翅は頭胸にくらべかなり長い. 跗節は小さい.

本邦から *Elixota curva* MARSEUL コマルキマワリ, *E. iridicollis* NAKANE ニジコマルキマワリ等が知られている.

台湾に次の3種が分布していることになっている.

2-1 *Elixota iridicollis* NAKANE (注2)

ニジコマルキマワリ

NAKANE, 1968, Fragm. Coleo., 21:83

体長7.5mm 内外. 台湾産の個体は大型でいく分短かく, 黒色で弱い銅色光沢を帯びる. 眼間距離は横直径よりやや短い. 上翅の点刻列の間隔はやや疎で会合部付近は点刻の直径の3~4倍の距離, 間室はよりあらく小点刻を散布. ㊦の交尾器はより大きく太く, 奄美産の個体と少なくとも亜種として区別出来得る. ♀は *Amarygmus carbonarius* HOPE (カントン産) とよく似ている.

台北 (*E. iridicollis* のバラタイプのタイプロカリティー) の他, 墾丁でも得られている.

2-2 *Elixota punctata* (PIC)

アバタコマルキマワリ*

PIC, 1922, Mel. Ent., 36:11 (*Amarygmus*)

体長8~9mm. 細長い. 黒色で青藍~暗紫色の光沢がある. 複眼は大きく眼間距離は横直径とほぼ同幅. 前胸背は滑かだが微小点刻を散布する. 上翅は強い点刻列がありアバタ状. 間室はわずかに高まり, 前胸背より疎に微小点刻を散布する.

PIC は本種を中国から記載した. 台湾各地で採集されている.

2-3 *Elixota pellegrini* (PIC)? (注3)

ナガコマルキマワリ*

PIC, 1922, Echange, 38:24 (*Anacyclus*)

体長8mm 内外. かなり細長い. 黒色で暗青藍~暗紫銅色の光沢がある. 複眼は大きく眼間距離は横直径のおよそ1/2. 前胸背は光沢が強くこまかい点刻がかなり密. 上翅の点刻列の点刻は大きくないが明瞭. 間室は弱く膨隆し, 微小点刻をやや密に装う.

PIC は本種を日本から記載した. 中条道崇 (1968) は台湾から *Elixota curva* を記録している.

台湾の個体は本邦の *E. curva* にくらべやや大きく幅も広く光沢が強い. 上翅の条溝はより浅く, ㊦の交尾器はやや短かく幅広く, 先端部のヘラ状部の形もやや異なる.

今回の同定は KASZAB 博士によるものだが, *E. pellegrini* は *E. curva* のシノニムかもしれない. その場合は台湾産は亜種~別種となるだろう.

台湾では烏来等に産する.

3. Genus *Oogeton* ダルマキマワリ*属

前回に述べたように三輪 (1939) は台湾から属の記載なしにいきなり *Oogeton makii* を記載している. 種の記載文から本属の特徴となる点として, 前胸背がほぼ半球状という記述があげられる. KASZAB (1941) は本属の特徴として, 後翅が退化している, ㊦の前中跗節が強く広がっている, 前胸背は完全にふち取られるなどの点をあげている.

3-1 *Oogeton makii* MIWA

ダルマキマワリ*

MIWA, 1939, Zool. Mag., 51(7):412

Oogeton nigrocoeruleum KASZAB, 1941, Stett. Z., 102:70

体長16mm 内外. 肩部がかなり強くくびれ長めのダルマ型. 黒色だがわずかに暗青藍色を帯びる. 複眼はかなり大きい眼間距離は複眼横直径より少し長い. 前胸背は丸く膨隆, 板面は微細に点刻される. 上翅は長卵形で

膨隆し条刻され、条溝内の点刻は目立たない。間室は弱く膨隆、微小な点刻を散布。前腿節は中央にかかるく太まる。

原産地は阿里山。KASZAB は甲仙甫より記載。奮起湖、水社寮等でも得られている。

4. Genus *Cyriogeton* セダカキマワリ*属

Plesiophthalmus に近いが、体は短めでより膨隆することが多い。複眼の大きさは種により変化があり、眼間距離も多様。上翅は前胸にくらべしばしば幅広くぶあつ。前腿節は中央に幅広くなり、しばしば内縁の先方がそがれるか、えぐられ、突起があるように見える。♂の前脛節は多少なりとも弧状で、先方に向けて若干幅広くなり、内縁の基方は軽くえぐられることが多い。また、第5腹板の後端が半円状にえぐられる（または窪む）ことが多いが、肢と腹板の特徴は次属と共通である。なお本属は派手な色彩を帯びるものが含まれている。

4-1 *Cyriogeton shigeoi* MASUMOTO

コンテイセダカキマワリ*

MASUMOTO, 1981, Elytra, 9(1):19

体長18~20mm。背面は暗黒褐色で真鍮色の金属光沢があり、時に弱い絹状光沢を帯び、また肩部に暗赤褐色紋を装うことがある。

次種 *C. nigroaeneum* GEBIEN によく似るがいく分大きく細長い。複眼はより大きい眼間距離はより狭く横直径の1/6程度。前胸背はより幅広く強く前方にまるまって狭まりより滑か。上翅の点刻列はより明瞭。肢はより太く、前腿節内(前)縁は次種にくらべより長く(基方より2/3から先端まで)えぐられる。♂の前脛節は内縁の基方2/5がえぐられる。♂の第5腹板後端中央は半円状にえぐられる。

原産地は墾丁。

4-2 *Cyriogeton nigroaeneum* GEBIEN

タカサゴセダカキマワリ*

GEBIEN, 1913, Arch. Nat. 79, A 9:40

体長15~18.5mm。黒色、真鍮光沢がないか、あっても弱い。時に弱い絹状光沢を帯びる。複眼は大きい眼間距離は前種より少し幅広く、横直径のおよそ1/5。前胸背、上翅とも滑か。上翅会合部はしばしば稜状にたかまる。肢はより細く、前腿節は中央に向け太まるが、内縁の基部より5/7から先端までえぐられる。♂の前脛節はより弱く弧状に曲り、内縁の基方2/5がえぐられる。

