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An illustrated descriptive catalogue of the genera *Anidrytus* Gerstaecker and *Epopterus* Chevrolat, with descriptions of new species (Coleoptera: Endomychidae)

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Abstract: The endomychid beetle genera *Anidrytus* Gerstaecker and *Epopterus* Chevrolat have been confused for many years. This paper discusses the similarities and differences of these genera, describes new species, makes some nomenclatural changes, and illustrates the genitalia for many species. New species described: *Epopterus picticollis*, *E. bioculatus*, *E. confusus*, *E. gracilis*, *E. loretensis*, *E. anomalus*, *E. aravacus*, *E. atriventris*, *E. crypticus*, *E. quechuanus*, *E. callerianus*, *E. flavonotatus*, *E. submaculatus*, *E. parvus*, *Anidrytus nimbiferus*, *A. parki*, *A. compactus*, *A. gibbosus*, *A. circumcinctus*, *A. bechyneorum*, *A. batesi*, *A. mexicanus*, *A. trinitatis*, *A. major*, *A. humerosus*, *A. grandis*, *A. cardiosoma*. New synonymies: *E. vacuus* Gerstaecker (= *E. scalaris* Gorham); *E. decempunctatus* Gerstaecker (= *E. bifasciatus* Pic); *E. variegatus* Erichson (= *E. decoratus* Kirsch); *A. contractus* Gerstaecker (= *A. dolosus* Gorham); *A. helvolus* Gerstaecker (= *Ephebus ignobilis* Gorham); *A. parallelus* Gerstaecker (= *Ephebus depressus* Gorham). Changes in nomenclatural status or combination: *Epopterus kirshi* Strohecker is reduced to a subspecies of *E. partitus* Gerstaecker; *E. angustatus* Strohecker is reduced to a subspecies of *E. fasciatus* (Fabricius); *E. fuliginosus* Guérin-Ménéville is transferred to *Anidrytus*.

The genera *Anidrytus* Gerstaecker and *Epopterus* Chevrolat share many common features, among them: body form ovate to oblong; dorsum pubescent, but much abraded in many specimens; antennomeres III & IV subequal; antennomeres IX & X, especially X, mesally acuminate; spinasternum horizontal, extended beyond front coxae, broadly spatulate with apex subtruncate. Males have protibia curved, enlarged in apical third, often with a small tooth below; and abdominal sternite VI is visible.

Gerstaecker (1858) distinguished the two genera on the basis of mandibular and maxillary structure: mandibular apex in *Anidrytus* is entire, in *Epopterus* it is bifid; maxillary galea is corneous at base in *Anidrytus*, in *Epopterus* it is entirely membranous. I doubt that Gerstaecker subjected all the species which he treated to much analysis but, rather, fell into the habit of assigning plainly colored and mostly larger forms to *Anidrytus* and those of strongly variegated pattern and mostly smaller size to *Epopterus*. Later authors, notably Gorham, followed him in this practice.

I have not so tested the many species now known but, after examining the holo- or lectotype of nearly all described forms, I think that a preliminary treatment may enable any future student of the group to proceed without repeating my efforts, which have extended over many years.

Most previous descriptions have been drawn on body form and color pattern. Many similarities in these features are found among the species. Yet, strong differences in color pattern are shown by specimens of *Epopterus* which, on the basis of aedeagal structure, are conspecific. Some of the observed variation is due, no doubt, to differences in maturity, but may also exist as color phases in some species. I have used trinomials only where names have already been published.

I consider the aedeagus the most reliable taxonomic character. This organ is strongly sclerotized, often asymmetrical and bizarre in form, which differs in appearance with change of position, either by rotation or inclination. The camera lucida drawings are of dextro-ventral aspect, the lesser curvature of the base is considered ventral.

Study of the aedeagi suggests relationships between species which transgress the nominal generic boundaries of these genera and suggests long separated evolutionary lines not reflected in current nomenclature. Evaluation and action on these ideas would be a long task, for which material and time left to me are inadequate. Therefore, I follow Gerstaecker's and Gorham's concepts in the assignment of species.

