

Revision of the genus *Antinia* PASCOE, 1871*
(Coleoptera: Curculionidae: Brachyderinae)

JAROSŁAW KANIA and AGATA DĄBROWSKA

Zoological Institute, University of Wrocław, Sienkiewicza 21, 50-335 Wrocław, Poland

ABSTRACT. The genus *Antinia* PASCOE, 1871 is transferred from the tribe *Cneorrhinini* to the *Dermatodini*. Its species are revised, figured and keyed. Lectotypes are designated for *A. eupleura* PASCOE, 1871, *A. pendleburyi* MARSHALL, 1932 and *A. variegata* VOSS, 1958.

Key words: entomology, taxonomy, revision, Oriental Region, Coleoptera, Curculionidae, *Antinia*.

INTRODUCTION

Till the present the genus *Antinia* was included in the tribe *Cneorrhinini* (sensu EMDEN 1936, 1944). It was the only genus of Oriental distribution in the tribe. In the identification key of the World *Brachyderinae* and, with small modifications, in the catalogue of the World *Brachyderinae* (EMDEN 1936, 1944, EMDEN and EMDEN 1939), *Antinia* was placed between the Central American *Pseudopantomorus* CHAMPION, 1911, the African genera *Leurops* MARSHALL, 1919 and *Fleurops* HUSTACHE, 1931, and the Palaearctic *Formanekia* FLEISCHER, 1923 and *Heydenia* Tournier, 1874. The characters considered were those of purely practical importance (i.e. in most cases distance for which the folded antennal scape reached), not reflecting relationships between taxa. After examining many taxa of the tribes *Cneorrhinini* and *Dermatodini*, we think that the genus *Antinia* is closer related with the Oriental genera of the *Dermatodini*, namely *Eustalida* FAUST, 1891, *Dermatoxenus* MARSHALL, 1916, and especially *Dermatodes* SCHÖNHERR, 1840. Besides a very similar habitus, *Antinia* and *Dermatodes* share such characters as the arrangement of furrows on the head, presence of small tubercles on pronotum (in *Dermatodes* sometimes also with

*Papers Celebrating the 90th Birthday of Dr. Bolesław Burakowski

a centrally situated seta), body covered with adherent and erect scales and enclosed corbels. In both genera some species have asymmetrical claws and unevenly convex eyes. The differences between the genera are: presence of more or less distinct humeri in *Dermatodes* (in *Antinia* absent), and more distinct costae on rostrum (in *Antinia* absent or nearly so). In our opinion a tendency to reduce humeri appeared independently in various lineages of the *Brachyderinae*, and the remaining characters testify to a close relationship between the genus *Antinia* and other Oriental genera of the tribe *Dermatodini* which have distinct humeri, rather than to a relationship with African or Palaearctic genera of the *Cneorrhinini* which are devoid of humeri.

Materials from the following collections have been used in this study (curators' names in parentheses):

- BMNH - British Museum Natural History (C. K. C. LYAL);
 JK - coll. Jarosław KANIA;
 MiZPAN - Muzeum i Instytut Zoologii Polskiej Akademii Nauk, Warszawa, Poland, (S. A. ŚLIPIŃSKI i D. IWAN);
 SMTD - Staatliche Museum für Tierkunde Dresden, Germany (R. KRAUSE);
 ZMUH - Zoologisches Institut und Zoologisches Museum, Universität Hamburg, Germany (R. ABRAHAM).

Acknowledgements. We are grateful to all the collection curators for the loan of the material. We thank Dr. Beata M. POKRYSZKO (Museum of Natural History, Wrocław University) who has translated this paper into English.

Antinia PASCOE, 1871

Antinia PASCOE, 1871: 161; MARSHALL, 1919: 273, 274; 1932: 209-210; EMDEN, 1936: 217; 1944: 565; EMDEN and EMDEN, 1939: 231-232; VOSS, 1958: 1, 30-31.
Dermatodina FAUST, 1895: 81-82; EMDEN and EMDEN, 1939: 231-232.

Type species: *Antinia eupleura* PASCOE, 1871 (by monotypy).

Body length 3.20-8.04 mm, width 1.43-3.25 mm, body elongatedly oval or pear-shaped (figs 1, 11, 24, 43), entirely brown or brown and partly black, covered with adherent, more or less oval scales of various hues of brown, and erect scales (figs 23, 33, 50). Head separated from rostrum by a narrow transverse groove. Median furrow on frons narrow. Rostrum longer than wide, widened towards apex, especially on the underside. Costae on rostrum poorly visible. Eyes evenly convex or in their posterior part delicately depressed (figs 4, 12, 31, 44). Antennae not very long, flagellum of 7 segments, club oval, its tip tapered. Pronotum rounded on sides, with distinct tubercles, each provided with a seta. Elytra more or less elongatedly oval, sometimes

distinctly convex, in one case with a tubercle in the third interval. Intervals convex, rows narrow or foveolate. Elytra and pronotum as a rule covered with spots (figs 11, 24, 43). Legs rather long, corbels enclosed, claws symmetrical or asymmetrical (figs 6, 27).

KEY FOR SPECIES DETERMINATION

1. Scutellum distinct (figs 1, 11); margin of elytral base bordered with dense, forward inclined setae; rows of various width formed of distinct foveolae with punctures, in each puncture a delicate seta (fig. 23), elytra moderately convex, elongatedly oval, c. 1.5-1.6x longer than broad; setae in intervals numerous, inclined backwards, c. 3x longer than adherent scales, claws asymmetrical (fig. 6) 2.
- Scutellum invisible (figs 24, 43), no setae on elytral margin, rows narrow, punctures in them invisible, covered with scales, with no setae (figs 35, 50), elytra strongly convex, on sides distinctly rounded, c. 1.3x longer than broad; setae in intervals rather few, strongly erect, 7x longer than adherent scales, claws symmetrical (fig. 27) 3.
2. Rows formed of large, shallow foveolae with densely arranged punctures inside (fig. 1), eyes unevenly convex, the strongest convexity before half length; intervals 1 and 2 from base to c. 1/3 length of elytra with dark brown scales, in posterior part an oblique band which on interval 3 passes through tubercles covered with thicker and closer arranged setae; aedeagus apex distinctly narrowed and tapered; sclerites in internal sac long (fig. 9).
..... *eupleura*
- Rows formed of fine, elongate punctures; eyes unevenly convex, the strongest convexity behind half length (fig. 12), interval 1 to c. 1/3 elytral length with dark brown scales, behind half elytral length from interval 2 a dark band, no tubercles; aedeagus apex narrowed but distinctly bluntly terminated; sclerites in internal sac short (figs 18, 19).
..... *pendleburyi*
3. Rostrum 1.1.-1.2x longer than wide, its underside distinctly widened towards apex (fig. 31); median furrow on frons narrow, sometimes poorly distinct, club rather slender, apically tapered (fig. 32); on interval 1 at elytral base to c. 1/6 length an elongate, light spot; behind elytral half length, from interval 5 a light, widening band; genitalia as in figs 36-42, parameres parallel, c. 7x longer than wide.
..... *vitiosa*
- Rostrum 1.3x longer than wide; its underside slightly widened towards apex (fig. 44); median furrow on frons distinct and wide; club stout, almost oval, narrowed towards apex (fig. 49); at half elytral length a brown, transverse band running from interval 2 and narrowing laterally; genitalia as in figs 51-54, no parameres.
..... *variegata*

Antinia eupleura PASCOE, 1871

(figs 1-10)

Antinia eupleura PASCOE, 1871: 161; EMDEN and EMDEN, 1939: 231; MARSHALL, 1932: 210; VOSS, 1958: 31.

DIAGNOSIS

Most similar to *A. pendleburyi*. Both species are characterized by a more slender body, presence of scutellum (figs 1, 11), unevenly convex eyes (figs 4, 12) and asymmetrical claws (fig. 6). *A. eupleura* differs from *A. pendleburyi* in poorer rounded elytral sides, foveolate elytral rows and the presence of an elongate tubercle on the third interval (fig. 1) (rows narrow with fine punctures, on elytra no tubercles (fig. 11)).

DESCRIPTION

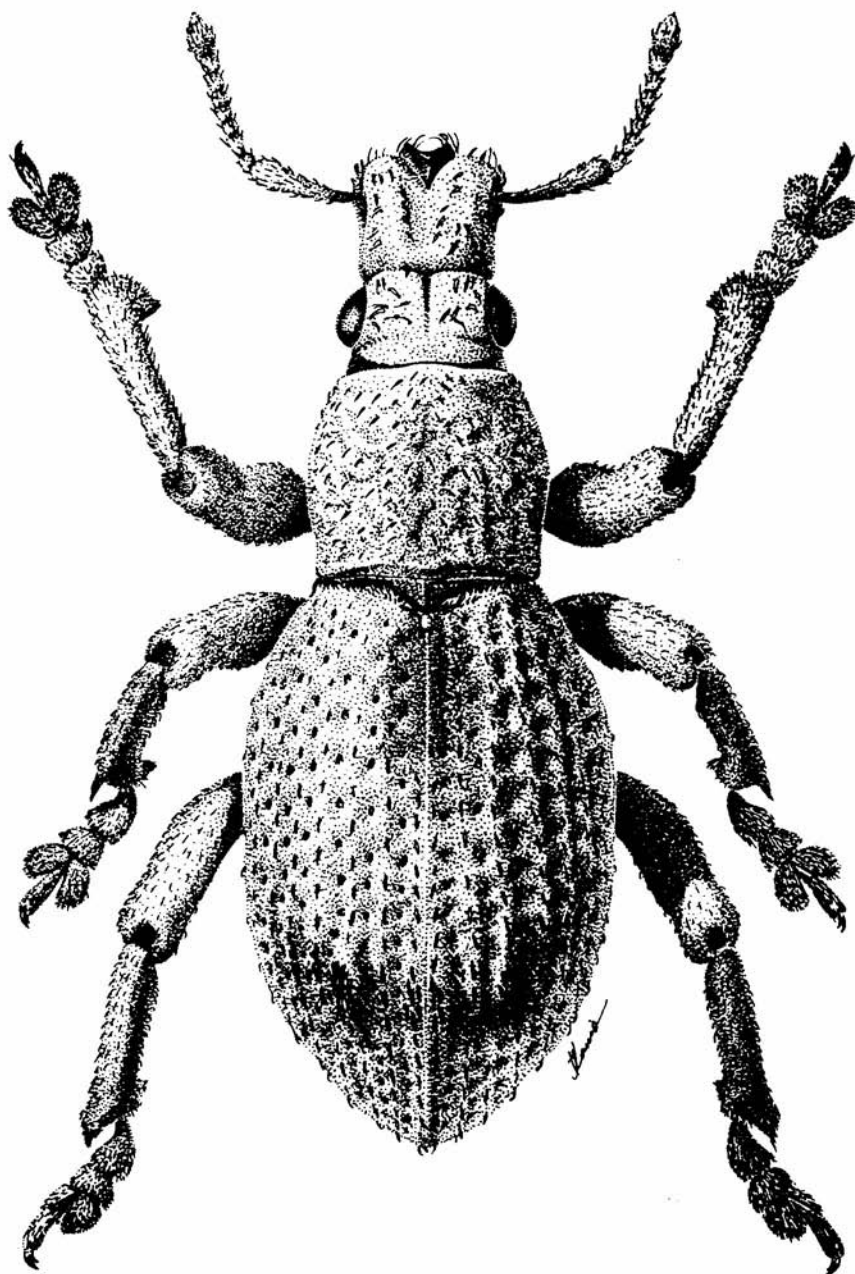
Body length 8.04 mm, width 3.25 mm.