♂の第5腹板後端中央は半円状にえぐられる。

台湾各地で得られている。

4-3 *Cyriogeton kondoi* MASUMOTO

コンドウセダカキマワリ*

MASUMOTO, 1981, Elytra, 9(1):18

体長12~16mm。背面は真鍮光沢を帯びる。複眼は大きく眼間距離は横直径のおよそ3/5。前胸背前縁は幅広いV字状で前角は少しとがる。上翅の前・側部は点刻列の点刻が融合し窪みやアバタ状。前腿節は基部から3/5が最大幅でそれより先きはそがれたようになっている。♂の前脛節は先方に向けわずかに広がる。第5腹板後端中央は弧状にえぐられる。

原産地は太平山、梅峯。

4-4 *Cyriogeton nishikawai* MASUMOTO

コガタセダカキマワリ*

MASUMOTO, 1981, Elytra, 9(1):22

体長9mm。サルハムシに似た体形をした小形種。黒色で背面は金属光沢が極めて強い。複眼は中庸で眼間距離は横直径より少し長い。上翅は強く膨隆し、第5条溝の基方とその後方が強く圧せられる。点刻列はこまかいが明らかで、しばしば条溝により連なる。間室は平坦で無点刻。前腿節内縁は先方2/7が強くえぐられ、かどはすどくととがる。♂の前脛節は弧状、内縁の基方半分はえぐられる。第5腹板はかるく切断状。

原産地は南山溪。

4-5 *Cyriogeton nanshanchiense* MASUMOTO

コブセダカキマワリ*

MASUMOTO, 1981, Elytra, 9(1):25

体長13.5mm。背面は黒緑色で鈍い光沢がある。複眼はかなり大きく眼間距離はほぼ横直径と同長。頭胸背と肢にはかなり密に点刻がある。小楯板後方は圧せられ、その両側と後方がコブ状に膨隆。点刻列は明瞭、間室は平坦か、わずかに隆まるが無点刻。前腿節の内縁の先方1/3は強くえぐられ、かどは鋭く突出。♂の前脛節内縁は基半分がえぐられる。第5腹節は鈍くまるまる。

原産地は南山溪。

4-6 *Cyriogeton fujitai* MASUMOTO

フジタセダカキマワリ*

MASUMOTO, 1981, Elytra, 9(1):24

体長14mm。後方に少し広がる。前胸背と上翅は深緑の光沢がある。複眼は中庸。眼間距離は横直径の約1.7倍。上翅は細い点刻条溝を具え、間室は平坦で無点刻。前腿節の内縁は先方2/5が強くえぐられ、かどは突起状。

原産地は大曼。

4-7 *Cyriogeton mayumiae* MASUMOTO

ミヤマセダカキマワリ*

MASUMOTO, 1981, Elytra, 9(1):21

体長11.5~12.5mm。上翅はあまり隆まらない。頭胸背は青藍色、上翅は深緑青色、赤紫色の虹状大紋を装う。複眼は中庸で眼間距離は横直径とほぼ同長。上翅の

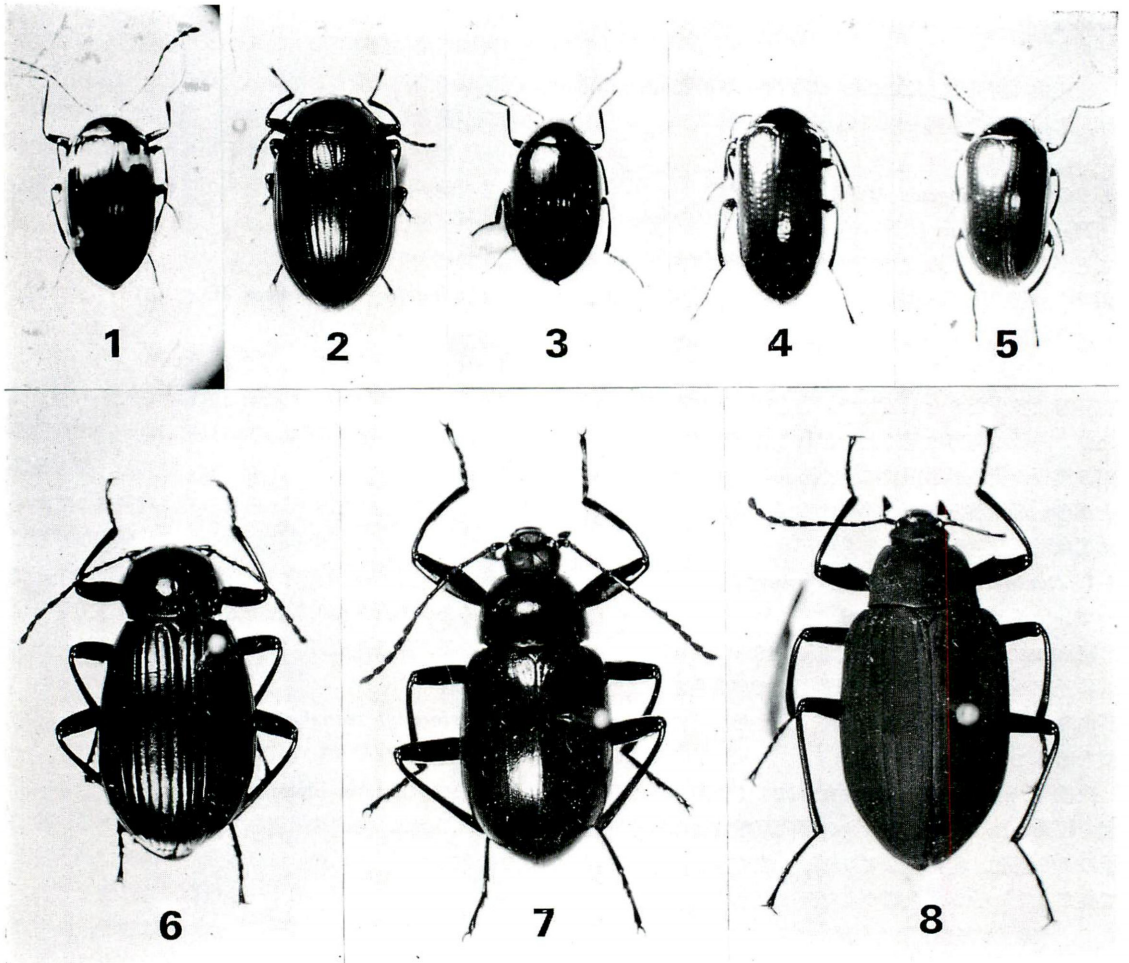


Fig. 1 1. *Amarygmus pilipes* GEBIEN 2. *Amarygmus cuprarius* WEBER 3. *Amarygmus micans cyaneipennis* PIC 4. *Elixota punctata* (PIC) 5. *Elixota iridicollis* NAKANE, (Formosa) 6. *Oogeton makii* MIWA 7. *Cyriogeton nigroaeneum* GEBIEN 8. *Plesiophthalmus longipes* Pic ?

