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The Erotylidae (Col.) collected by the Noona Dan Expedition in the Philippines and Bismarck Islands.

Studies on the Erotylid-beetles (18).

By

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The thirteen species recorded in this paper were collected by the Danish Noona Dan Expedition (see Petersen 1966: Ent. Meddr. 34:283—304) during the years 1961 and 1962 in the Philippines (11 species) and the Bismarck Islands (only 2 species).

In the Philippines collecting took place in the southwestern islands, Palawan, Balabac and Tawi Tawi, and all the species found are new to the fauna of these islands. The expedition did not take the only two species formerly recorded from these areas, viz. *Encaustes palawanica* Heller from Palawan and *Triplatoma exornata* Heller from Tawi. Three species and one subspecies are considered new to science and described below.

The Erotylid-fauna of Palawan, Balabac and Tawi Tawi is more closely related to the fauna of Borneo than to the fauna of the main islands of the Philippines. There are no species in common with Celebes (Zulawesi) with the exception of one species, *Episcapha quadrimacula* (Wiedemann) which has a wide distribution, however.

Subfamily DACNINAE.

Endytus bizonatus (Crotch).

Triplatoma bizonata Crotch, (1876), Cist. Ent., 1 (13): 406 (Borneo, Sarawak).

Philippines. — TAWI TAWI: Tarawakan, 1 ♂, 21 Oct. 1961, (Mercury light).

General distribution — Borneo (incl. Sawarak); Java; Sumatra; Burma (Tenasserim); Philippines (Tawi Tawi Is.).

Episcapha (Episcapha) quadrimacula (Wiedemann).

Engis quadrimacula Wiedemann, (1823), Zool. Mag., 2 (1): 132 (Java).

Philippines. — PALAWAN: Brooke's Point, Uring Uring, 3 exs., 14 and 25 Aug. 1961; Pinigisan, 600 m., 5 exs., 21 and 23 Sept. 1961. — BALABAC: Dalawan Bay, 2 exs., 5 Oct. 1961 (Mercury light). — TAWI TAWI: Tarawakan, 1 ex., 12 Nov. 1961 (Malaise trap); Lapid Lapid, 2 exs., 21 Nov. 1961.

Gen. distr. — Indonesia (incl. Sarawak and N. Borneo); Malaya; Viet-Nam; Laos; Thailand; Burma; India; Ceylon; Philippines.

Episcaphula (Episcaphula) mediofasciata Heller.

Episcaphula (Episcaphula) mediofasciata Heller, (1918 (1920)), Arch. f. Naturg., 84 (8): 102–103 & 111, Taf. II, Fig. 49 (Nova Pommerania: Peninsula quae Gazelle nominatur).

Bismarck Isls. — NEW BRITAIN: Yalom, 1,000 m., 1 ex., 13 May 1962.

Gen. distr. — Bismarck Isls. (New Britain Is.).

Note: In comparison with the description and the figure shown in the original paper, the present example is larger (8.5 mm in the body-length) and the black parts of body are more reduced: head with the clypeus wholly dark reddish, the inter-antennal area piceous and the median part of inter-ocular area dark reddish; pronotum deep reddish, with a subtrapezoidal black marking from the median part of basal border to a little beyond the middle of disc and a small blackish spot at each side of the previous subtrapezoidal marking; scutellum almost black; elytra with the basal black part abbreviated longitudinally and deeply triangularly notched near the middle of its posterior part, the posterior black part forming an elongate obtriangular marking which is distinctly separated from the surrounding reddish parts; underside of prothorax with the black area concentrated mediobasally and the lateral parts broadly reddish.

Episcaphula (Episcaphula) newbritaina sp. nov.

Body elongate-oblong. General colour black, strongly lustrous; mouth-parts light red-brown to piceous, with the labrum (except the anterior marginal area piceous) and bases of mandibles black; tarsi blackish at base, lighter apically; each elytron with two (one basal and one subapical) red-brown markings; the

basal one distinctly separated from the scutellar region and also from the basal part of the sutural area of elytron, very closely approaching or nearly touching the middle of the basal border of elvtron, not covering neither the humeral area nor the lateriobasal corner of elytron, it is close to the laterio-basal border of elytron, which is black, and the marking is nearly straight at its posterior border, but laterally somewhat produced posteriorly along the black border of elytron; the subapical marking close to the lateral black border of elytron, not reaching the sutural border, but closer to it than the basal marking, its anterior border gently and unevenly arched, the posterior border distinctly emarginate. In some specimens the basal segments or the whole antenna rather light to dark red-brown to piceous, the elytral markings more light brownish, the underside of body and the legs almost entirely light or dark brownish to piceous, or partly blackish and piceous.