Because of interspecific similarities and intraspecific variations in external features, I found it impossible to construct a worthwhile key. I would be loathe to attach identity labels to most females

¹ Dr. Strohecker finished this paper before his death, November 14, 1988. The manuscript has been changed little from its original form, and lacks certain details generally required for modern systematic papers and by *Insecta Mundi*. Even in its current state, it represents a step forward in the study of these genera and is here published for that reason. Paul E. Skelley, Florida State Collection of Arthropods, Florida Department of Agriculture & Consumer Services, Division of Plant Industry, 1911 SW 34th St., Gainesville, FL 32614-7100, U.S.A.

unless in series with males, and I believe the most reliable path to identification of males is by comparing figures of the aedeagi with the specimen. Each figure is followed by a number in parentheses which indicates the species number in the text.

Material examined for this study is found in the following institutions, the officers of which I thank for their cooperation: American Museum of Natural History, New York (AMNH); California Academy of Sciences, San Francisco (CASC); Canadian Museum of Nature, Ottawa (CMNC); Deutsches Entomologisches Institut, Eberswalde Finow (DEIC); Field Museum of Natural History, Chicago (FMNH); Florida State Collection of Arthropods, Gainesville (FSCA); Hungarian Natural History Museum, Budapest (HNHM); Funcacion e Instituto Miguel Lillo, Tucumán (IMLA); Instituto de Zoologia Agricola, Universidad Central de Venezuela, Maracay (IZAV); Entomologisches Institut, Museum G. Frey, Tutzing (MGFT); Muséum d'Histoire Naturelle, Geneva (MHNG); Muséum National d'Histoire Naturelle, Paris (MNHN); Natural History Museum, London (NHML); Staatliches Museum für Tierkunde, Dresden (SMTD); U. S. National Museum, Washington (USNM); Museum für Naturkunde der Humboldt Universität, Berlin (ZMHB); Museum & Institute of Zoology, Polish Academy of Sciences, Warsaw (ZMPA); Zoological Museum, University of Copenhagen, Copenhagen (ZMUC); Zoologische Staatssammlung, Munich (ZSMC).

Genus *Epopterus* Chevrolat

Chevrolat 1844:380; Erichson 1847:181; Gerstaecker 1858:274; Chapuis 1876:123; Gorham 1890:129; Strohecker 1953:62.

Type species: *Erotylus ocellatus* Olivier (Strohecker 1953:63).

Most species 3.5 - 5 mm long, although some may slightly exceed 6 mm. Body outline broadly cordate to oblong and subparallel. Elytra variegated with black or brown and yellow or red markings, often with a broad dark band across middle. In two species, *E. lineoguttatus* Gorham and *E. clara* Gorham, the pale elytra are marked with black points or streaks. The dorsum is pubescent, but often much abraded in museum material.

Diagrams of color pattern only are shown for four species described from unique female types: *E. vicinus* Pic, *E. fallax* Gerstaecker, *E. rubiginosus* Gerstaecker, and *E. quaesitus* Gorham. All figures of elytra are intended to show only pattern; any realism is fortuitous. No illustrations are offered

for the following nominal species: *E. myops* Guérin-Méneville and *E. trimaculatus* Guérin-Méneville, which I have been unable to locate; *E. geniculatus* Pic, which is compared with *E. picticollis* n. sp.; *E. ryei* Gorham, *E. lineoguttatus* Gorham, *E. pantherinus* Gorham, and *E. ocellatus maculosus* Gorham. Habitus figures of the last four accompany the original descriptions.

1. *Epopterus ocellatus* (Olivier)

Fig. 24, 33

Erotylus ocellatus Olivier 1792:437. Type repository unknown.

Eumorphus ocellatus (Olivier) 1808:1067, pl. 1, fig. 6.
Epopterus ocellatus Gerstaecker 1858:275, pl. 3, fig. 43u, x; Strohecker 1953:pl. 3, fig. 30.

Oblong, rather flat above, almost equally rounded in front and in rear. Legs, head and antennal base reddish yellow. Venter and pronotum reddish brown, the latter with 4 black spots in a transverse row. Elytron blackish brown with suture reddish. A yellow band on base of elytron encloses a dark humeral spot and a large dark ocellus, almost or quite touching base. A yellow pre-apical band emits a short ray at middle of its front edge and 2 long posterior rays, one along margin, other near suture; it may form 2 complete rings enclosing dark spots. Front tibia of male abruptly widened beyond middle. Length 6-6.5 mm, width 3.4-3.6 mm.