Body elongate, pear-shaped (fig. 1), dark brown, covered with tightly adhering scales. Elytra convex, with two tubercles behind half length on the third interval.

Adherent scales light brown, rhomboid or oval. Antennal club dark brown, with light, hair-like setae, its colour distinct from that of the other parts of antennae. In the middle of pronotum, on elytra behind scutellum and in posterior part of elytra streaks of dark brown or nearly black (at suture) scales. Sides of elytra with adherent scales of metallic pink hue, with a greenish blue shiny streak and fine spots. Intervals 1 and 2 to 0.3 length covered with dark brown scales, in posterior part of elytra an oblique band passing through tubercles. On the tubercles, additionally, somewhat wider and denser arranged erect scales. Band shape as in fig. 1. On intervals 7-10, from elytral base to c. 0.8 elytral length a streak of green scales. Green scales present also on intervals 4-6 and 11, forming only fine spots in anterior part of elytra. Erect scales strongly bent and inclined backwards, on the underside concave, widened backwards and rounded apically, the widest in the posterior part of elytra, especially on tubercles. On pronotum and head erect scales smaller, like in the anterior part of elytra. Femora, tibiae, tarsal segments 1-2 with narrow, bent, seta-like scales; on apices of tibiae scales longer, on tarsal segments 3-4 finer and darker. Microsculpture under the scales, on elytra, fine, reticulate, with a feeble sheen.

Head widened behind eyes, separated from rostrum by a narrow transverse groove covered with scales (fig. 4). Median furrow on frons narrow and deep, behind the furrow devoid of scales, at the level of posterior eye margin shallower, less distinct and scale-covered.

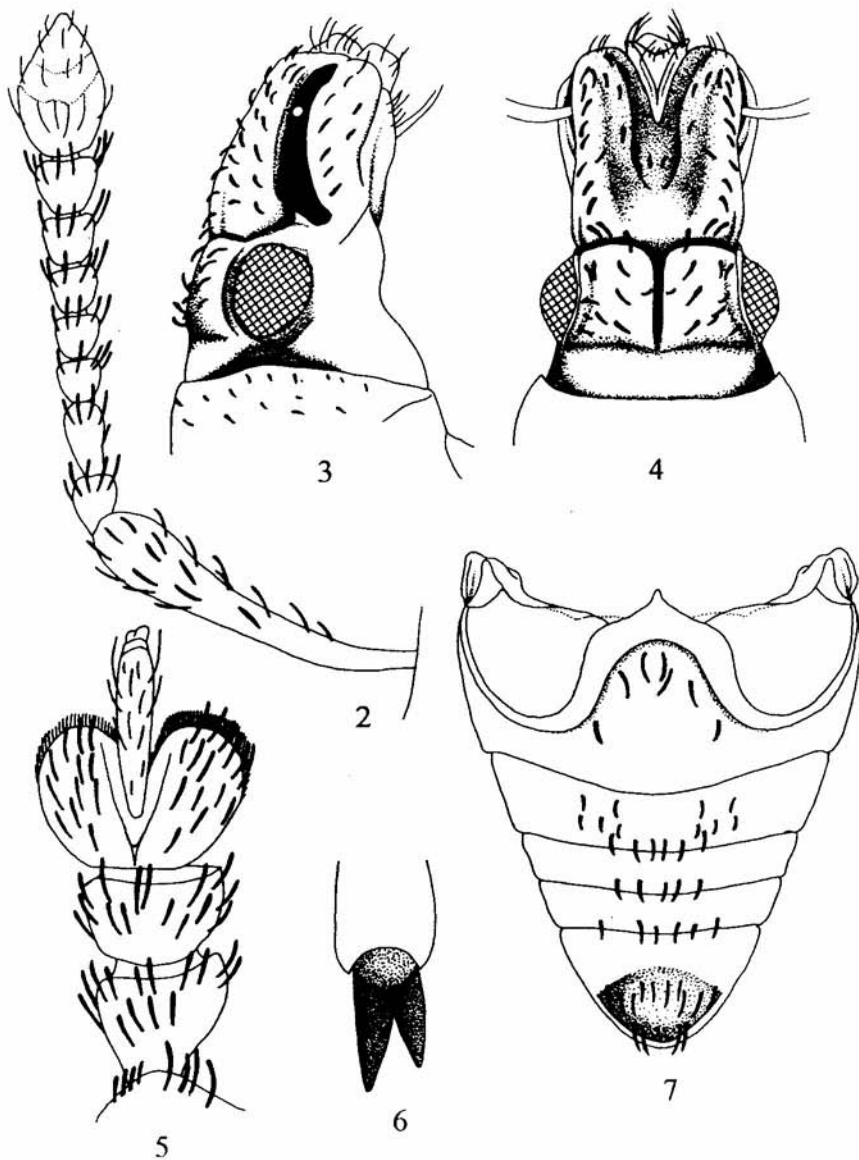
Rostrum c. 1.2x longer than wide, distinctly widened anterad, especially on the underside (fig. 4). On rostrum sides, from base to about apex, two blunt costae, from base to antennal insertion parallel, further slightly divergent. Antennal scrobe from antennal base anteriorly bent downwards, posteriorly slightly widened, upper margin towards eye straight, lower margin somewhat bent downwards (fig. 3). In side view rostrum slightly bent.



1. *Antinia eupleura*, male (by J. KANIA)

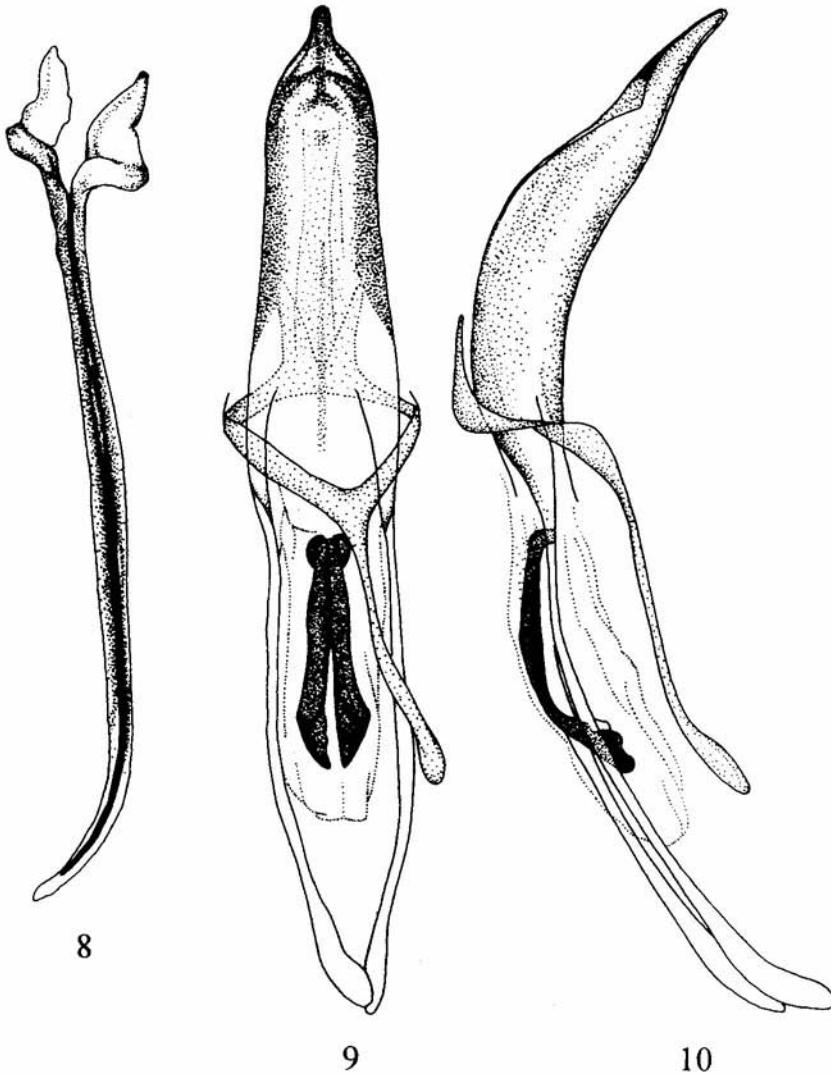
Eyes oval, unevenly convex, in anterior part evenly rounded, before posterior margin very delicately depressed.

Antennae short (fig. 2). Scape curved, widened apically, c. 3.7x longer than maximally broad. The first flagellomere c. 1.6x longer than wide, second c. 1.7, third as long as wide, flagellomeres 4-7 transverse. Club oval.