Head slightly convex on the surface, distinctly ridged along the inner border of each eye, sulcated along the inner border of the ridge, somewhat raised near the antennal pore, obliquely striate just before the raised area, slightly emarginate at the front border of clypeus, rather strongly and closely punctured on the whole surface (these punctures uneven in size, especially finer on the posterior part of frons and on the anterior part of clypeus), very strongly and closely punctured on the post-ocular area. Eyes large, markedly convex and rather coarsely facetted. Antennae: 3rd segment much longer than the 2nd and 4th segments. 8th segment transverse subtrapezoidal and broader but shorter than the 7th segment; 9th-11th segment very strongly enlarged forming a loosely articulated club. Pronotum transverse, distinctly narrowed anteriorly with the sides gently rounded, the front corners markedly produced forwardly and the medio-basal part distinctly arcuately produced backwardly; front and basal borders immarginate with the exception of the lateral part of the former which is narrowly marginate: lateral borders distinctly marginate (these margins widened and bearing a setigorous pore at each corner); dorsum lightly convex, finely and rather closely punctured (each one of these punctures bearing an extremely fine hair, which is recognizable under a high power lens and is easily rubbed off) with some larger fovea-like punctures intermixed (these punctures more numerous in groups

at each side of the median part of base and with a tendency to be placed more closely on each side of the middle area of disc, although far more spread than in the basal groups (these larger punctures also provided with a hair in the centre). Scutellum much broader than long, gently emarginate at the basal border, subacuminated at the medio-posterior corner, flattish and extremely finely, but not very closely punctured on the surface. Elytra elongate, widest and gently arched outwardly at each post-humeral part and gradually narrowed posteriorly from there, rounded at the apex; dorsum moderately convex, but the lateral and apical margins reflexed, finely, closely and confusedly punctured on the whole surface (each one of these punctures bearing an extremely fine hair like the punctures of pronotum) and moreover with five files of rather larger punctures on the median area and an impressed line close to the posterior twofifths of the sutural border; humeri slightly raised, impunctate.

Underside finely and closely pubescent-punctate; intercoxal area of prosternum distinctly marginate at each side (these margins strongly convergent, abruptly turned inward at the anterior ends, but not completely connected), distinctly and rather sparsely pubescent-punctate between these margins and markedly emarginate at the posterior border; intercoxal area of mesosternum transverse subtrapezoidal, rather sparsely but distinctly pubescent-punctate on the surface, distinctly marginate at each side (these margins each strongly widened anteriorly); metasternum with a central longitudinal suture from the basal border to near the middle of sclerite; mesocoxal lines absent; metacoxal lines present, but short. Legs as usual in structure and size, but the femora comparatively robust.

Length: 8.0 mm.

Bismarck Isls. — NEW BRITAIN: Yalom, 1,000 m., holotype and 3 paratypes, 11, 12 and 21 May 1962. Holotype and 2 paratypes in the Zoological Museum, Copenhagen; 1 paratype in my collection.

This new species is very closely allied to *E. novaeguineae* Heller from NE. New Guinea in general coloration and structure of body, but may be distinguished from it by the shape of the elytral maculations, the more dense distribution of the coarser punctures of the pronotum, the presence of the filed punctures on the elytra, etc. Besides *E. novaeguineae* there are several allied species in New Guinea and its neighbouring islands, but the combination of the body-colour and the punctuation phase of pronotum and elytra, especially the presence of the filed punctures on elytra, distinguishes the new species from other known species.

Nesitis attenuata (Crotch).

Triplatoma attenuata Crotch, (1876), Cist. Ent., 1 (13): 405-406 (Borneo, Sarawak).

Philippines. — PALAWAN: Pinigisan, 600 m., 1 \circlearrowleft , 3 Sept. 1961 (Mercury light). — TAWI TAWI: Tarawakan, 1 \circlearrowright , 2 \bigcirc , 22—25 Oct. 1961.