Most specimens examined are labeled "Brazil". Brazil: Sta. Catarina, Corupa, XII.1944, A. Muller (AMNH).

2. *Epopterus annulatus* Guérin-Méneville

Fig. 34

Epopterus annulatus Guérin-Méneville 1857:268, pl. 13., fig. 20. Holotype ♂, Brazil (NHML).

Very similar to and probably a color form of *E. ocellatus*, as noted by Csiki (1901:47). The figure in Guérin-Méneville does not properly show the long caudal rays of the posterior elytral band.

"Guyana", ♂ (FSCA).

3. *Epopterus myops* Guérin-Méneville

E(popterus) myops Guérin-Méneville 1857:268. Type material from Brazil?, Colombia?; repository unknown.

Epopterus ocellatus myops Csiki 1901:47.

Originally described as tawny brown, elytra very dark, pronotum lighter, venter and legs yellowish, femora briefly fuscous at base. Pronotum

with 4 black spots. Elytra finely punctate, black at base and apex, with an anterior yellow band forming a circle near the scutellum and another pale band at apical third. A smaller variety.

4. *Epopterus trimaculatus* Guérin-Ménéville

Epopterus trimaculatus Guérin-Ménéville 1857:268. Type material from Colombia; repository unknown.

Original description as follows: Body and elytra black, shining, pronotum with anterior border yellow. All antennomeres yellow, blackish at base. Legs black, knees and tarsi yellow. Elytron with a large posterior yellow area, which is dentate on front edge and extends almost to apex, enclosing 3 black spots, the middle one largest. Length 5.33 mm, width 3 mm.

5. *Epopterus partitus partitus* Gerstaecker

Fig. 35

Epopterus partitus Gerstaecker 1858:277. Lectotype, Mexico: Yucatan (NHML). A syntype ♀ is presumably in ZMPA.

Oblong, elytra more gradually rounded caudad than in *E. ocellatus*. Venter reddish yellow; thoracic sterna and legs may be dusky. Antennal base and pronotum reddish yellow, the latter with 4 black spots in a transverse row. Elytron reddish yellow with 2 black spots on base, smaller on umbo, larger near scutellum and narrowly reaching elytral base; wide black band across middle, U-excavate in front and V-excised at middle of hind edge. Black color extending forward along suture almost to scutellum and also caudad, where it widens into a semi-circular spot; lateral is an oval black spot. Length 6-6.8 mm, width 3.5-4 mm.

6. *Epopterus partitus maculosus* Gorham

Epopterus ocellatus maculosus Gorham 1890:129, pl. VII, fig. 19.

Epopterus partitus maculosus: Arrow 1920: 48. Lectotype ♂, Nicaragua: Chontales, Janson, B. C. A., Col. VII, *E. ocellatus* Ol. (NHML).

Differs from nominate form only in having the broad black elytral band interrupted at middle by a pale vitta, which, however, may be incomplete.

Reported by Gorham from Belize; Guatemala; Nicaragua; Mexico: Tabasco. A considerable series of paralectotypes are in NHML.

7. *Epopterus partitus kirschi* Strohecker, new status

Fig. 36

Epopterus kirschi Strohecker 1959:181, fig. 8. Holotype ♂, Ecuador: Balzapamba (ZMHB).

More intensively colored than nominate form; head, legs, middle of metasternum and first sternite black. Pronotum rufous with 4 black spots. Elytron with pale areas reduced to rather narrow bands, apex yellow. The aedeagus differs little from that of the nominate form. Length 6-6.5 mm, width 3.5-3.7 mm.

Colombia: Valle de Cauca, Anchicaya Dam, 70 km E Buenaventura, 22.VII.1970, H. & A. Howden, 2♂♂ (CMNC; FSCA).

8. *Epopterus tigrinus* Gerstaecker

Fig. 37

Epopterus tigrinus Gerstaecker 1858:279. Holotype ♂, Brazil (ZMHB).