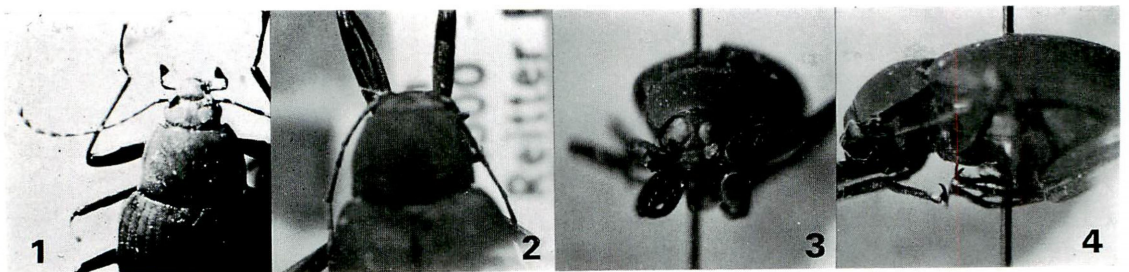


Fig. 2 1. *Plesiophthalmus longipes* PIC ?, (Formosa) 2-4. *Plesiophthalmus longipes* PIC (China, REITTER leg., in Natural History Museum, Paris)

点刻列の点刻は小さく、間室は平坦。前腿節内縁の先方3/8はえぐられる。♂の前脛節は基方2/5がえぐられる。♂の第5腹板はかかる切断状。

原産地は阿里山、能高山、卓社大山、卑南主山、八通関。

5. Genus *Plesiophthalmus* キマワリ属

前属にくらべ、体はより長めで、前胸背と上翅の幅は基部であまり差がなく、上翅の基部は前胸背基部よりあまり隆らない。

5-1 *Plesiophthalmus uenoi* MASUMOTO

ウエノキマワリ*

MASUMOTO, 1981, Elytra, 9(2):31

Plesiophthalmus taiwanus MASUMOTO, 1981, Elytra, 9(1):28, (nec NOMURA, 1964)

体長12~13mm。肩部がくびれる。背面は銅色~真鍮色で光沢がある。複眼は中庸で眼間距離は横直径よりわずかに狭い。前胸背はよく膨隆し、前縁は極めて広いV字型。上翅の点刻列の点刻はこまかく縦長、間室は幅広く平坦で微小点刻を装う。後翅は退化している。前腿節は先方2/7はえぐられる。♂の前脛節は基方2/5が弱くえぐられる。♂の第5腹板後縁中央はコブ状の小突起を具え、後端はまるみを帯びる。

原産地は水社寮、奮起湖。

5-2 *Plesiophthalmus spectabilis taiwanus*

NOMURA

タイワンクロツヤキマワリ*

NOMURA, 1964, Ent. Rev. Jap., 17(2):49

体長19~20mm。体は長め。黒色でかなり光沢あり。複眼は大きく眼間距離は横直径の約1/4。前胸背後縁付近の中央に幅広いU字型の浅い溝あり。前腿節内縁の先方1/3はえぐられ、かどはやや鋭く、♂の前脛節の基方1/3はえぐられる。♂の第5腹板は切断状。

台湾亜種は上翅間室が膨隆し、こまかく弱く点刻される。

台湾各地に分布。

5-3 *Plesiophthalmus kanoi* MASUMOTO

タカサゴキマワリ*

MASUMOTO, 1981, Elytra, 9(1):26

体長14mm。体は短かい。黒色で光沢あり。背面と肢は点刻をかなり密に装う。複眼は大きく眼間距離は横

径の1/3以下。上翅の条溝は浅いが幅広く、間室は隆まる。前腿節の先方3/8はえぐられる。♂の前脛節内縁基部3/7がえぐられる。第5腹板後端中央はかかる半円弧状えぐられる。

原産地は埔里。

5-4 *Plesiophthalmus formosanus* MIWA

タカサゴイブシキマワリ*

MIWA, 1939, Zool. Mag., 51(7):412

体長16~19mm。背面はよく膨隆する。黒色で光沢がない。頭部と前胸背前縁・側方および下面は灰白色毛を装う。眼間距離は横直径のおよそ1/4。前胸背前縁はほぼ直線状で前角は少しく鈍角、両側はかかる円弧をえがき後角はほぼ直角。上翅の点刻列は極めて微小で条溝も浅い。前腿節の内縁の先方1/3はかかるくえぐられるが、かどは鈍い。♂の前脛節は基方3/7がえぐられる。♂の第5腹板後端中央は半円~弧状にえぐられる。

台湾各地に分布するが、幾つかの型に分けられよう(詳細は後日触れる)。

5-5 *Plesiophthalmus longipes* PIC

PIC, 1938, Mel. Ent., 70:8

ホソイブシキマワリ*

体長18~19mm。黒色で光沢がない。前種にやや似るが細長く背面の膨隆度も少ない。複眼は大きく眼間距離は横直径の約1/2で前種にくらべ若干幅広い。前胸背はまるまらずかるく先方に狭まり、前角は鈍く突出し、側辺の後方は弱くくびれ、後角は鋭角に突出。板面の点刻は多少粗い。上翅はこまかいが明らかな点刻溝がある。下面の毛は薄い。前腿節の内縁の先方1/3はえぐられる。巴稜、三光等の山地で得られている。

中条道崇(1968)はパリ博物館の標本と照合して台湾から *P. longipes* を記録したとしている。著者もパリで REITTER のラベルのある標本を検した(Fig. 2参照)が、台湾産の個体は眼間距離がより狭く、背面の膨隆度も弱い。さらに原記載の体長より、だいぶ大型であること等の相違点がみられ、別種の可能性が強いと考える。

注(1)~(3): 本稿を日本鞘翅目学会に提出(1981年11月末)した後、(1)は別属に移行させ、(2)、(3)はそれぞれ新亜種及び新種として発表することとした。

(次回は♂の交尾器から見た台湾の *Amarygmini* の検討を行う予定である。)

Tribe Cnodalonini

***Addia nakanei* sp. nov.**

Dark reddish brown; upper surface bearing deep greenish luster; elytra purplish in sutural and marginal portions, pronotum also often purplish. Oblong-oval; rather strongly convex above.