Gen. distr. — Borneo (incl. Sarawak); Java; Sumatra; Nias; Perak; Philippines (Palawan Is. & Tawi Tawi Is.).

Note: The above-mentioned example from Palawan Is. differs from the typical form of this species from Borneo and also from the above-mentioned examples from Tawi Tawi Is. in the following points: body more strongly convex on the dorsum, more strongly curved downwardly at the posterior part, and more smooth and lustrous on the dorsum; pronotum more rounded at each side, mesosternum narrowed posteriorly, legs robuster, pronotum with a lunar red-marking at each anterio-lateral part; subbasal red-marking of each elvtron narrower, more weakly dentate and not extending the basal border of elytron along the lateral border, two posterior red-markings rather weakly developed, etc. As it is well-known, however, this species is very variable in many points of the shape and structure of the body, and the different characters seen in the above-mentioned example from Palawan Is. may also be included in the range of individual variation in this species.

Triplatoma gestroi Bedel.

Triplatoma Gestroi Bedel, (1882), Ann. Mus. Civ. Stor. Nat. Genova, 18: 439 (Key) & 440, Tav. x, Fig. 4 (Sarawak).

Philippines. — TAWI TAWI: Tarawakan, 1 O, 24 Oct. 1961.

Gen. distr. — Borneo (incl. Sarawak); Sumatra; Philippines (Tawi Tawi).

Subfamily TRIPLACINAE.

Tribe ENCAUSTINI.

Aulacochilus sericeus Bedel.

Aulacochilus sericeus Bedel, (1871), Ann. Soc. Ent. France, (5) 1: 273 (Key) & 282–283 (Malacca & Malaisie).

Philippines. — Tarawakan, 6 exs., 22 Oct. (in fungus) and 2 exs., 23 Oct. 1961.

Gen. distr. — Borneo; Sumatra; Java; Malacca; Philippines (Tawi Tawi Is.).

Note: Arrow (Trans. Ent. Soc. London, (3-4): 300 (1922) and Fauna Brit. India, incl. Ceylon and Burma, Coleoptera-Clavicornia: 90 (1925) synonymized this species with A. *janthinus* Lacordaire (Monographie des Erotyliens: 250 (1842) (Java)), but these two species are separated from each other by many specific characters, especially they are easily distinguished by the punctuation-phase of the lateral parts of metasternum. And, at the same time, this fact may suggest that revisional works is needed for the examples recorded from India, Burma, Tonkin, etc. under the name of A. sericeus Bedel.

Tribe TRIPLACINI.

Amblyopus vittatus magnivittatus subsp. nov.

This new subspecies with the body broadly elliptical in outline. moderately convex on the dorsum, shining black in the general coloration (partly red-brown to piceous in various degrees in immature individuals), bimaculated on each elytron (Fig. 1 A) (sometimes these markings are more developed and connected with each other as shown in Figs. 1 B—D), is separated from the nominate form, A. vittatus vittatus (Olivier, 1807), by the following points: Body in general smaller (length 5.0-8.5 mm) and more finely punctured on the dorsum (especially on the interstices of the files of distinct punctures of elytra), 1st segment of the antennal club shorter and markedly transverse with its lateral borders not straight but distinctly rounded, pronotum more rounded at each side and more strongly narrowed in front with the front corners more strongly produced forwardly, elytra more weakly narrowed posteriorly at the post median part (nearly parallel-sided at the median part), elytral markings larger as



Fig. 1. Amblyopus vittatus magnivittatus subsp. nov. Different colour patterns of elytra.

shown in Fig. 1, and tibiae (especially the fore-tibiae) more strongly dilated terminally.

Philippines. — PALAWAN: Brooke's Point, Uring Uring, 8 paratypes, 20 Aug.—26 Sept. 1961; Pinigisan, 600 m., 3 paratypes, 3—22 Sept. 1961. — BALABAC: Dalawan Bay, holotype, 10 Oct., 7 paratypes, 8—13 Oct. 1961. All taken in Malaise traps. Holo- and paratypes in the Zoological Museum, Copenhagen; paratypes in my collection.

So far as can be judged from the present 19 examples, the form with two isolated red-brown markings on each elytron (Fig. 1 A) seems to be the typical one in this subspecies because 16 examples belong to this form.

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Cyrtomorphus pardalinus Gorham.