Oblong, rather flat above. Venter, bases of femora and tibiae black. Pronotum black, sides yellow with a small black spot near lateral margin. Elytron black, with an irregular yellow or orange band across base enclosing 2 dark spots. A broad apical pale band encloses a lateral dark spot and a semicircular black spot on suture. Length 5.7-6.5 mm, width 3-3.5 mm.

Brazil: Sta. Catarina, Lagos, Fruhstorfer (ZMHB; FSCA); Nova Teutonia, F. Plaumann (GMFT; FSCA); Parana (FSCA).

9. *Epopterus geminus* Gerstaecker

Fig. 38

Epopterus geminus Gerstaecker 1858:279. Lectotype ♂, Colombia (ZMHB).

Venter and legs black. Head and antennal base reddish yellow. Pronotum with front angles and sides yellow, disc with large trapezoidal black patch; small black spot in pale area of each side. Elytron mostly black; an irregular orange band across base encloses 2 black marks which reach base. A yellow area at apex encloses 2 oval black spots. Length 5.5-6 mm, width 3.3 mm.

Venezuela: Caracas, Berg Avila, P. C. Vogl (ZMHB; FSCA). Colombia: Santander del Norte, Santiago, 700 m, 23.V.1974, H. & A. Howden, 1 pair; 30 km S Cucuta, 8.V.1974, Howdens, ♂ (CMNC; FSCA).

10. *Epopterus signaticollis* Gerstaecker

Fig. 29, 30, 39

Epopterus signaticollis Gerstaecker 1858:280. Holotype ♂, Colombia (ZMHB).*Epopterus scalaris* (in part) Gorham 1890:130.

Oblong, venter yellow, hind part of metasternum and first sternite black, sternites 2-4 dusky at middle. Head and antennal base yellow. Pronotum yellow, middle of front margin and 4 discal spots black. Elytron reddish yellow with a small dark spot on umbo, an oval dark spot at mid-line of base, a broad multidentate dark band across middle and 2 black spots before apex. Length 5.5 mm, width 3.5 mm.

The description above was extracted from Gerstaecker. A male from Colombia: Villavicencio, has the inner front spot narrowly connected to base, and the middle black band interrupted at the side. A male from Panama: Bugaba (FSCA ex Janson) has venter and legs entirely black.

Colombia: Cundinamarca, Monterredondo, Schneble, 1 pair (GMFT); Meta, Villavicencio, 9.VIII.1938, C. H. Seevers, ♂ (FSCA); Antioquia, Puerto Berrio, VIII.1938. Seevers, ♂ (FSCA). Panama: Bugaba, 250-400 m, Champion, ♂ (FSCA ex Janson).

11. *Epopterus vacuus* Gerstaecker

Fig. 40

Epopterus vacuus Gerstaecker 1858:283. Holotype ♂, French Guiana: Cayenne (MNHN).*Epopterus scalaris* Gorham 1890:130, pl. VII, fig. 20. Lectotype ♂, Panama: Bugaba, Champion (NHML). **New synonym.**

Venter, femora and tibial bases black. Antenna stout, black, basal antennomeres (except III) hardly longer than wide. Head dusky yellow. Pronotum with sides yellow, disc black, the dark color abruptly narrowed at mid-length and continued narrowly forward to front margin. Elytron black with a large yellow patch on shoulder enclosing a small black spot. The pale color does not reach suture, and its hind edge is tridentate. Apex yellow, front edge of this pale area tridentate. Length 6 mm.

Although Gerstaecker cited a single female in the Thomson collection, the presumptive type is a male; the front tibia is less strongly modified than in the males of most species of the genus.

12. *Epopterus testudinarius* Gorham

Fig. 31, 45

Epopterus testudinarius Gorham 1873:48, pl., fig. 7. Lectotype ♂, paralectotype ♀, Brazil: Amazon, Bates (NHML).

Oblong. Antenna, legs, and venter black. Head and pronotum yellow, latter with large black patch which may extend across entire base, abruptly narrowed at middle, then continues to front margin. Scutellum black. Elytron yellow with small oblong black mark on shoulder, smaller round black spot near scutellum, and broad, irregularly margined black band across middle. Apex black, between it and middle black band a deeply constricted yellow band. In a male from Villavicencio the pronotum is wholly black, the entire side margin of elytron yellow. Length 6-6.5 mm, width 3.6-3.8 mm.