2-7. *Antinia eupleura*: 2 - antenna, 3, 4 - head, 5 - fore tarsus, 6 - claws, 7 - abdominal sternites

Pronotum c. 1.1x wider than long, poorly rounded on sides, cylindrical. Base somewhat wider than anterior margin. Pronotum surface strongly, irregularly furrowed. In the middle of pronotum more or less regular furrows form a broken gutter; on its sides furrows perpendicular to the long axis or oblique. Pronotum sides behind anterior margin poorly narrowed, on top not narrowed. In the middle of pronotum a dark streak, somewhat lighter than that on elytra, more distinct at the base of pronotum.



8-10. *Antinia eupleura*: 8 - spiculum gastrale, 9, 10 - aedeagus

Elytra c. 1.5x longer than wide, ovate, distinctly convex, from base to 0.3 length widened, somewhat rounded, further, from half length, parallelsided. Elytral base from 1 to 3 interval strongly emarginate. Intervals delicately but distinctly convex. Rows with large, shallow foveolae, with deep punctures inside. On elytra, except punctures on intervals, adherent scales. Each puncture with a thin, light seta of a length equal to puncture diameter. Distance between punctures equal to c. 3 puncture diameters. On the third interval, behind half elytral length, a large, elongate tubercle.

Scutellum small, almost square with rounded angles.

Legs long, slender, femora slightly thickened. Fore and mid tibiae before the apices slightly bent inwards, hind tibiae straight. Fore and mid tibiae at apices truncate on the outside, on the inside produced into a spine, covered with light brown setae. Outer margin of corbels with dark brown setae, inner margin with sharp, dense and much longer setae. Trasi not very wide (fig. 5). Bilobate segment asymmetrical: in fore tarsus inner lobe slightly wider, in mid and hind tarsi outer lobe wider. Claws of uneven length (fig. 6), in fore tarsus inner claw longer, in mid and hind tarsus outer claw longer.

Abdomen as in fig. 7.

Male genitalia (figs 8-10) with moderately sclerified aedeagus, arcuately narrowed towards apex; apex rounded. Apophyses c. 1.2x longer than aedeagus. Parameres at base wide, narrowing towards apex. Phallobasic apodeme c. 2x longer than apophyses. Sclerites in internal sac long, bilaterally symmetrical, united with one end, the other, free, ends forming sharp, wedge-shaped terminations. Spiculum gastrale as in fig. 8.

MATERIAL EXAMINED

Lectotype, male (present designation): "Type" [black print on white label with red border]; "Penang" [handwritten, black ink on green drop-shaped label]; "*Antinia eupleura*, Type PASC." [handwritten, black ink on white rectangle]; "PASCOE Coll. 93-60." [black print on white rectangle]; "Lectotypus *Antinia eupleura* PASCOE, des. J. KANIA 93" ["Lectotypus" -red print, the rest handwritten, black ink, white rectangle with red border]; [glycerin preparation]; (BMNH).

Antinia pendleburyi MARSHALL, 1932

(rys. 11-23)

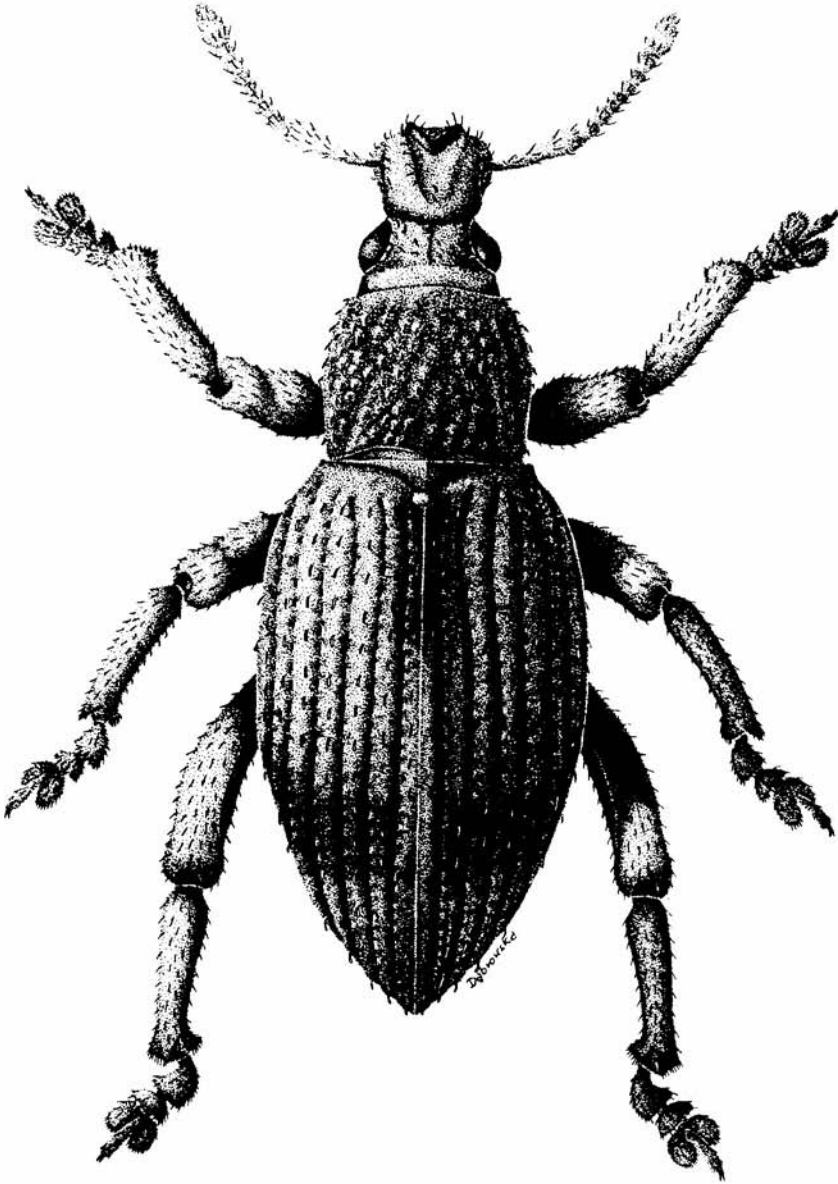
Antinia pendleburyi MARSHALL, 1932: 209; EMDEN and EMDEN, 1939: 232; VOSS, 1958: 31.

DIAGNOSIS

See diagnose of *A. eupleura*.

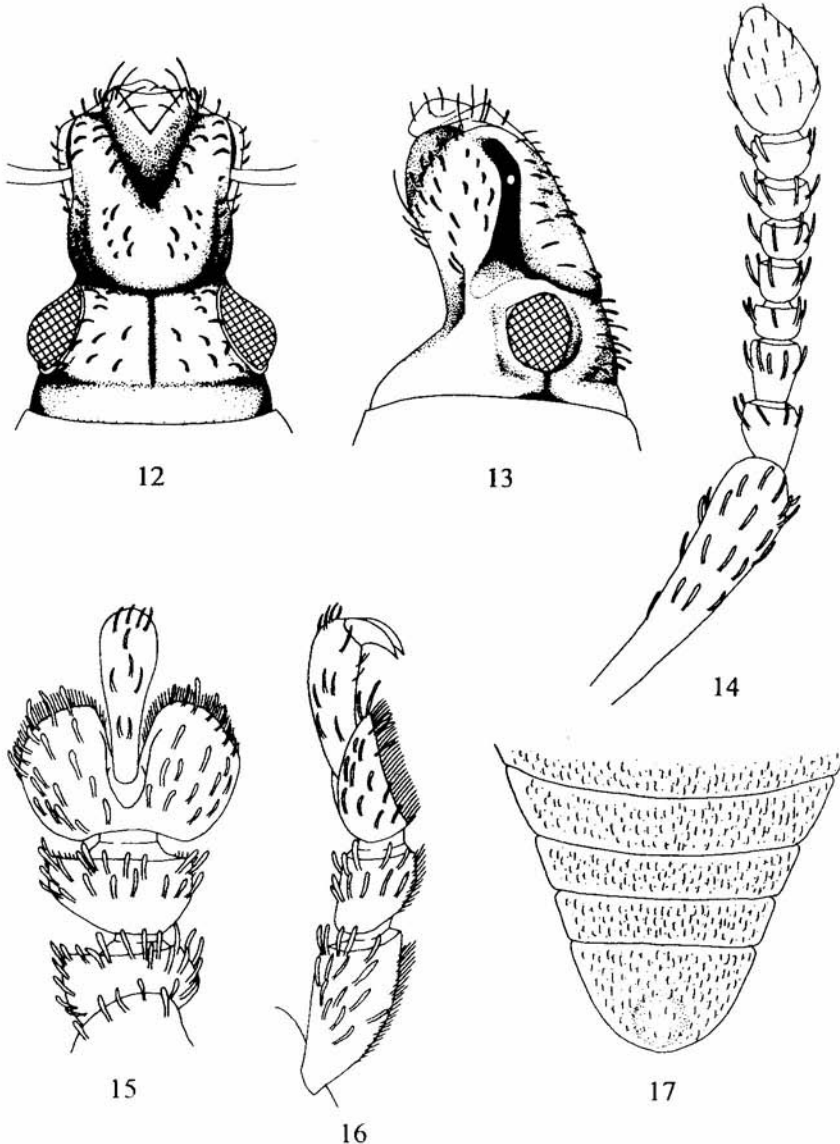
DESCRIPTION

Body length 7.20 mm, width 2.95 mm.