Cyrtomorphus pardalinus Gorham, (1896), Ann. Mus. Civ. Stor. Nat. Genova, 36: 285—286 (Burma: Carin Chebà; Tenasserim: Mountains between Meekalan and Kyeat).

Philippines. — TAWI TAWI: Tarawakan, 1 ex., 16 Nov. 1961 (Malaise trap).

Gen. distr. — Burma; Java; Borneo; Philippines (Tawi Tawi Is.).

Note: The size of this species is somewhat variable, viz. Gorham (l. c.) recorded his examples as 5.0—7.0 mm in bodylength. Arrow (Fauna Brit. India, incl. Ceylon and Burma, Col.-Clavicornia: 111—112 (1925)) noted his examples as 5.0—6.0 mm, and the present example measures about 4.5 mm.

Spondotriplax bisbisignata sp. nov.

Body oval in shape, moderately convex on the dorsum. General colour black, lustrous; head piceous, with the vertex and the anterior part of labrum red-brown; maxillae and labium, together with their palpi, yellow-brown; antennae deep yellow-brown, with the five terminal segments black (except the apical half of 11th segment light yellow-brown); each elytron with two yellow-brown markings as follows; the 1st large subquadrate one on the base extending from the side to the 2nd file of distinct punctures completely covering the lateral and basal borders of the elytron together with the corresponding part of epipleuron, the 2nd subrotundate one between middle and apex of the elytron extending from the 2nd to a little beyond the 7th file of distinct punctures; underside dark red-brown to piceous, with the mesosternum and the median area of metasternum black; legs dark red-brown to piceous, with each tarsus lighter, especially the claw-segment and claws vellow-brown.

Head lightly convex as a whole, but rather flattish on the middle of frons, finely and rather closely punctured (these punctures finer and more closely placed on the anterior than on the posterior area), very narrowly but distinctly marginate at each side, dinstinctly notched at the front border of clypeus. Last segment of maxillary palpus subtrigonate, about twice as broad at the apical border as it is long. Antennae slender but short; 3rd segment longer than the two following segments united but clearly shorter than the next three together; club consists of five segments, but

the two basal ones are small (the first one obtrapezoidal, the second one transverse and much broader than the first), next two segments strongly expanded, and apical segment subrotundate and much narrower than any of the two preceding segments. Pronotum strongly transverse, about two and a half times as broad as long, nearly parallel-sided at the basal two-thirds but then gently convergent anteriorly with a gentle curvature; front border nearly straight at the median part, but laterally markedly produced anteriorly; lateral borders narrowly but distinctly marginate, markedly widened at each, basal and anterior, extremity with a fovea-like puncture in the middle of each; basal border distinctly emarginate at each side of the median part which is lobed posteriorly; dorsum transversely convex, distinctly and rather closely punctured, slightly depressed at each side of the basal median lobe and with a transverse row of large punctures in each of these depressions along the basal border. Scutellum nearly semicircular with the point adjoining the elvtral suture acuminated, impunctate and flattish on the surface. Elytra moderately convex, with each humerus slightly convex and impunctate; each elytron with seven files of distinct punctures (these files disappearing at the apical area of elytron, the 1st file close along the sutural border), interstices of these files finely and closely punctured (the outermost interstice extraordinally broad in this species, but without even a trace of the 8th file - in other species the 8th file of punctures is seen in this place. Underside finely and rather closely pubescent-punctate (the punctures on the thorax coarser than those on the abdomen); intercoxal area of prosternum broad, widened posteriorly, narrowly but distinctly marginate at each side and emarginate at the posterior border, neither raised nor acuminated at the middle of the anterior marginal area; procoxal lines well impressed, extending to near the mid-point of the front border of coxae and anterior border of prosternum and then curving inwards but they keep widely separated from each other; meso- and metacoxal lines well impressed; legs moderate in their thickness and normally structured.

Length: nearly 4.0 mm.

Philippines. — MINDANAO: Curuan District, Sapamoro, 1 ex. Holotype, 21 Dec. 1961. In the Zoological Museum, Copenhagen.