Colombia: Meta, Villavicencio, 13.VIII.1938, C.H. Seevers (FSCA).

13. *Epopterus comptus* Gorham

Fig. 44

Epopterus comptus Gorham 1890:130, pl. 7, fig. 200.

Lectotype ♂, 4 paralectotypes, Nicaragua: Chontales, Janson, Belt (NHML).

Oblong. Venter black, paler caudad, legs yellow. Antenna yellow at base, antennomeres VI-XI black. Head and pronotum pitchy red, latter with basal 3/5 of side margin, 2 anterior and 3 elongate basal spots black. Elytra black with umbo yellow, pale color extending to suture as a ring enclosing round black spot. Elytral apex extensively yellow with large dark spot enclosed. Length 5.8-6 mm, width 3.5 mm.

Nicaragua: Chontales, ♂ probably from original collection; ♀ without locality data (FSCA ex Janson).

14. *Epopterus undulatus* Guérin-Méneville

Fig. 41

Epopterus undulatus Guérin-Méneville 1857:269, pl. 13, fig. 21. Type material from Argentina: Buenos Aires, Dejean coll.; repository unknown.

Oblong. Venter black, abdomen paler caudad. Legs yellow, basal half of middle and hind femora and of all tibiae black. Antennal base and head yellow. Pronotum yellow with the following black marks: an inverted V with apex at middle of front margin, its lobate limbs extending to hind angles, a

small round spot on each side. These markings may be obscured by general darkening. Elytron black with narrow yellow band across base, enclosing black humeral spot and elongate parascutellar dark mark; a narrow zigzag pale band at posterior quarter, and lunate bar close to apex. Length 5-5.8 mm, width 3-3.2 mm.

Argentina: Tucumán, Tucumán, Horco Molle, San Pedro de Colabao, Choromoro; Jujuy: Yuto; Catamarca, El Alto. Bolivia: Sta. Cruz, El Cidral (IMLA). Argentina: Cordoba, Jesus Maria (GMFT). Paraguay: Asuncion (HNHM).

15. *Epopterus zebra* Strohecker

Fig. 3, 69

Epopterus zebra Strohecker 1957:269, fig. 27. Holotype ♂, Peru (HNHM).

Oblong. Upper surface reddish yellow. Pronotum with a W-shaped mark and median basal spot black. Elytron marked with black as follows: 2 round spots on base, an undulate band before middle, another band just behind middle, and 2 large coalescent spots before apex. Length 5.9 mm, width 3.3 mm.

16. *Epopterus picticollis* Strohecker, n. sp.

Fig. 28, 76

Holotype ♂, Peru: Huanuco, 25 km below Carpish, 2500 m, 9.IX.1946, F. Woytkowski, and allotype ♀ with same data except 8.IX (AMNH). Paratypes: 2♀, same locality, IX.1948 (FSCA).

Oblong, subparallel. Venter blackish, distal part of femora ferruginous. Antenna, except antennomere I, black. Head and pronotum reddish brown, the latter with a dark marginal spot on each side and 2 broad black marks extending obliquely mesad from hind angles; behind these marks, near center, is a pair of black points. Elytron broadly red at middle, base and apex suffused with black. A narrow yellow band begins at side margin behind umbo and broadens mesally to form a large ring enclosing a large dark spot. At posterior third is a narrow undulate yellow band. Length 5 mm, width 3 mm.

17. *Epopterus geniculatus* Pic

Epopterus geniculatus Pic 1931:9. Holotype ♂, Bolivia (MNHN).

Similar in size, form and markings to *E. picticollis*, which is possibly a color form of *E. geniculatus*. The yellow bands of elytron are narrower,

especially the posterior one, which runs in undulant fashion obliquely caudad and mesad.

18. *Epopterus nigerrimus* Strohecker

Fig. 70

Epopterus nigerrimus Strohecker 1957:268, fig. 26.

Holotype ♂, Brazil: Goyaz, Jatahy (HNHM).

Narrowly oblong, subparallel. Deep black below and above, dorsum thickly punctate. Elytron with 2 narrow red marks, the anterior Y-shaped, embracing the umbo, the posterior near apical third, transverse and undulate. Length 4.6-4.8 mm, width 2.7 mm.