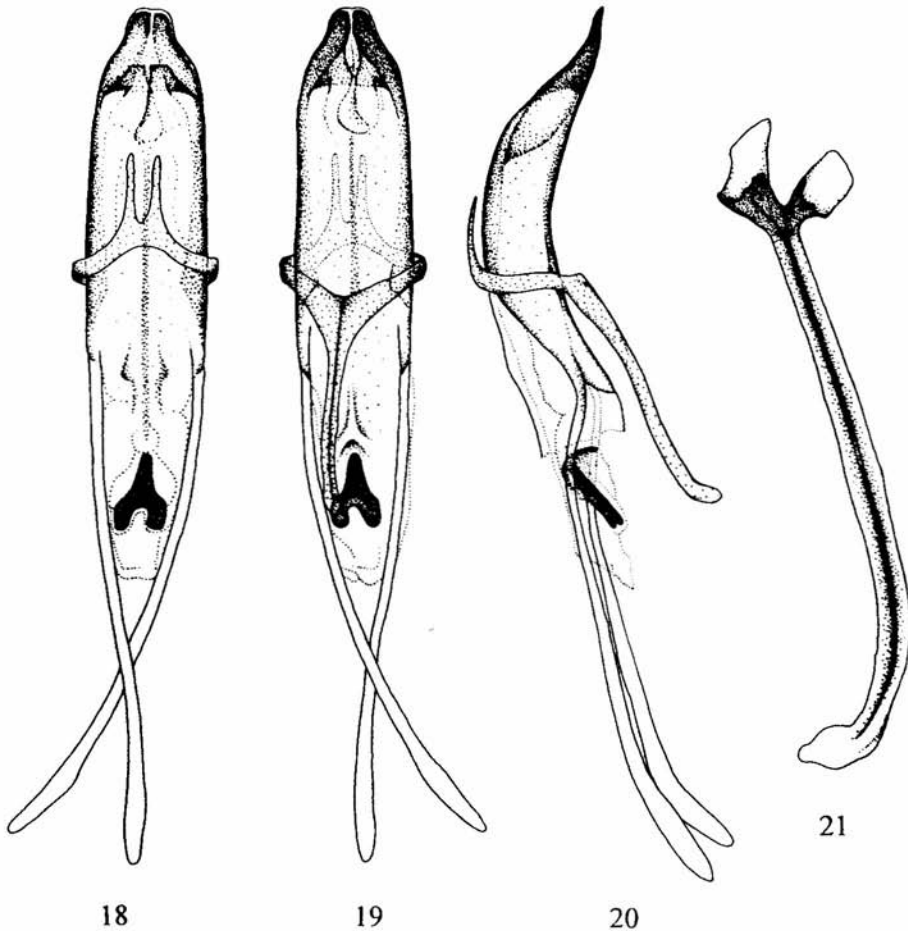
11. *Antinia pendleburyi*, male (by A. DABROWSKA)

Body elongatedly oval, slightly convex (fig. 11), head and rostrum black, the rest brown. Body covered with tile-like overlapping scales of creamy (with pearl sheen), light brown and tawny scales, and with erect, bent scales. Adherent scales oval, rhomboid or drop-shaped. Scales on head and rostrum arranged densely, strongly erect, 3.5x longer than those on elytra and pronotum. On vertex scales adherent. Antennae densely covered with elongate, tile-like overlapping scales. In



12-17. *Antinia pendleburyi*: 12, 13 - head, 14 - antenna, 15, 16 - fore tarsus, 17-abdominal sternites

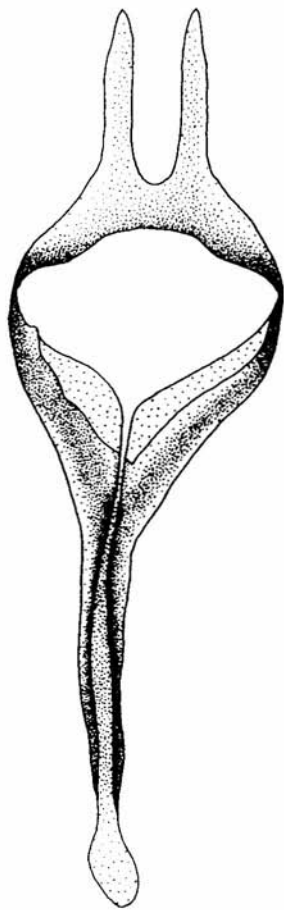
the middle of pronotum a longitudinal, dark streak, surrounded with an oval spot of somewhat lighter scales; on sides of pronotum in its anterior part two smaller, brown spots. Elytra densely covered with overlapping scales, on intervals with a single row of erect, bent setae (on some intervals, in anterior part of elytra and somewhat behind half length additional setae). Seta length equal to or exceeding length of punctures in rows. Dark brown scales cover the first interval to 1/3 length and intervals 2-4 behind half length, brown-black scales on intervals 5-9 form a distinct, widening band. Intervals 7-11 additionally covered with pearl scales. Erect scales on elytra, pronotum and legs c. 5x longer than wide and c. 3x longer than adherent scales (fig. 23), always distinctly darker than adherent scales in the same place.



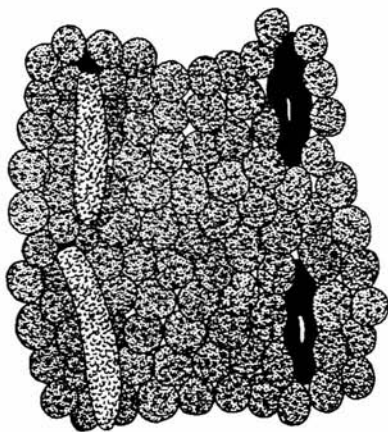
18-21. *Antinia pendleburyi*: 18-20 - aedeagus, 21 - spiculum gastrale

Head not constricted behind eyes, separated from rostrum by a wide and deep transverse groove, densely covered with scales. Median furrow on frons extends from the transverse groove to posterior eye margin. Eyes large, eccentrically convex, the strongest convexity in their posterior part (figs 12, 13).

Rostrum 1.1x longer than wide. Its upperside almost parallelsided, lateral margins delicately constricted at half length; underside of rostrum distinctly widened anterad, at apex somewhat wider than rostrum length. From transverse groove to c. 1/3 rostrum length a median costa, further divided into divergent sharp costae reaching the level of antennal bases. Between the costae upperside of rostrum strongly concave. Lateral margins of rostrum costate, between the median costa and



22



23

lateral margin of rostrum paramedian costae depart from the transverse groove and reach c. 1/2 rostrum length up to antennal bases. In side view rostrum convex, delicately bent. Antennal scrobes slightly widened posterad, nearly straight, between antennal base and rostral apex narrow and bent posterad.

Antennae short, scape distinctly bent and widened towards apex, c. 3.8x longer than maximum width. The first flagellomere c. 1.6x longer than wide, second c. 1.1x longer, flagellomeres 3-7 distinctly wider than long. Club oval, slightly tapered apically, delicately hairy (fig. 14).

Pronotum c. 1.1x wider than long, delicately rounded on sides, widest at half length, on top distinctly convex. Pronotum base c. 1.3x wider than anterior margin. Laterally, from base to c. half length, two costae converging anterad. Top of pronotum, especially on sides, with large granules arranged in outwards bent rows. Each granule densely covered with adherent scales, and with a single erect seta in the middle.

Elytra elongatedly oval, widest at c. 0.3 length. Intervals distinctly convex, rows very narrow, with fine, elongate punctures. Distance between punctures in a row slightly smaller than or equal to puncture length. Punctures in rows with a thin, short, bent scale (fig. 23). Elytral base from side to scutellum emarginate and bordered with densely arranged, erect scales.

Scutellum wider than long; apex slightly rounded.

Legs long, like in *A. eupleura*. Fore tibiae straight, on their inner margin, c. 2/5 length from base, a large, sharp spine, between it and apex three smaller spines. Apices of tibiae produced inwards into a spine, covered with long, silky, light brown setae. Mid tibiae with a long, sharp spine on the inner side of apex, and with four fine spines. Hind tibiae with four large and one smaller spine, and a row of long, silky setae on inner side. Corbels on both sides densely covered with scales, on the inner side yellowish, on the outer pearl. Tarsi short, wide (figs 15, 16). Third tarsal segment emarginate almost to the base, asymmetrical: on fore tarsi outer lobe narrower, on mid and hind tarsi inner lobe narrower. Claws of unequal length, in fore tarsi outer claw shorter, in mid and hind tarsi inner claw shorter.

Abdomen as in fig. 17.

Male genitalia (figs 18-22) with moderately sclerified aedeagus. Aedeagus narrowed anterad, apically truncate. Apophyses c. 1.4x longer than penis. Parameres narrow, almost parallelsided, c. 8x longer than wide. Phallobasic apodeme c. 2.7x shorter than apophyses. Sclerites in internal sac small, in a shape of an inverted Y. Spiculum gastrale as in fig. 21.

MATERIAL EXAMINED

Lectotype, male (present designation): "Type" [black print on white round label with red border]; "Malay Penin. West Coast. Langkawi Is. [black print on white rectangle]; "April 26th 1928" [handwritten, black ink], on the reverse of the label: "Payang Bunting As" [handwritten, black ink]; "H. M. PENDLEBURY, Coll. F. M. S. Museums" [black print]; "Press. by Imp. Inst. Ent. Brit. Mus. 1932-295" [black

print on white rectangle]; "*Antinia pendleburyi*, Type, [male symbol], MSHL." [handwritten, black ink on white rectangle]; "Lectotypus *Antinia pendleburyi* MSHL., des. J. KANIA 95" [handwritten, black ink on white rectangle with red border]; [glycerin preparation]; (BMNH).

***Antinia vitiosa* (FAUST, 1895)**

(rys. 24-42)

Dermatodina vitiosa FAUST, 1895: 82; MARSHALL, 1926: 371.

Antinia theivora MARSHALL, 1919: 274 (pl. 17, fig. 3); EMDEN and EMDEN, 1939: 232.

Antinia vitiosa: MARSHALL, 1926: 371, 1932: 210; EMDEN and EMDEN, 1939: 231-232; VOSS, 1958: 31.

DIAGNOSIS

Most similar to *A. variegata*. Both species are characterized by the absence of scutellum (figs 24, 43) and symmetrical claws (fig. 27). *A. vitiosa* differs from *A. variegata* in a slightly narrower rostrum, narrower median furrow on frons (figs 31, 44), presence of a light elongate spot on the first elytral interval and a light band behind half length of elytra (fig. 24) (in *A. variegata* only in posterior part of elytra brown band (fig. 43)) and in normally developed parameres of tegmen (figs 39-42) (in *A. variegata* parameres absent (figs 51-53)).