Head wide-hexagonal, moderately convex, rather closely and finely punctate; frons gently sloping forward, sparsely punctate in front; frontal suture nearly straight and finely impressed, with both ends connected by gena-clypeal sutures; clypeus wide, feebly but broadly convex in middle and depressed around gena-clypeal borders, front margin straight with both ends roundly oblique; genae depressed in posterior portions, outer margins oblique in anterior 2/3, then roundly narrowed; eyes extremely transverse, shortly and roundly produced laterally, distinctly sulcate along inner margins; interocular space a little wider than latitudinal diameter of eye; antennae medium-sized, reaching basal portion of pronotum, 1st joint distinctly stout and ovoid, 5 apical joints club-like, 7th to 10th nearly triangular, 11th oblong-oval, relative length of each joint (base to apex): 1.8, 1.0, 1.8, 1.5, 1.4, 1.3, 1.6, 1.4, 1.5, 1.6, 2.3.

Pronotum transverse (breadth : length=25.0 : 15.5), broadest at basal 3/7, roundly narrowed to front and base; front border rather strongly emarginate, clearly margined but margin interrupted in median 1/4; basal border slightly bisinuate; sides distinctly margined; front angles rather acute; hind angles a little obtuse; disc moderately convex, closely and rather finely punctate, often (but not always) with shallow median impression and irregularly shaped impressions on both sides. Scutellum small and triangular, impunctate.

Elytra ovoid, about 1.3 times as long as broad, gradually widened from base, broadest at basal 2/5, then roundly narrowed, narrowly roundly produced in apical portion; dorsum rather strongly convex above, thickest at basal 2/7; disc with rows of strong punctures, distance between them about 1-4 times their diameter, scutellary rows very short, consisting of few punctures; intervals flat in middle and feebly convex in lateral portions, nearly smooth (microscopically punctate); sides distinctly canalinate, narrowly reflexed along outer margins.

Mentum heart-shaped and projected, sulcated on both sides; gula parabolic, finely reticulate; maxillary palpi relatively large, each terminal joint with arcuate outer side 1.8 times as long as inner, 1.3 times as long as apical.

Prosternum finely margined in front, sparsely punctate, wrinkled in anterior portion, fusiform elevation with raised longitudinal edges along median, prosternal process triangular; mesosternum deeply hollowed in wide V-shape; metasternum sparsely and finely punctate, shallowly wrinkled, front border slightly raised. Abdomen microscopically punctate, with 2 anterior sternites and anterior half of 3rd sternite shagreened and shallowly wrinkled.

Legs without any special characteristics; relative length of each tarsal joint (base to apex): 1.5, 1.1, 0.9, 1.0, 4.5; 2.1, 1.3, 1.3, 1.4, 5.0; 3.2, 1.7, 1.5, 5.3, respectively.

In female, usually body shorter and more ovoid.

Body length: 7.5-9.5 mm.

Holotype: ♂, Fenchihu, Chiayi Hsien, Formosa, 26. VI. 1981, K. MASUMOTO leg.; paratypes: 34 exs., ditto.; 2 exs., Fenchihu, 24. VII. 1972, T. NAKAMURA leg.

This new species closely resembles *Addia latior* NAKANE from Amami Oshima Is., but differs from the latter in having a larger body with different coloration, a pronotum with more strongly arcuate sides and a disc more finely punctate, elytra with rows of coarser punctures and very short scutellary rows and a differently shaped aedeagus.

M.T. CHÛJÔ recorded *Addia latior* NAKANE and *A. scatebrae* LEWIS from Formosa, but I think one of those species is in fact this new species.

In 1894, G. LEWIS described the genus *Addia* for the first time from Japan comparing *Hemicera* (Cnodalonini) and *Ceropria* (Diaperini). It has been treated as a genus of the tribe Diaperini, but as Dr. T. NAKANE has already suggested, the genus actually belongs to the tribe Cnodalonini by virtue of the structure of the underside of the body.

We cannot find any notable differences between the genus *Addia* and the genus *Tetraphyllus* except that the former has a more elongate body. Recently Dr. Z. KASZAB informed me that after careful examination he has come to the conclusion that the genus *Addia* is synonymous with the genus *Tetraphyllus*.

Tribe Ulomini

Uloma tsugeae sp. nov.

Dark reddish brown; antennae, legs, mouth organs, genae, prosternum, lateral portions of metasternum and abdomen, etc., lighter in color; moderately shining. Oblong; longitudinally convex.

Head transversely elliptic, distinctly grooved in flattened Y-shape, apexes of groove reaching front margin and dividing clypeus and genae; frons finely punctate, microscopically reticulate; fronto-clypeal groove comparatively distinctly punctated but smooth; clypeus moderately but broadly elevated, nearly impunctate and micro-reticulate, sublinearly truncate in front; genae rather closely and finely punctate, with outer margins oblique and very feebly arcuate; vertex moderately convex, strongly and closely punctate; eyes strongly transverse, distance between them about 3 times their latitudinal diameter; antennae relatively narrow, softly flattened, gradually thickened to apexes, 7 apical joints somewhat club-like, relative length of each joint

(base to apex): 2.0, 1.2, 1.7, 1.6, 1.6, 1.6, 1.5, 1.5, 1.5, 1.5, 2.0.

Pronotum subquadrate (breadth : length=29.5 : 22.0), moderately arcuate laterally, broadest at middle; front border arcuate-emarginate, finely margined but margin interrupted along median 3/7; basal border weakly bisinuate; sides clearly margined; front angles narrowly rounded; hind angles obtuse; disc rather strongly convex, fairly closely but finely punctate, punctures shallower in middle, semicircularly excavated at median of anterior 1/3, with 2 pairs of gibbosities along upper edge of excavation, placed near median and on lateral edges respectively, excavation nearly impunctate in anterior portion, distinctly punctate in posterior. Scutellum shortly subcordate, feebly elevated, nearly impunctate.

Elytra 2.4 times as long as broad, 2.3 times longer than pronotum, broadest at middle, gently narrowed to front and moderately roundly narrowed to rear, narrowly roundly produced in apical portion; dorsum rather strongly convex, feebly depressed after scutellum; disc moderately punctate-striate, punctures in striae rather fine; intervals nearly flat, feebly convex in lateral and posterior portions, rather closely and minutely punctate with sparse, fine transverse wrinkles.