Argentina: Cordoba, 2♂♂, ♀ (ZSMC; FSCA).

19. *Epopterus bioculatus* Strohecker, n. sp.

Fig. 23, 55

Holotype ♂, French Guiana: Cayenne (FSCA ex Janson).

Long-oval, elytra gradually narrowed from anterior third. Venter and femoral bases dark brown. Antennal base yellow, club black. Dorsum blackish brown, elytron with anterior and posterior yellow rings. Pronotum with sides subparallel basad, fairly strongly curved to front angles, hind angles very sharp, disc finely, sides coarsely and densely punctate. Elytra more than 3X as long as pronotum. The anterior yellow area leaves a large dark humeral spot and completely encloses an oval dark spot near scutellum. The posterior yellow band encloses a dark lateral spot and is extended in 2 short rays toward the scutellum. Length 5.3 mm, width 3 mm.

The single specimen has a previous determination "*E. ocellatus*".

20. *Epopterus cucullinus* Gorham

Fig. 48

Epopterus cucullinus Gorham 1873:49. Holotype ♂, Brazil: Amazons (NHML).

Described by Gorham as, "Evenly ovate and rather convex.... Elytra ovate, not much narrowed towards the apex, closely punctured.... rich pitchy-red, with 3 orange-yellow markings, the 2 anterior irregular and transverse, the third.... an irregular and not clearly defined spot near apex. Antennae pitchy-red, club black." Pronotum with 4 black spots. Length 5 mm.

Brazil: Ega, Bates, 2♂♂, ♀ (NHML); Amazons, ♂ (SMTD).

21. *Epopterus dilectus* Gorham

Fig. 25, 49

Epopterus dilectus Gorham 1875:16. Holotype ♂, Ecuador: East Andes, Buckley (NHML).

Rather narrowly ovate, similar to *E. cucullinus*. Antennal base reddish brown, club black. Dorsum reddish to dark brown, pronotum with 4 black spots. Elytron with a pale yellow fascia behind umbo, inclined slightly caudad and not reaching suture; another, more irregular fascia across caudal slope. Length 4.5 mm.

22. *Epopterus vicinus* Pic

Fig. 14

Epopterus vicinus Pic 1931:9. Holotype ♀, Bolivia (MNHN).

Oblong. Pronotum in part black. Elytra pitchy, partly brown, with anterior and posterior undulate and branched yellow fasciae. Antenna red, club black, legs mostly red. Length 5 mm.

The description above is a summary of Pic's diagnosis. Specimens from Callanga, Peru, closely resemble the holotype: dorsum blackish brown. Pronotum with 4 black spots in a transverse row; these obscure in darker specimens. Figure 14 was drawn from a Callanga specimen. Its aedeagus is identical to that of *E. dilectus*, and I suspect that *E. vicinus* is a color form of *E. dilectus*.

23. *Epopterus notatus* Strohecker

Fig. 16, 71

Epopterus notatus Strohecker 1957:266, fig. 18. Holotype ♂, Amazon (HNHM).

The holotype and one other specimen subsequently referred to this species are all I have seen; both specimens are in somewhat immature state of coloration. Elytral markings are similar to those of *E. vicinus* but with yellow areas much wider. In the holotype the posterior yellow band does not form complete rings. Length 4.3-4.7 mm, width 2.5-3 mm.

Colombia: Amazonas, Leticia, 700ft, 9.VII.1970, H. & A. Howden (CMNC).

Additional material is needed to determine the relationship of *E. vicinus* and *E. notatus* to *E. dilectus*. Similarity of the aedeagi suggests conspecificity.

24. *Epopterus confusus* Strohecker, n. sp.

Fig. 77

Epopterus cucullinus: Strohecker 1957:267, fig. 21 (not of Gorham). Holotype ♂, (Brazil?): Amazon (HNHM).