This new species is easily distinguished from the known species of the genus in the phase of its elytral maculation. On the other

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hand, the species is closely allied to *Tritoma coccinella* Heller, 1918 (1920), from Luzon, Philippines, in the coloration of the dorsum of the body, but Heller's species differs from the present species in the following points: Body larger (4.5 mm), the 2nd antennal segment as long as the four following segments together, pronotum strongly narrowed forwardly from the base, each elytron with eight files of distinct punctures, and prosternum subtuberculate at the middle of its anterior marginal area.

Tritoma bisignata sp. nov.

Body oval, rather lightly convex on the dorsum. General colour red-brown, lustrous; antennal club infuscated, with the exception of the yellowish terminal half of apical segment; median part of each elytron with a subquadrate black marking which extends from the 4th file to the 7th file of distinct punctures and widens outwardly.

Head lightly convex, finely punctured, the punctures larger and sparser on the posterior area than on the anterior area, very narrowly emarginate at the front border of clypeus. Antennae slender but short; 3rd segment elongate and a little shorter than the three following segments together, 8th segment transverse but small, 9th and 10th strongly transversely expanded, 11th subrotundate and a little narrower than the 10th. Pronotum transverse, nearly two and a half times as broad as long, narrowed anteriorly from the base (the basal half of lateral border straight, but the anterior half gently curved); front border deeply emarginate, with the median part gently arched forwardly; basal border somewhat produced backwardly with a distinct curvature; lateral borders narrowly but distinctly marginate, these borders somewhat widened at each end, and include a small fovea-like puncture in the centre of each widened part; dorsum transversely convex, finely and rather closely punctured, these punctures larger and rather more sparsely placed on the median disc than on the lateral areas. Scutellum nearly cordiform, about as broad as long, straight at the basal border, flat on the surface with some minute punctures. Elvtra moderately convex on the dorsum; each elvtron with seven files of distinct punctures (these files become rather indistinct at the posterior part of the elytron, the 7th file, very short, consisting of much finer punctures than the other files), interstices between these files finely and rather closely punctured. Underside finely

but not closely pubescent-punctate, these punctures coarser on the lateral areas and finer on the median area; prosternum distinctly and closely pubescent on the median area; anterior median area neither raised nor acuminated at the middle of anterior border; procoxal lines short, straight, convergent forwardly but widely separated from each other at their apices; mesocoxal lines long, but metacoxal lines very short. Legs moderate in size.

Length: 3.5 mm.

Philippines. — TAWI TAWI: Tarawakan, 1 ex. Holotype, 7 Nov. 1961 (Malaise trap). In the Zoological Museum, Copenhagen.

This new species is easily separated from the known species of the genus by its unique coloration of the body, especially by the phase of elytral maculation, and it may be a very characteristic feature of *bisignata* that the central part of prosternum is very closely pubescent.

Tritoma marginicollis sp. nov.

Body very small, oval, moderately convex on the dorsum. General colour deep yellow-brown, lustrous; antennae with the 8th segment piceous, the 9th and 10th segment black, and the 11th segment black at the basal half and yellowish at the terminal half; prosternum black at the middle; elytra black; meso- and metathorax red-piceous to dark piceous.

Head broad but very short, lightly convex, finely but sparsely punctured, narrowly but distinctly marginate at each side and also at the front border of clypeus which is distinctly emarginated. Last segment of maxillary palpus about four times as broad as long. Antennae short; 3rd segment somewhat longer than the two succeeding segments together, 8th segment transverse but very much smaller than the club segments, 9th and 10th segments strongly transverse, 11th only a little broader than long with the outer borders rounded. Pronotum transverse, about two and a half times as broad as long, gradually narrowed anteriorly (lateral borders mostly straight, but anteriorly distinctly curving inward, narrowly but distinctly marginated along the whole border (lateral borders somewhat broader than the front and basal borders); front border deeply emarginated, with the median part nearly straight; basal border with the median part strongly produced backwardly with a strong curvature. Dorsum distinctly convex from side to side, finely but sparsely punctured, narrowly but

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distinctly grooved along the lateral borders, including a row of punctures in each one of these grooves; the four corners each with a large puncture. Scutellum cordiform with the basal border straight, flat on the surface with a few minute punctures. Elvtra moderately convex, with the humeri not evidently raised; each elytron with six files of distinct punctures which become indistinct at the posterior part (the 1st, 8th and 9th files of distinct punctures which are seen in many species of this genus are not recognized in this species), interstices of these files of distinct punctures strongly, rather closely and confusedly punctured except on the lateral marginal area (these interstitial punctures a little finer than the filed punctures on the inner disc); elytral epipleuron impunctate and smooth, broad and gently narrowed posteriorly at the basal half, but strongly narrowed posteriorly at the posterior half. Underside rather coarsely and sparsely pubescent-punctate; prosternum somewhat raised longitudinally at the middle, sharply angulate at the middle of front border, almost lacking the procoxal lines; mesosternum strongly transverse, obtrapezoidal, narrowly but distinctly marginate at the front- and lateral borders; meso- and metacoxal lines distinct. Legs short and robust.