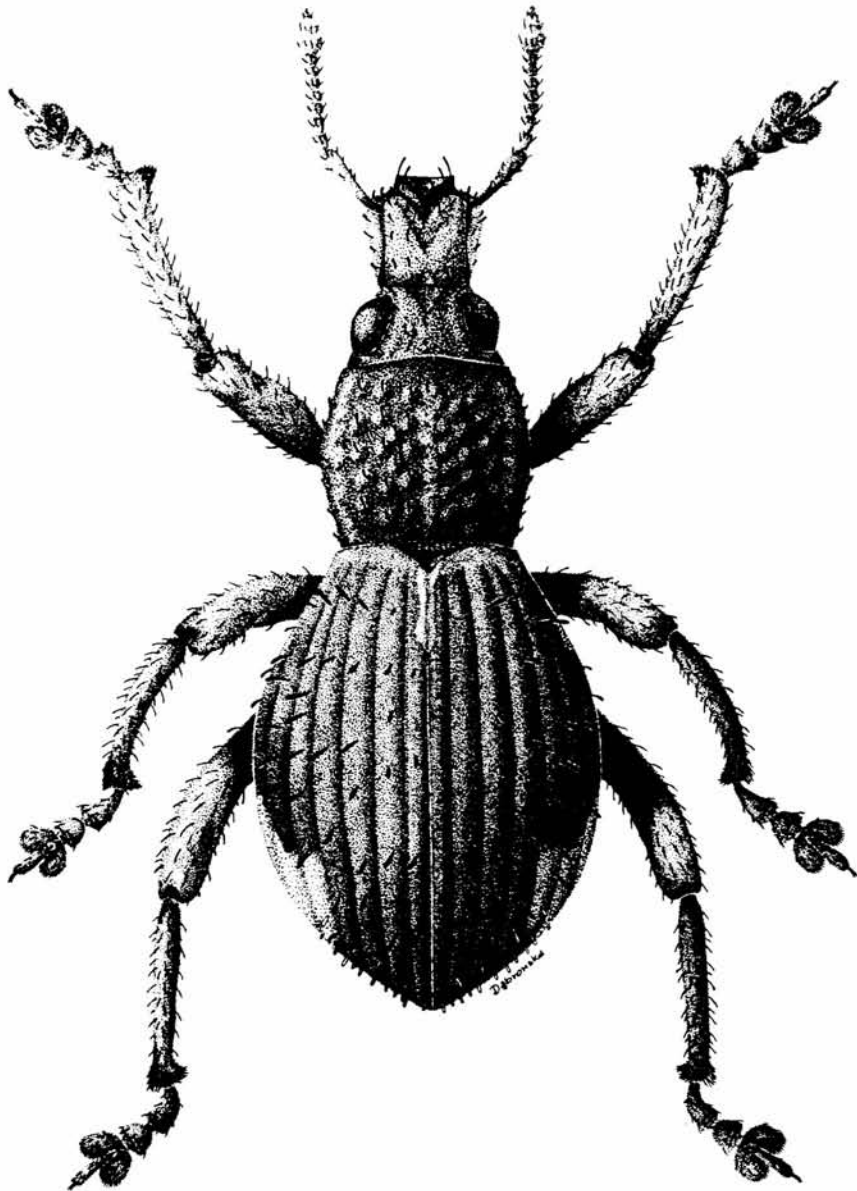
DESCRIPTION

Body length 3.20-4.40 mm, width 1.40-2.20 mm.

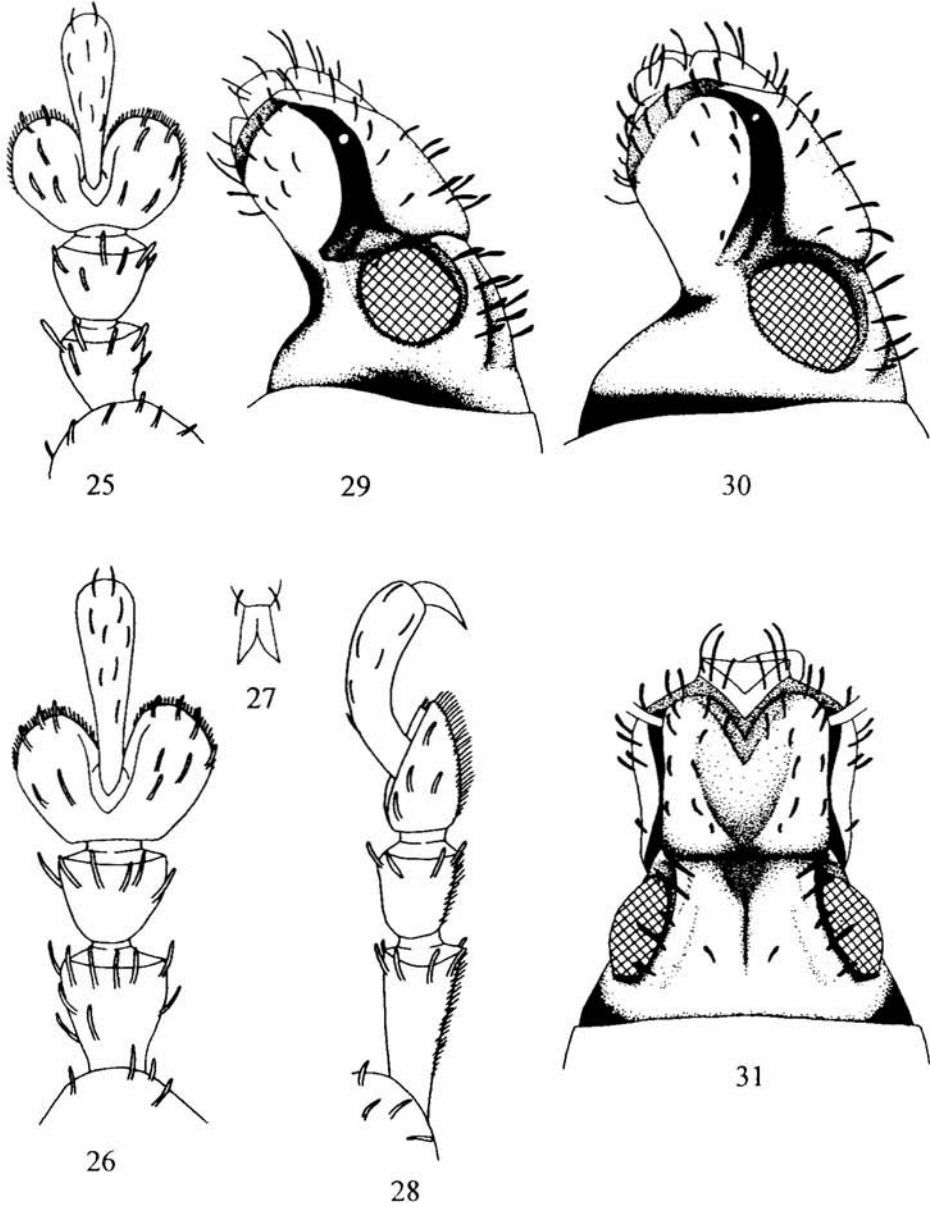
Body pear-shaped, strongly convex (fig. 24); head, pronotum and elytra black, legs dark brown, antennae light brown.

Body covered with oval adherent scales, tile-like overlapping and forming a sort of shell (fig. 33), of pearl, brown and almost black colour. In the middle and on sides of pronotum light brown streaks, lighter than the top of pronotum, more or less distinct. The first elytral interval at base with light scales forming a narrow, elongate spot c. 1/6 elytron long. Light scales present also on sides of elytra, in anterior part arranged rather irregularly, behind half elytral length from interval 5 they form a light band, delicately widening to interval 8, and distinctly wider from interval 9 to lateral margin. On whole body erect scales of slightly bent, truncate or rounded apices. On head, pronotum and legs erect scales 3-5x longer than adherent scales. On elytra setae darker and larger, c. 6-7x longer than adherent scales. Erect scales on legs like those on pronotum. Antennae sparsely covered with adherent scales and with strongly erect setae, especially on distal flagellomeres. Club somewhat darker at base, with adherent and erect hair-like setae (fig. 32).

Head widened behind eyes, separated from rostrum by a deep and wide transverse groove (fig. 31). Frons somewhat narrower than rostrum width at base, elongatedly convex, with a narrow, rather deep median furrow extending from the transverse groove to posterior eye margin. On sides of median furrow frons unevenly and delicately longitudinally striated. Eyes large, evenly convex (figs 29, 30).