Mentum somewhat cordate, broadly depressed in middle, with margin (except basal portion) raised, microscopically coriaceous; maxillary palpi each with securiform terminal joint.

Prosternum coarsely setaceous punctate except median portion; metasternum closely punctate and coarser anteriorly. Abdomen closely punctate, 3 anterior sternites shallowly wrinkled in lateral portions and more finely punctate medially, 2 apical sternites also more finely punctate.

Fore femora strongly thickened; fore tibiae distinctly widened to apexes and somewhat crescent-shaped, outer margins bearing about 8-10 outer teeth, inner margins very slightly emarginate both at base and in middle, middle tibiae shortly but rather sharply dentate outwardly, hind tibiae comparatively slender, indented; relative length of each metatarsal joint (base to apex): 4.5, 1.5, 1.2, 3.2.

Female comparatively larger, groove on head shallower, excavation replaced by shallow depression in anterior-median portion on pronotum. Pronotum more strongly narrowed to front, front border feebly bisinuate-emarginate, punctures comparatively distinctly punctate. Mentum flat and coriaceous.

Body length: 11.8-12.7 mm.

Holotype: ♂, Fenchihu, Chiayi Hsien, Formosa, 26. VI. 1981, K. MASUMOTO leg.; paratype: 1 ex., ditto.

This new species somewhat resembles both *Uloma bonzica* MARSEUL from Japan and *U. kondoii* NAKANE from Yakushima Is., Japan, but is easily differentiated from the former in having a comparatively larger body with a broader pronotum and a more gently sloping, wider excavation, and from the latter in having a more slender, less convex body with 2 pairs of gibbosities along the edge of the pronotal excavation.

***Uloma meifengensis* sp. nov.**

This new species resembles *Uloma excisa* GEBIEN from Formosa, but is distinguishable from the nominate species in the following points:

Body smaller and shorter; slightly more convex above.

Head comparatively shorter, more sparsely and irregularly punctate; clypeus shorter, with front margin straight and longer; genae with outer margins more distinctly angulate in posterior portions; eyes more transverse, remarkably depressed along inner margins; antennae slightly shorter, more distinctly widened toward apices, 7 apical joints flattened and somewhat club-like, 7th joint to 10th extremely transverse, 11th rather ovoid (as fig. 4-2a).

Pronotum more transverse (breadth : length=22.0 : 14.7), broadest at middle, strongly roundly narrowed forward, gently narrowed to rear; disc more finely and irregularly punctate, somewhat semicircularly excavated at median of anterior 2/5, with 2 pairs of obsolete gibbosities along upper edge of excavation placed near median and on lateral edges respectively.

Elytra comparatively shorter (length : breadth=40.0 : 24.0); disc more finely punctate-striate, punctures in striae weaker; intervals more flattened, more distinctly transversely wrinkled, more roughly microsculptured; humeral corners more angulate.

Mentum larger and transverse-oblong; terminal joint of each maxillary palpus longer with apical side more oblique.

Prosternum raised and ridge-like along median.

Fore tibiae less strongly widened to apices, with inner margins not noticeably emarginate at base but feebly produced in basal 1/3 and more broadly produced in apical 1/3; relative length of each metatarsal joint (base to apex): 3.2, 1.0, 0.9, 3.2.

Aedeagus comparatively short, strongly curved in middle, slender toward apex, with pointed, smaller apical portion.

Body length: ca. 9 mm.

Holotype: ♂, 2. I. 1975, Meifeng, Nantou Hsien, Formosa, K. MASUMOTO; paratypes: 1 ex., ditto; 1 ex., 29. III. 1974, ditto.

***Uloma nomurai* sp. nov.**

This new species also closely resembles *Uloma excisa* GEBIEN, but is distinguishable from the latter in the following characteristics:

Body larger, more elongate and thicker.

Head more transverse; clypeus more distinctly transverse-oblong and convex, almost impunc-

tate; eyes more transverse; antennae slightly more slender, 7 apical joints somewhat club-shaped, 6th joint to 10th dilated to each apex, 7th to 10th distinctly transverse, 11th ovoid (as fig. 4-3a).

Pronotum more elongate (breadth : length=27.0 : 19.5), broadest at basal 1/3, roundly narrowed forward and to rear; front border comparatively narrowly emarginate; front angles distinctly narrowly rounded; disc more closely and finely punctate, more deeply, semicircularly excavated at median of anterior 2/5, with 2 pairs of distinct gibbosities along upper edge of excavation, located near median and on lateral edges respectively, shortly impressed along basal border on both sides.

Elytra more elongate (length : breadth=53.5 : 29.0), broadest near base and at basal 3/5, gradually roundly narrowed to rear; disc more finely punctate-striate, punctures in striae comparatively indistinct; intervals broader, transversely wrinkled, more roughly microsculptured.

Mentum transverse-hexagonal; terminal joint of each maxillary palpus ovoid, slightly obliquely truncate at apex.

Prosternum finely, rugosely punctate in lateral portions, strongly raised and nearly smooth along median. Abdomen more closely, finely punctate, longitudinally wrinkled in lateral-basal portions of 4 anterior sternites.

Legs comparatively thicker; fore tibiae more strongly widened to each apex with apical thorn slightly curved down- and outward: relative length of each metatarsal joint (base to apex): 4.5, 1.2, 0.9, 3.5.

Aedeagus wider, strongly bent downward at basal 2/5, with shorter but wider apex (=fused lateral lobes).

Body length: 9.8-11.7 mm.

Holotype: ♂, Meifeng, Nantou Hsien, Formosa, 2. I. 1975, K. MASUMOTO leg.; paratypes: 4 exs., ditto.; 2 exs., Sungkang, Nantou Hsien, 11. VI. 1974, H. YOKOYAMA leg.; 3 exs., Meifeng, 9. VI. 1973, 1 ex., 14-17. V. 1973, 1 ex., 14. VI. 1974, H. YOKOYAMA leg.; 1 ex., Tsuifeng, Nantou Hsien, 22. VII. 1972, Y. MIYAKE leg.

The new species is named after the late Mr. Shizumu NOMURA.

Tribe Bolitophagini

***Byrsax shibatai* sp. nov.**

Dark blackish brown; antennae, claws, mouth organs reddish brown. Upper surface with sparse, short yellowish hairs, those in lateral portions closer and more distinct. Oblong-oval; strongly convex above.