Length: 2.5 mm.

Philippines. — TAWI TAWI: Tarawakan, 1 ex. Holotype, 24 Oct. 1961. In the Zoological Museum, Copenhagen.

The present new species is easily distinguished from the known species of the genus by its small body, unique coloration and some other characteristic structural details, especially by the pronotum completely marginate all the way round the borders and by the structure of prosternum.

Tritoma postica (Crotch).

Cyrtotriplax(?) postica Crotch, (1876), Cist. Ent., 1 (13): 462-463 (Sarawak).

Philippines. — TAWI TAWI: Tarawakan, 3 exs., 23 and 30 Oct. and 14 Nov. 1961 (Malaise traps).

Gen. distr. — Borneo (Sarawak); Philippines (Tawi Tawi Is.).

Note: The present examples differ from the original description in the following points: Head more or less infuscated at the middle of face; pronotum more or less infuscated at the middle of anterior marginal area; in one example elytra mostly black with the apical area yellow-brown like the form described originally, but the second example has the basal half of elytra black and the posterior half yellow-brown, and in the third one the basal onethird of elytra is black and the posterior two-thirds yellow-brown; meso- and metacoxal lines present (a compasison with the typespecimen may be needed in case of this character which is described as "linea coxali nulla" in the original description).

Summary.

Thirteen species are recorded. From the Philippines three species of the genera *Spondotriplax* and *Tritoma*, and one subspecies of *Amblyopus vittatus* are new to science. One new species is described from the Bismarck Islands (New Britain), genus *Episcaphula*.

ANMELDELSE

E duard Wagner: Wanzen oder Heteropteren. II. Cimicomorpha. — Die Tierwelt Deutschlands und der angrenzenden Meeresteile etc. 55. Teil. 179 sider + 114 textfigurer. Jena 1967. Pris DM 32,40.

Et år efter udgivelsen af første bind af heteroptererne i »Tierwelt Deutschlands«, omhandlende gruppen *Pentatomorpha* inden for landtægerne (Geocorisae), (se anm. i Ent. Medd. Bd. 34 (4), side 281), foreligger nu fra samme forfatters hånd andet bind af de planlagte tre. I dette gives en nybearbejdelse af de fleste familier inden for gruppen *Cimicomorpha* (Tingidae, Reduviidae, Nabidae, Cimicidae, Anthocoridae etc.), samt rettelser og tilføjelser til det tidligere udkomne bind om den artsrige familie Miridae (Tierwelt Deutschlands, 41. Teil, 1952).

For de nye afsnit i bogen gælder stort set den samme ros og de samme indvendinger, som fremførtes i anmeldelsen af første bind. Tegningerne er talrige og illustrative. Man bemærker især figurerne med »tværsnit« af pronotum i afsnittet om familien Tingidae (»masketæger«); en utraditionel, men effektiv illustration af den i reglen meget komplicerede thorax-struktur hos disse tæger.

Rettelserne til Wagner's førnævnte bind om familien Miridae optager alene ca. 50 sider! Et godt eksempel på, hvor hurtigt systematiske arbejder bliver forældede. De fleste af rettelserne er tilmed resultatet af forfatterens egne arbejder og består overvejende af tilføjelse af nye arter, omgrupperinger osv. Et par af de foretagne ændringer forekommer dog anmelderen uberettigede. Det gælder f. eks. rehabiliteringen af *Blepharidopterus brevicornis* (E. Wagner, 1947), der af Wagner nu betragtes som en underart af *B. angulatus* (Fall.), skønt Leston (1958, Proc. S. Lond. Ent. Soc.) på meget overbevisende måde har vist, at *brevicornis* er en forma af den således dimorfe art *angulatus*, kun