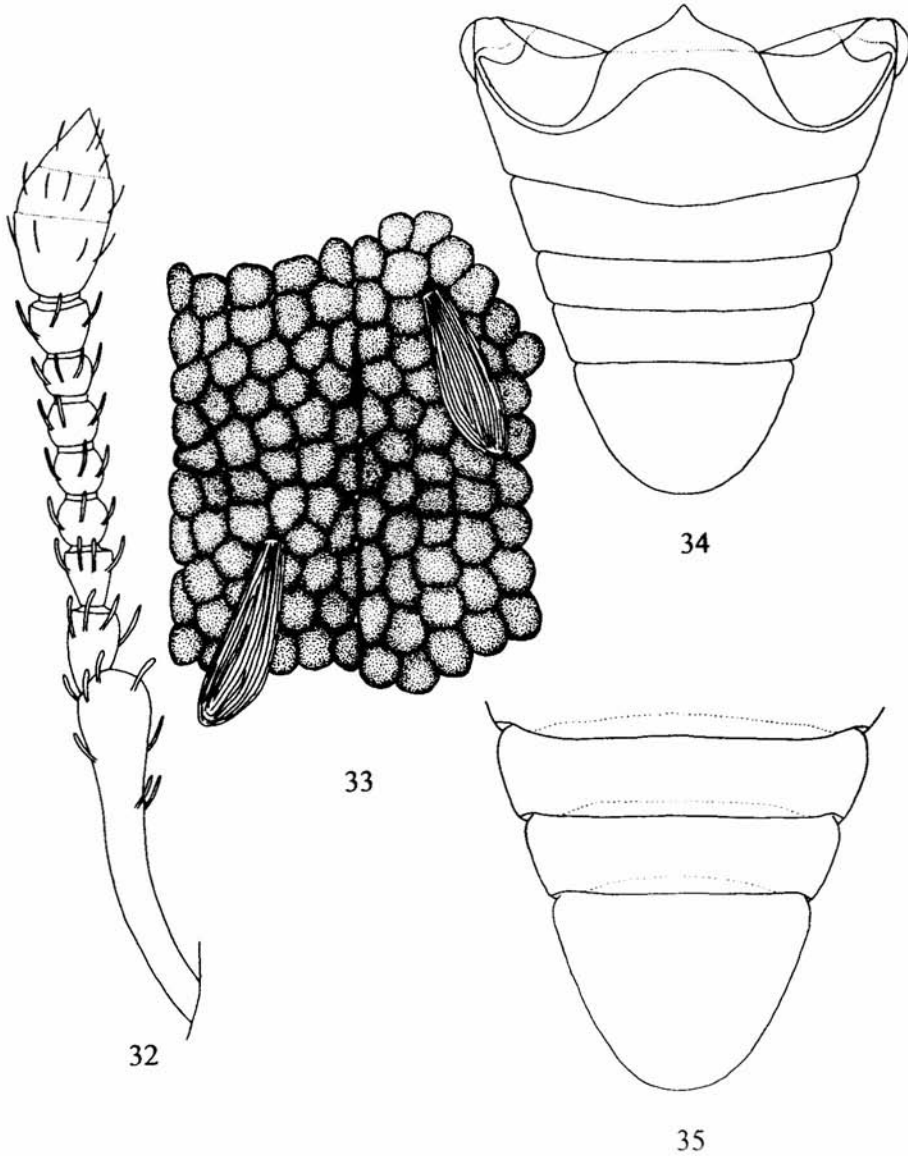


24. *Antinia vitiosa*, female (by A. DABROWSKA)

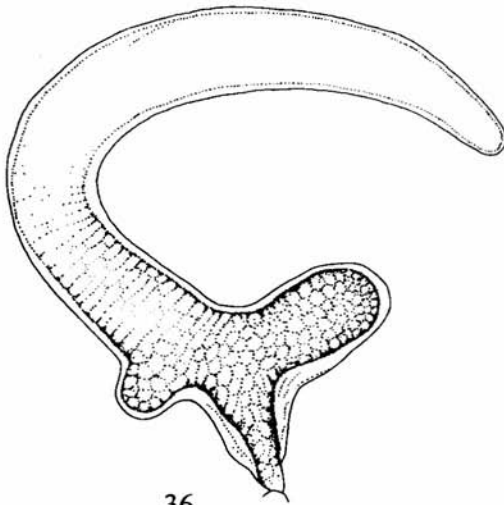


25-31. *Antinia vitiosa*: 25 - fore tarsus (male), 26, 28 - fore tarsus (female), 27 - claws, 29 - head (male), 30, 31 - head (female)

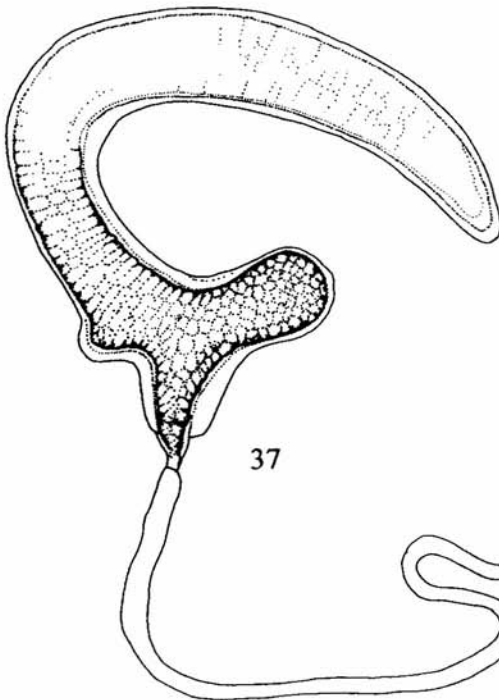
Rostrum 1.1-1.2x longer than wide. Its underside distinctly widened towards apex, upperside parallelsided. Median costa at base of rostrum widely convex, from 1/3 rostrum length to epinotum very narrow and sharp. In side view rostrum convex,



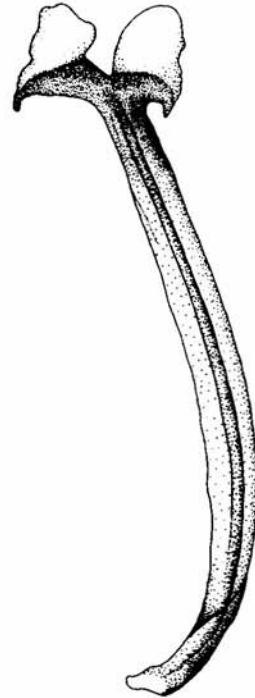
32-35. *Antinia vitiosa*: 32- antenna, 33 - scales of elytra, 34 - abdominal sternites (female), 35 - abdominal sternites (male)



36



37

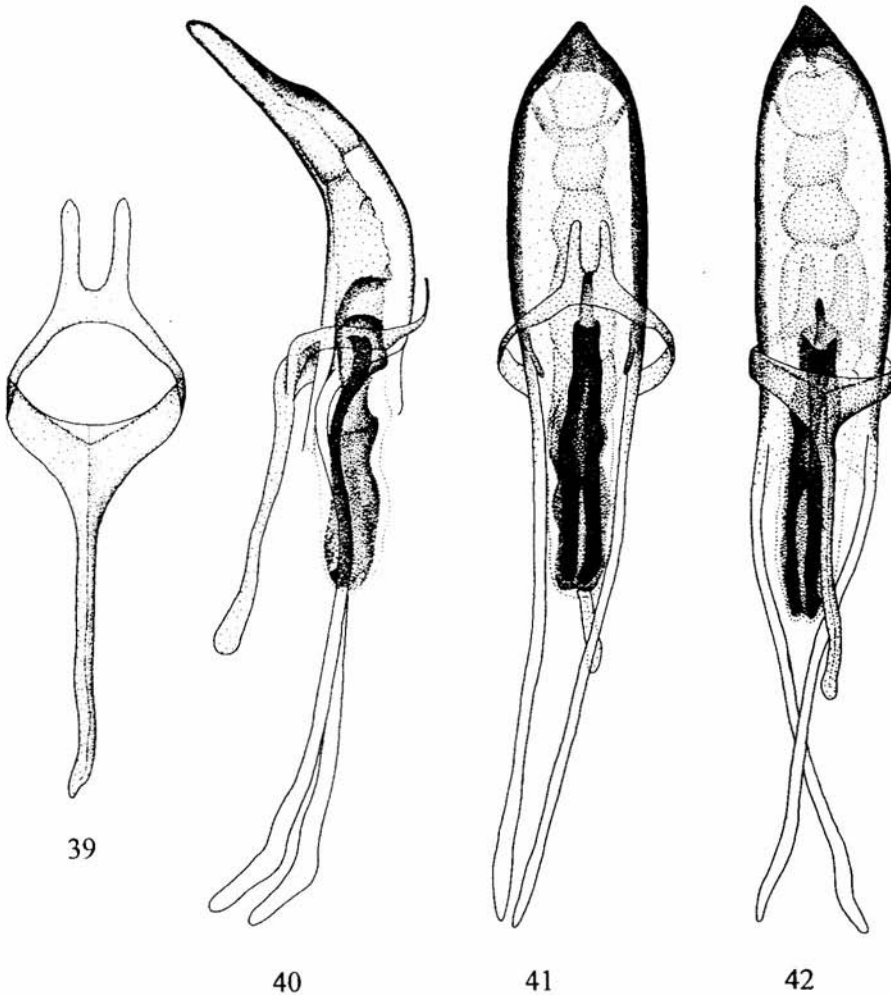


38

36-38. *Antinia vitiosa*: 36, 37 - spermatheca, 38 - spiculum gastrale

bent. Antennal scrobes arcuately bent downwards, usually slightly widened posterad, from antennal base to rostrum apex narrowed (figs 29, 30).

Antennae short (fig. 32). Scape bent and distinctly widening towards apex, c. 4-5.5x longer than its maximum width. The first segment c. 1.3-1.6 longer than wide, second c. 1.2-1.3x longer than wide. Both segments distinctly longer than the remaining ones, third somewhat longer than wide, segments 4-7 wider than long. Club oval, distinctly tapered apically, covered with delicate setae, thinner than erect scales on flagellomeres, 1.7-1.9x longer than wide.



39-42. *Antinia vitiosa*: 39 - tegmen, 40-42 - aedeagus

Pronotum 1.1-1.2x wider than long, distinctly rounded on sides, widest behind half length, on top poorly convex, base 1.1-1.2 wider than anterior margin. Top of pronotum covered with rather large, flat tubercles on which there are densely arranged adherent scales. On each tubercle a single erect scale, half as long as erect scales on elytra.

Elytra elongatedly oval, strongly convex, on sides distinctly rounded, widest somewhat before half length (fig. 24). Intervals convex, rows half as broad as intervals. Punctures in rows round, deep, distances between them equal to puncture diameter (fig. 33). Rows and intervals on top of elytra completely covered with scales. Proportions of interval width and row width and punctures can be determined only after removing the scales. In specimens with scales complete rows very narrow, with covered puncturation. On sides of elytra rows devoid of scales, and puncturation distinct.

Scutellum invisible.

Legs fairly long and slender. Tibiae arcuately bent inwards, apex of fore tibiae produced inwards into a spine, with numerous light setae at base; on inner margin smaller spines. Mid and hind tibiae with fine spines on inner side and a larger spine on apex; on inner and outer side rows of dark setae. Tarsi slender (figs 25, 26, 28). Third segment emarginate nearly to base; on fore tarsi inner lobe somewhat wider, on mid and hind tarsi outer lobe wider. Claws symmetrical (fig. 27).