Head transverse, broadly flattened and smooth, shortly impressed medianly, with pair of long,

nearly vertical horns, curved in- and slightly forward just above eyes, back of apical half of each horn bearing 8-10 small, pointed tubercles, sparsely haired; frons gently sloping toward strongly arcuate, distinctly impressed front-clypeal border; clypeus slightly convex, somewhat coriaceous, with front margin feebly arcuate forward and dentate on both sides; genae with outer margins oblique, dentate and moderately reflexed in posterior 1/3, coriaceous like clypeus; eyes relatively large, obliquely, roundly produced laterally; antennae comparatively large, conspicuously pectinate, shape as in fig. 4-4a.

Pronotum a little more than twice as broad as long, broadest at middle; front border widely emarginate and gently arcuate forward; basal border more widely arcuate to rear; sides broadly explanate, with lateral margins coarsely serrated, divided into 11 teeth; front angles obtuse (continuation of teeth); hind angles deeply emarginate; disc strongly convex, rather closely and coarsely punctate, irregularly tubercular, with pairs of subconical tubercles along shallow median groove, frontal pairs very distinct. Scutellum subpentagonal, shallowly and roughly punctate.

Elytra about 1.2 times as long as broad, broadest at base, subparallel-sided in basal 3/5, then roundly narrowed toward apex; dorsum strongly, longitudinally convex above, disc sparsely and coarsely punctate, tubercular, tubercles mostly symmetrically arranged in longitudinal rows, those in inner portion often elongate and somewhat ridge-like, those in lateral portions smaller; sides moderately explanate, narrower toward posterior portion, with lateral margins coarsely serrated, divided into about 25 teeth each, these in basal portion large and gradually smaller toward apex; humeral corners subrectangular and weakly emarginate in inner portions only.

Prosternum weakly depressed transversely, distinctly keeled along median line, coarsely and not so closely punctate; mesosternum short, deeply excavated in V-shape in middle, hind margin strongly raised and closely punctate, with small forward-pointing projections at apexes of 'V'; metasternum strongly and rather closely punctate, microscopically shagreened in subtriangular areas before subbasal grooves. Abdomen strongly, closely and setaceous punctate in 3 anterior sternites, finely and setaceous punctate on 2 apical sternites, distinctly depressed along borders of 3 apical sternites.

Legs rather closely haired; femora fairly strongly thickened; each tibia moderately thickened and narrowed in apical 1/3 of outer margin; tarsi short with stout apical joints; claws rather large, each with small blunt tooth near base.

Body length: ca. 6.3 mm.

Holotype: ♂, Nanshanchi, Nantou Hsien, Formosa, 29. VII. 1972, K. MASUMOTO leg.

This new species is easily distinguished from other *Byrsax* species in having uniquely shaped antennae, head, and pronotum.

The new species is named after Mr. Taichi SHIBATA.

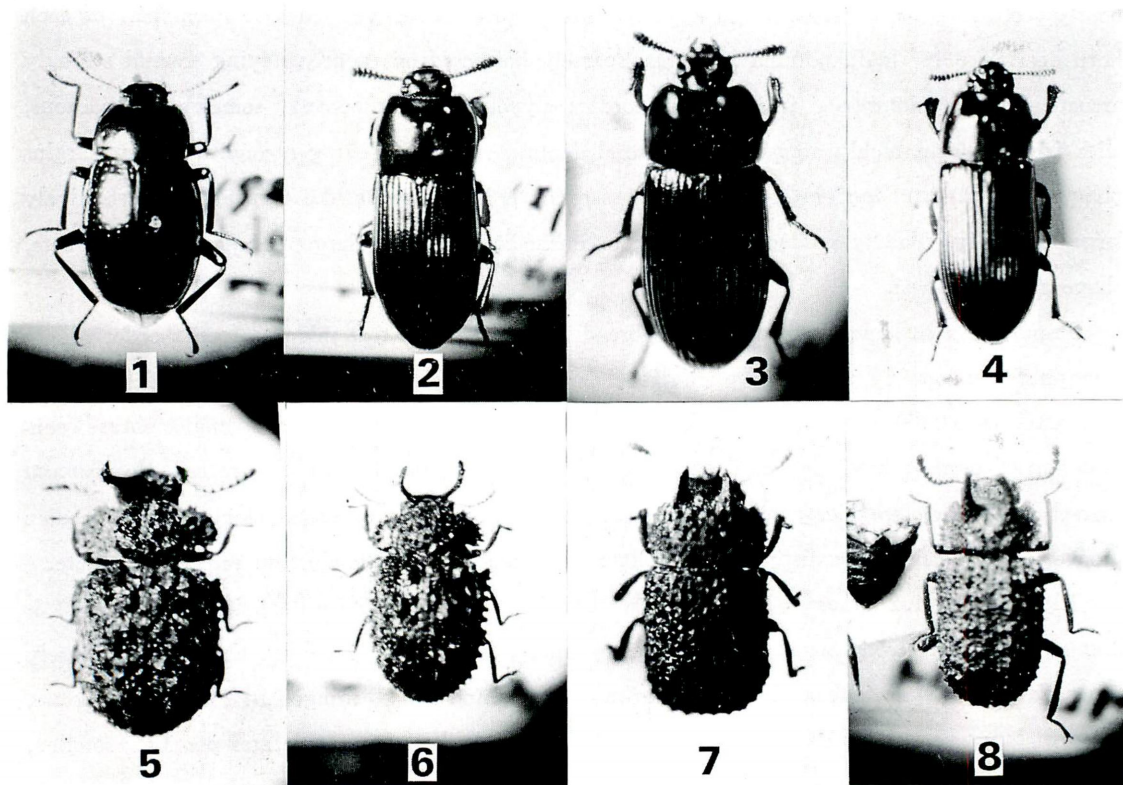


Fig. 3 1. *Addia nakanei* sp. nov., ♂, (holotype) 2. *Uloma tsugeae* sp. nov., ♂, (holotype)
 3. *Uloma meifengensis* sp. nov., ♂, (holotype) 4. *Uloma nomurai* sp. nov., ♂,
 (holotype) 5. *Byrsax shibatai* sp. nov., ♂, (holotype) 6. *Byrsax kawadai* sp. nov.,
 ♂, (holotype) 7. *Bolitotrogus formosanus* sp. nov., ♂, (holotype) 8. *Boletoxenus*
formosanus sp. nov., ♂, (holotype)

Byrsax kawadai sp. nov.