Form oblong, elytra rather strongly convex. Legs and venter brownish black, elytral epipleura and sides of prosternum yellow. Dorsum dark brown, elytron with 2 yellow patches, the anterior closely embracing the shoulder and bluntly extended mesocaudad; the posterior crossing the caudal slope, extending from side margin almost to suture. Antenna slender, antennomeres III-VI each about 3X as long as wide, antennomeres VII-VIII longer than wide, stalk yellowish brown, club black. Pronotum with sides parallel basad, rather strongly rounded to front angles, finely margined, disc gently convex. Front tibia of male much widened distad, middle and hind tibia straight. Length 4.9 mm, width 3 mm.

25. *Epopterus longus* Strohecker

Fig. 67

Epopterus longus Strohecker 1957:268, fig. 22. Holotype ♂, Amazon (HNHM).

Elongate, subparallel. Elytron with 2 transverse yellow bands. In appearance much like *E. cucullinus* but narrower and with posterior elytral band more undulate. Length 4.5 mm, width 2.5 mm.

I have seen only the holotype.

26. *Epopterus obliquus* Strohecker

Fig. 15, 72

Epopterus obliquus Strohecker 1957:265, fig. 14. Holotype ♂, Amazon sup.: Haituba (HNHM).

Subparallel in form but with elytra gradually narrowed from anterior third. Dorsum dark brown, elytron with 3 yellow areas: a quadrate spot at middle of base, a posthumeral rounded spot, and a narrow oblique band across posterior third. Length 4.4 mm, width 2.6 mm.

Only the holotype has been studied.

27. *Epopterus fallax* Gerstaecker

Fig. 21

Epopterus fallax Gerstaecker 1858:287. Holotype ♀, Amazon (ZMHB 21834).

Form somewhat elongate, elytra widest near mid-length. Venter black except front of prosternum and distal sternites, bases of femora and tibiae fuscous, elytral epipleura yellow. Pronotum reddish brown, head with a black fleck, pronotum with 2 lunate discal spots and a marginal spot on each side black. Elytron reddish yellow on base and near apex, the extreme apex and a broad median band dark brown. In the anterior yellow area are 2 dark spots, the outer on the umbo and rectangular, the inner spot reaching the base and prolonged latero-caudad as a slender streak. Two dark spots lie in the caudal pale area, the inner one touching the darkened suture. Length 4.8 mm, width 3 mm.

I have seen no additional examples.

28. *Epopterus gracilis* Strohecker, n. sp.

Fig. 32, 74

Holotype ♂ and allotype ♀, Peru: Pucallpa, 2.X.1954, E. I. Schlinger & E. S. Ross (CASC, holotype No. 13315).

Long-oval, elytra rather strongly convex. Venter and legs reddish brown. Dorsum dark brown, elytron with triramous yellow basal mark and bilunate yellow band across apical slope. Antenna rather slender, antennomeres III-VII each longer than wide, antennomeres I-VII brown, antennomeres VIII-XI black. Pronotum with sides convergent from base forward, little rounded to front angles, hind angles slightly divergent and acute, discal punctures fine and well spaced, punctation of sides coarser, subrugose. Elytra 3.5X as long as pronotum, widest in anterior third, gradually narrowed caudad. Length 4 mm, width 2.5 mm.

29. *Epopterus pictus* (Perty)

Fig. 22, 42

Endomychus pictus Perty 1832:111, pl. 22, fig. 11. Type material from Brazil; repository unknown.

Epopterus pictus: Gerstaecker 1858:286.

Oval, elytra gradually tapering and strongly convex. Venter, legs, antennal base, head and pronotum reddish brown, pronotum with 4 black spots in a transverse row. Gerstaecker has described the elytron as reddish yellow with black-bordered brown markings: a rectangular shoulder patch and mesad of this a large oval spot; a broad, irregularly margined median band; behind this 2 large spots transversely placed and a triangular spot at apex. Length 4.4-4.8 mm.

Unfortunately, I broke the aedeagus of the Gerstaecker specimen in extracting it. Drawings

have been made from a closely similar example in HNHM. I have seen no other material.

30. *Epopterus vernicatus* Gerstaecker

Fig. 26, 79

Epopterus vernicatus Gerstaecker 1858:285. Holotype ♀ without locality data (NHML).