Abdomen as in figs 34, 35.

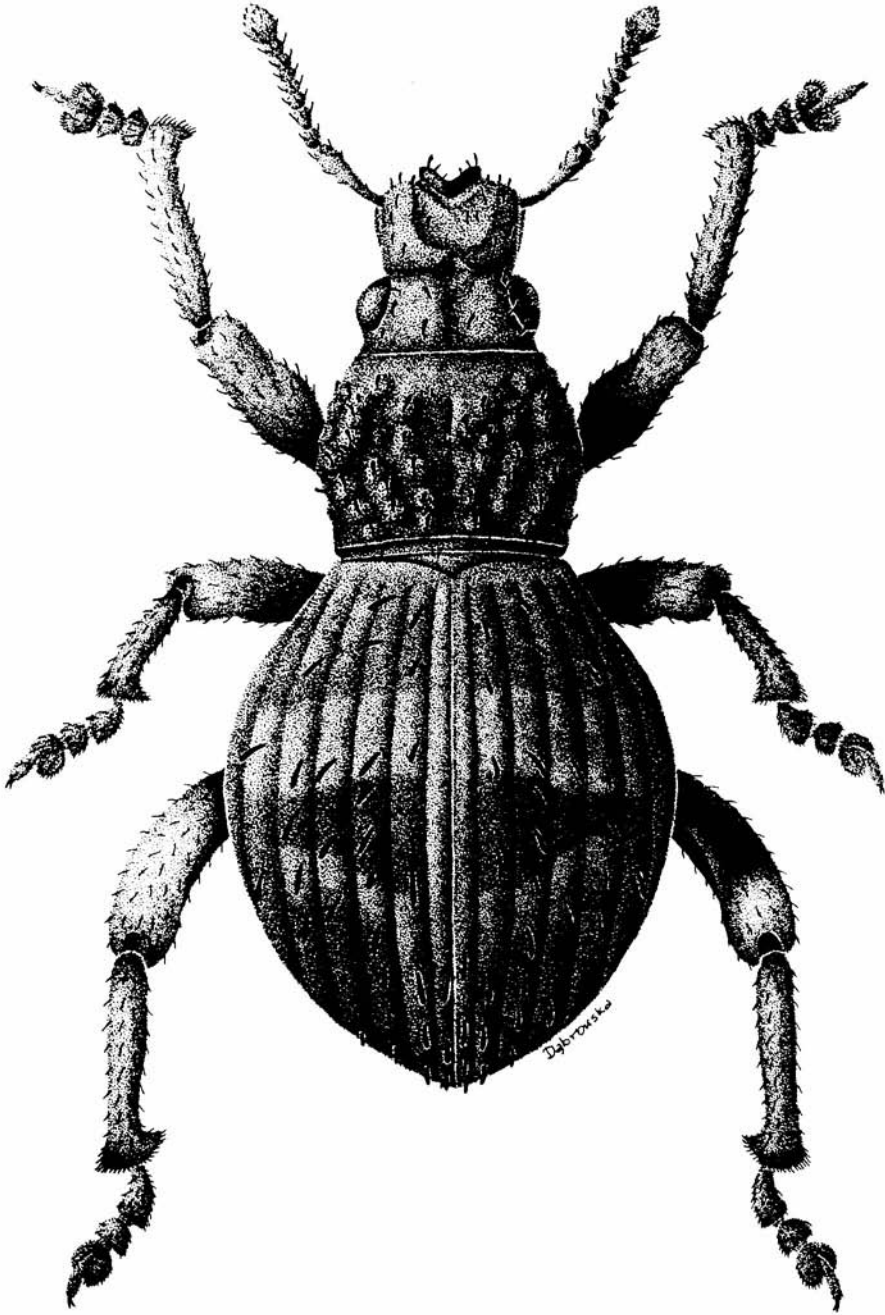
Male genitalia (figs 38-42) with moderately sclerified aedeagus, apex produced into a sharp tip. Apophyses c. 1.5x longer than aedeagus. Parameres parallel, c. 7x longer than wide. Phallobasic apodeme c. 2x shorter than apophyses. Sclerites in internal sac long, united for a considerable part of their length. Spiculum gastrale as in fig. 38. Spermatheca as in fig. 36, 37.

TYPE MATERIAL EXAMINED

Syntypes: "[golden square]"; "Java STAUDGR"; "*vitiosa* FAUST" [the last two handwritten, black ink on white background]; "Coll. J. FAUST Aukauf [sic!] 1900 [black print on yellow background]; "Type" [black print on red background]; "*Antinia (Dermatodina) vitiosa*" [handwritten, black ink on white background]; "Staatl. Museum fur Tierkunde Dresden" [black print on white background]; 2, [sex not determined], (SMTD); [labels as above, but with no error on "yellow" label and with no determination label]; 1, [sex not determined], (SMTD).

OTHER MATERIAL EXAMINED

Indonezja: Java, Tjisarua ad Bogor, leg. B. PISARSKI et J. PRÓSZYŃSKI, 24.04.1959, 1, 01.05.1959, 4 (tea plantation), 02.05.1959, 1 (tea plantation), (3 MiZPAN, 2 JK); Java, Tjibulan ad Bogor, leg. B. PISARSKI et J. PRÓSZYŃSKI, 09.04.1959, 1, 16.04.1959, 2 (tea plantation), (2 MiZPAN, 1 JK).



43. *Antinia variegata*, male (by A. DABROWSKA)

Antinia variegata Voss, 1958

(rys. 43-54)

Antinia variegata Voss, 1958: 30-31.

DIAGNOSIS

See diagnose of *A. vitiosa*.

DESCRIPTION

Body length 3.60 mm, width 1.90 mm.

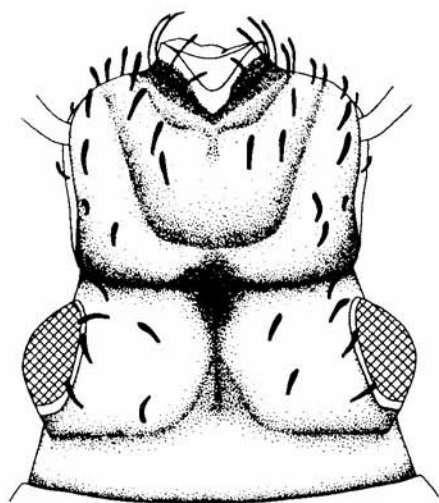
Body pear-shaped, elytra strongly convex (fig. 43). Head, pronotum and elytra black, legs dark brown, antennae light brown.

Body covered with oval, tile-like overlapping scales of cinnamon-brown colour, and with erect setae. At half elytral length a transverse dark brown band narrowing from interval 2 to 5, on sides narrow, passing into a group of several poorly distinct, irregular spots of brown and rusty scales. Similar fine spots at base of elytra and at their apex. The lightest scales in the middle of elytra before and behind the band. Erect scales on head and rostrum c. 5x longer than adherent scales, slightly bent, of rounded apices, at apex wider than at base. Erect scales on pronotum, because of the specimen being worn, few and poorly visible. Their traces suggest that they are distributed like those in *A. vitiosa*. Setae on legs similar to those on pronotum, c. 3-4x longer than adherent scales. On elytra erect scales longer, c. 6-7x longer than adherent scales, at apices slightly bent and poorly tapered or rounded (fig. 50). Antennae sparsely covered with adherent scales and erect light setae. Club covered with more delicate, hair-like setae, especially in apical part.

Head widened behind eyes, separated from rostrum by a deep transverse groove (fig. 44). Frons not much narrower than rostrum, convex. Median furrow on frons deep and narrow, extending from the transverse groove to posterior eye margin. Eyes small, evenly convex. Rostrum c. 1.3x wider than long. Underside of rostrum slightly widened towards apex, upperside only insignificantly widened. From rostrum base to apex two symmetrical wide costae, forming a distinct triangular depression which lowers again around epinotum. Near the transverse groove, in the middle of rostrum, at the prolongation of the median furrow, a short, wide groove. In side view rostrum convex, bent downwards (fig. 45). Antennal scrobes invisible in top view, arcuately bent downwards.

Antennae short (fig. 49). Scape club-shaped, c. 3.5x longer than its maximum width. The first flagellomere c. 1.5x longer than wide, second c. 1.2x longer, third as long as wide, the other flagellomeres transverse. Club almost 2x wider than flagellomeres, stout, short oval, apically somewhat tapered.