Very closely resembles the new species *Byrsax shibatai*, but is differentiated from it by the following characteristics:

Body slightly more elongate.

Head with median groove more distinct; fronto-clypeal border more gently curved; clypeus with front margin feebly arcuate, horns bent distinctly forward and also inward to each apex; genae with outer margins more obtuse; eyes more oblique; antennae not pectinate like *B. shibatai* but serrated like *B. kaszabi*.

Pronotum comparatively long (breadth : length = 25.5 : 13.5); front border more strongly produced; sides more strongly produced laterally and widely explanate, lateral margins strongly serrated each with 8-9 teeth, their tips rounded, emargination before base deeper and more oblique; disc coarsely and somewhat confluent punctate only in anterior-median portion, without *B. shibatai*'s specially prominent tubercles.

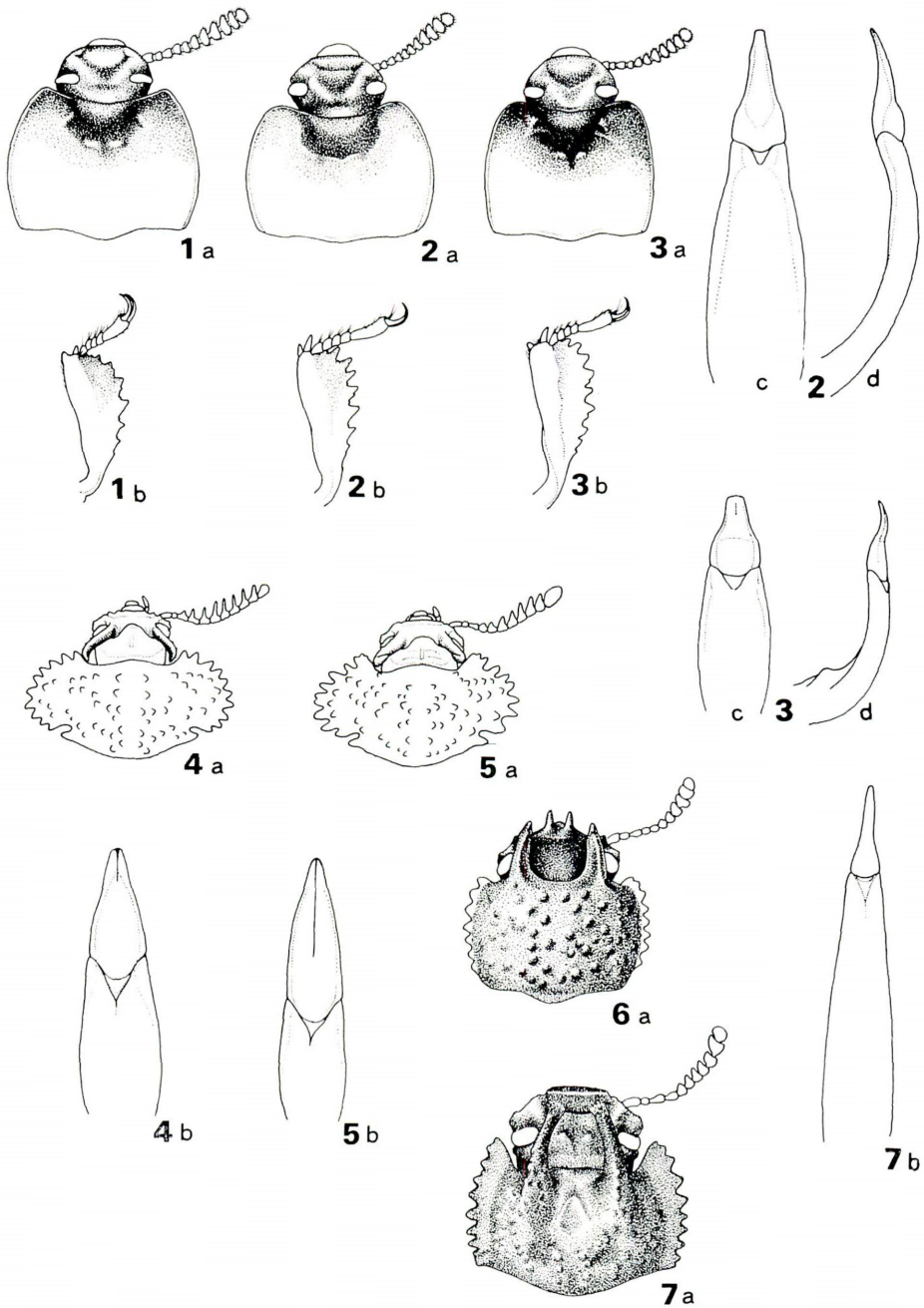


Fig. 4 1. *Uloma tsugeae* sp. nov., ♂, 1 a: fore body, 1 b: fore leg 2. *Uloma meifengensis* sp. nov., ♂, 2a: fore body, 2b: fore leg, 2c: aedeagus (dorsal view), 2d: aedeagus (lateral view) 3. *Uloma nomurai* sp. nov., ♂, 3a: fore body, 3b: fore leg, 3c: aedeagus (dorsal view), 3d: aedeagus (lateral view) 4. *Byrsax shibatai* sp. nov., ♂, 4a: fore body, 4b: aedeagus (dorsal view) 5. *Byrsax kawadai* sp. nov., ♂, 5a: fore body, 5b: aedeagus (dorsal view) 6. *Bolitotrogus formosanus* sp. nov., ♂, 6a: fore body 7. *Boletoxenus formosanus* sp. nov., ♂, 7a: fore body, 7b: aedeagus (dorsal view) (T. ENDO del.)

Elytra slightly longer (length : breadth=30.5 : 23.0) with rows of strong punctures and more distinctly longitudinally elongate ridge-like tubercles; sides comparatively broadly explanate, more strongly serrated, apex of each serration rounded and emargination deep and rounded; each elytron with about 20 teeth in outer margin; apical portion straightly, obliquely declined (in the case of the previous species, roundly declined).

Underside less shiny, comparatively strongly punctate. Legs less slender. Aedeagus more slender.

In female, pronotum with lateral margins more narrowly produced and basal border more strongly produced than male.

Body length: 5.6-7.0 mm.

Holotype: ♂, Nanshanchi, Nantou Hsien, Formosa, 1. VI. 1981, K. KAWADA leg.; paratypes: 7 exs., ditto.