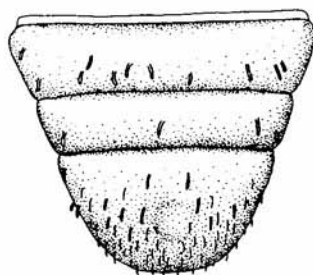
Pronotum on top poorly convex, c. 1.3x wider than long, at base slightly wider than at apex, widest at half length, unevenly rounded on sides, from base to c. 0.25-0.50 length parallelsided, further rounded. On top of pronotum distinct tubercles arranged in longitudinal rows, in anterior part of pronotum bent sideways. The poor state of preservation of the specimen does not permit a detailed analysis of the



44



45



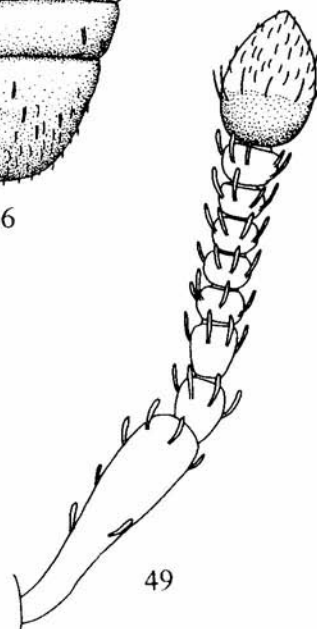
46



47

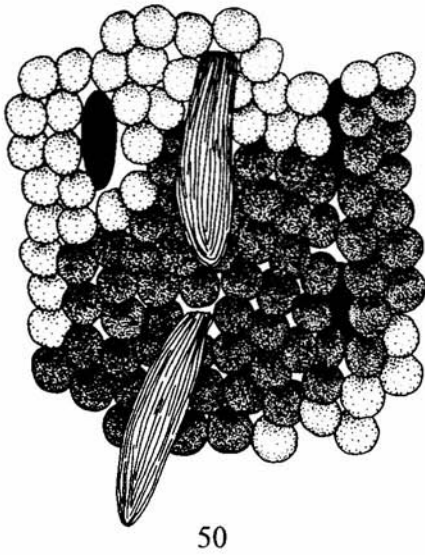


48

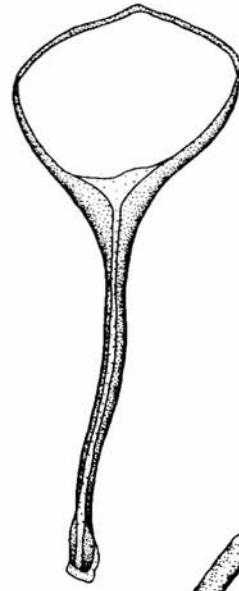


49

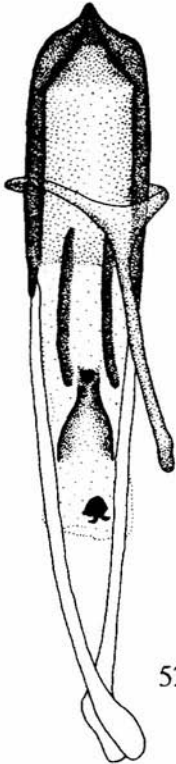
44-49. *Antinia variegata*: 44, 45 - head, 46 - abdominal sternites, 47, 48 - fore tarsus, 49 - antenna



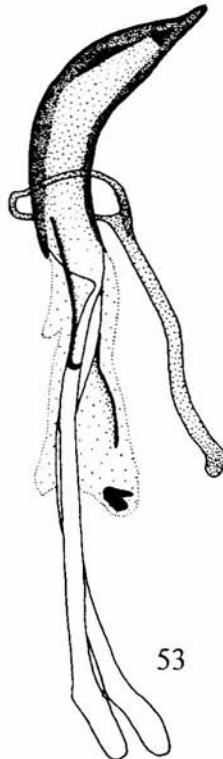
50



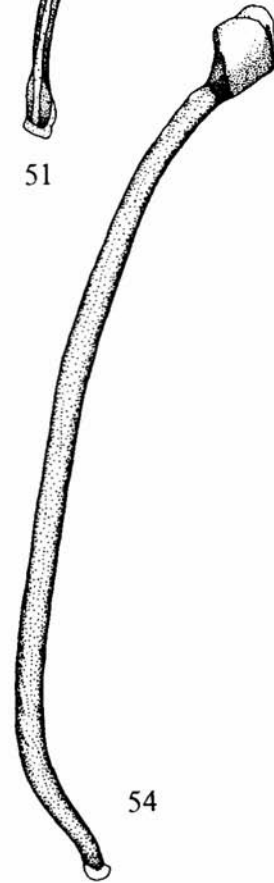
51



52



53

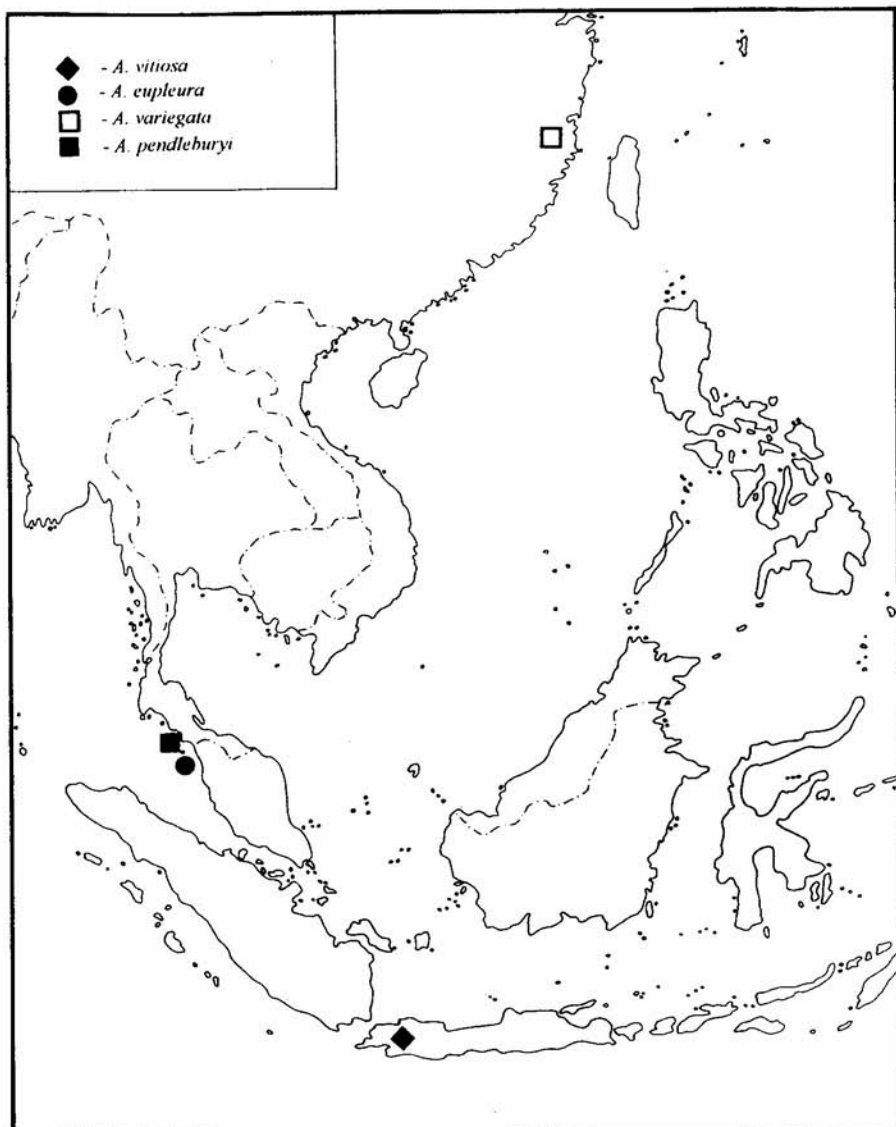


54

50-54. *Antinia variegata*: 50 - scales of elytra, 51 - tegmen, 52, 53 - aedeagus, 54 - spiculum gastrale

surface of pronotum and elytra. Probably, like in *A. vitiosa*, the tip of each tubercle bears a centrally situated seta.

Elytra oval, c. 1.2x longer than wide, very strongly convex, on sides distinctly rounded, broadest at half length. Intervals convex, rows narrow, densely covered with adherent scales; punctures invisible or very poorly visible. In places devoid of scales punctures in rows elongate, distances between them somewhat longer than puncture length. Elytral base delicately emarginate.



55. Distribution of *Antinia*

Legs slender. Tibiae almost straight, on apices inwards produced into a spine covered with light, delicate setae. On mid tibiae a similar spine. On inner side of tibial apex, at basal surface of tarsi, a row of tapered setae. On hind tibiae a spine on the inside, corbels closed, surrounded by a row of setae. Tarsi as in figs 47, 48.

Abdomen as in fig. 46.

Male genitalia (figs 51-54) with poorly sclerified aedeagus, apex produced into a short sharp tip. Apophyses c. 1.5x longer than aedeagus. No parameres. Phallobasic apodeme c. 1.8x shorter than apophyses. Sclerites in internal sac as in figs 52, 53. Spiculum gastrale as in fig. 54.

MATERIAL EXAMINED

Lectotype, male (present designation): "China Fukien" [handwritten, black ink on yellow rectangle]; "Shaowu-Fukien (500 m) J. KLAPPERICH 16. 5. 1937" [handwritten, black ink on pink rectangle folded in two]; "*Antinia variegata* m." [handwritten, black ink on white rectangle]; "Paratypus" [black print on orange rectangle with black border]; "Coll. E. VOSS Eing. 3-75" [black print on white rectangle]; "Lectotypus *Antinia variegata* VOSS, des. J. KANIA 95" ["Lectotypus" -red print, the rest handwritten, black ink, white rectangle with red border]; [glycerin preparation]; (ZMUH).

REFERENCES

- EMDEN, F. [I.] VAN, 1936. Die Anordnung der *Brachyderinae*-Gatungen im Coleopterorum Catalogus. Stett. Ent. Zeit., **97**: 66-99, 211-239.
- EMDEN, F. I. VAN, 1944. A key to the genera of *Brachyderinae* of the world. Ann. Mag. Nat. Hist., Ser. 11, **11**: 503-532, 559-586.
- EMDEN, M. VAN, F. [I.] VAN EMDEN, 1939. *Curculionidae: Brachyderinae* III. In: W. JUNK, S. SCHENKLING Coleopterorum Catalogus, Pars 164: 197-327.
- FAUST, J., 1895. Rüsselkäfer aus dem Malayischen Archipel. Stett. Entomol. Zeit., **56**: 81-114.
- MARSHALL, G. A. K., 1919. Some new injurious weevils from Asia. Bull. Ent. Res., **9**: 273-277.
- MARSHALL, G. A. K., 1926. On new *Curculionidae* from the Oriental Region (Col.). Ann. Mag. Nat. Hist., ser. 9, **17**: 353-371.
- MARSHALL, G. A. K., 1932. New oriental *Curculionidae* (Col.). Stylops, **1**, 10: 209-216.
- PASCOE, F., P., 1871. On the *Curculionidae*. Journ. Linn. Soc. Zool., **11**: 154-218.
- VOSS, E., 1958. Ein Beitrag zur Kenntnis der Curculioniden im Grenzgebiet der Orientalischen zur Paläarktischen Region (Col., Curc.) Decheniana, **5**: 1-139.