As mentioned above, this new species resembles the one previously described. It is quite interesting that both of these new species occur in the same locality.

***Bolitotrogus formosanus* sp. nov.**

Blackish brown; horns on clypeus, outer margins of genae (posterior portions) and pronotum, legs, mouth organs, part of underside, more or less reddish, antennae yellowish; feebly sericiously shining. Subcylindrical and stout.

Head transverse, very closely and coarsely punctate, somewhat rugose in posterior portion, steeply sloping from strongly raised hind head to front; frons feebly depressed in anterior portion; fronto-clypeal border broadly arcuate backward and very finely impressed; clypeus elevated in elongate elliptic, with pair of conical projections, outer margin broadly arcuate and both ends obtusely emarginate; gena-clypeal borders raised, with rows of conical tubercles reaching subrectangularly produced outer margins; genae oblique and depressed, with outer margins slightly obliquely emarginate in anterior 2/3, subparallel in posterior 1/3; gena-fronto border shortly and finely raised; eyes relatively small, oblique, less produced than outer margins of genae; antennae medium sized, 5 apical joints club-like, 5th joint to 7th dilated to each apex, 8th to 10th transverse, 11th nearly round.

Pronotum oblong (breadth : length=21.5 : 12.0), gently arcuate laterally and broadest at basal 2/3; front border broadly emarginate and bisinuate, with pair of rather well-developed median horns on front border directed forward, cross-sectionally somewhat acutely triangular, slightly bifid at each apex, emargination of horns broadly U-shaped; basal border nearly straight but roundly produced in median 2/7; sides coarsely serrated, each with 7-10 teeth; front angles narrowly roundly produced; hind angles obtuse; disc very strongly convex, coarsely punctate in anterior portion

and along base, irregularly nodulose over major portion of rest, nodules fairly coarse and often pyramid-shaped especially in lateral portions, narrowly obliquely explanate along lateral margins. Scutellum small, semicircular, slightly wider than long.

Elytra 1.2 times as long as broad, 2.2 times longer than pronotum, subparallel, rounded in apical portion; dorsum strongly, longitudinally convex, nearly vertically declined in lateral portions; disc with rows of distinct carinate tubercles, often elongated in middle; intervals between rows irregularly granulate and coarse but punctures invisible; sides invisible in dorsal view, irregularly serrated.

Prosternum coarsely coriaceous, finely reflexed in front, transversely depressed, intercoxal space elevated, prosternal process semicircular and small, strongly depressed; mesosternum rather short, raised along median; metasternum scattered with coarse punctures, distinctly depressed in median portion and excavated longitudinally in posterior 5/7. Abdomen microscopically shagreened and rather closely, setaceous punctate on 3 anterior sternites, sparsely punctate on 2 apical sternites, basal border of 4th and 5th sternite each strongly grooved.

Body length: ca. 3.5 mm.

Holotype: ♂, Nanfengshan, Kaohsiung Hsien, Formosa, 28.IV. 1981, T. TSUYUKI leg.

This new species somewhat resembles *Bolitotrogus kurosonis* MIYATAKE from Shikoku, Japan, but is easily distinguished by its subparallel body and impunctate discs of the pronotum and the elytra.

***Boletoxenus formosanus* sp. nov.**

This new species closely resembles *Boletoxenus bellicosus* (LEWIS) from Japan in general features, but differs from the latter in having a more elongate body, more distinct clypeal carina, differently shaped antennae, more widely explanate pronotal sides with less arcuately serrated outer margins, a narrower scutellum, less distinctly and more closely tubercled elytra, and comparatively slender legs.

Detailed characteristics of both male and female compared with those of *B. bellicosus* are as follows:

Male: Head more transverse, genae obliquely well-produced; pronotum relatively more transverse (breadth : length=15.5 : 8.5), lateral margins more sharply serrated, front angles more strongly produced forward, elytra a little longer (length : breadth=22.5 : 16.5), apical portion more distinctly produced downward; legs, especially fore tibiae, more slender; shape of aedeagus different.

Female: Head less transverse; eyes more rounded; pronotum a little more transverse (breadth : length=16.0 : 9.5), front border widely emarginate but not bulged medianly, basal

border distinctly roundly produced in median half, disc less convex with gibbosities more closely set and less developed; elytra a little longer (length : breadth=21.0 : 16.5), apical portion less distinctly produced downward.

Body length: 7.5-8.0 mm.

Holotype: ♂, Meifeng, Nantou Hsien, Formosa, 14-17. V. 1973, Y. HOKOYAMA leg.; para-type: ♀, ditto.

Corrigenda to Series (I)-(III)

(I): *Elytra*, 8, (2), 1981

- Page 42, Line 2: sparesely→sparsely; produceed→produced
 L. 3: then→them
 L. 17: margned→margined
 L. 33: differes→differs
 P. 43, L. 16: becomming→becoming
 P. 45, L. 14: ronded→rounded
 P. 47, L. 26: longltudinally→longitudinally
 P. 48, L. 10: differnt→different
 L. 12: margings→margins
 L. 13: clolor→color
 L. 25: bisinate→bisinuate
 P. 50, L. 30: Undersuface→Undersurface

(II): *Elytra*, 9, (1), 1981

- Page 18, Line 18: broder→border
 P. 19, L. 23: oval→oval
 P. 22, L. 19: somowhat→somewhat
 P. 23, L. 28: 5/6→5/7
 P. 26, L. 33: confluenly→confluently
 P. 40, L. 32: punctatestriate→punctate-striate
 P. 45, L. 45: thier→their
 P. 46, L. 28: distingishable→distinguishable

(III): *Elytra*, 9, (2), 1981

- Page 80, Line 6: adout→about
 L. 16: thickend→thickened
 P. 81, L. 18: undersuface→undersurface
 P. 82, L. 2: interruded→interrupted
 L. 9: puntate-striate→punctate-striate
 L. 29: now→new
 P. 83, L. 11: marging→margin
 P. 85, L. 15: pubesuent→pubescent
 P. 90, L. 12: nnrrowly→narrowly
 L. 15: slighly→slightly
 P. 93, L. 27: preoccupied→preoccupied
 P. 96, L. —: 1-4 (top: fore body; bottom: aedeagus); 5-8 (top: fore body; middle: right protibia; bottom: aedeagus); 9-10 (left: elytron; right: aedeagus)
 L. 2: *Paramisolampidius taiwanus*→*Paramisolampidius formosanus*