Long-oval. Pronotum with sides convergent from base forward, little rounded, hind angles acute. Elytra broadened from base in anterior third, gradually narrowed caudad, strongly convex. Venter, legs, antennal base and pronotum reddish brown, pronotal disc infusate. Elytra blackish brown. Behind umbo a yellow band extends mesad enclosing a dark humeral spot and a larger oval dark spot. From this yellow band a narrow pale streak divides the dark disc (2 median black spots of Gerstaecker's description). Rather narrow yellow bands enclose 2 dark spots near apex, which is dark. Length 4.5 mm.

A male from Rio de Janeiro resembles the holotype closely but is slightly larger (5 mm) and lacks the discal pale streak.

31. *Epopterus lorentensis* Strohecker, n. sp.

Fig. 81

Holotype ♂, allotype ♀ Peru: Loreto, 20 km from Ucayali on Rio Calleria, Colonia Calleria, 10-30.IX.1961, B. Malkin (FMNH). Paratypes: 3♀♀ with same data as holotype (FMNH; FSCA).

Long-ovate. Venter infusate, terminal sternites and legs reddish brown. Dorsum dark reddish brown, elytron with yellow area at base enclosing dark humeral spot and ocellate medial spot, and an undulate yellow band across apical slope; band emits 2 sharp rays in front, and its posterior border excised by a fuscous spot; apex is pale. Pronotum narrowed from base, its sides moderately curved to front angles, marginal bead rather wide and flat, hind angles acute. Elytra 3.5X as long as pronotum, widened in anterior half, gradually narrowed caudad. The abrupt widening of front tibia of male is less than usual in the genus. Length 4.3-5 mm, width 2.7-3.5 mm.

32. *Epopterus anomalus* Strohecker, n. sp.

Fig. 83

Holotype ♂, Ecuador: Pastaza, Ashuara, Rio Macuma 10 km from R. Morona, 300 m, 7-16.IX.1971, B. Malkin (FMNH). Allotype ♀, Colombia: Putomayo, Rio San Miguel, Santa Rosa de Sucumbios, 400 m, 1-7.IX.1971, B. Malkin (FMNH).

Oval. Venter, femora and elytral epipleura black. Dorsum dark reddish brown, elytron with apex and triramous humeral spot yellow. Pronotum relatively small, 2X as wide as long, sides parallel basad, gently rounded in front, hind angles weakly acute. Elytra 3.5X as long as pronotum, rapidly widened from base in anterior third, gradually narrowed caudad. The anterior yellow patch covers the umbo, sends a ray across base and a shorter, blunter ray mesocaudad. Length 4.5 mm, width 2.9 mm.

33. *Epopterus aravacus* Strohecker, n. sp.

Fig. 85

Holotype ♂, Venezuela: Aragua, 10 mi. nr. Cata, 25.II.1971, H. & A. Howden (CMNC).

Long-oval, similarly rounded in front and behind. Venter and femoral bases black. Pronotum with disc black, shining, very finely punctate, sides yellow with a black spot on each side, which is more or less coalescent with black of disc. Elytron yellow, with umbo and basal spot, a broad median band, 2 pre-apical spots and extreme apex dark. Median band dark brown, its front edge twice deeply incised by pale rays, hind margin similarly incised. Pronotum 2.5X as wide as long, sides evenly rounded, anterior curvature not abrupt. Elytra 3.5X as long as pronotum and but little wider at base, gradually widened to about middle, thence evenly narrowed caudad.

34. *Epopterus reticulatus* Strohecker

Fig. 8, 66

Epopterus reticulatus Strohecker 1957:264, fig. 12. Holotype ♂, Bolivia: Cochabamba, Germain (HNHM).

Elliptical in outline. Yellow above with disc of pronotum and 5 spots on elytron dark brown. The pronotal spot is transversely rectangular; the dark elytral markings consist of a rounded humeral spot, an oblong spot near middle of base, 2 elongate rectangles near middle, and a rounded or somewhat triangular spot before apex. Length 3.8 mm, width 2.5 mm.

35. *Epopterus deltoideus* Strohecker

Fig. 11, 61

Epopterus deltoideus Strohecker 1957:266, fig. 20. Holotype ♂, Amazon sup.: Haituba (HNHM).

Oval, elytra narrowly cordate. Dorsum yellow, elytron with umbo, a small oblong basal spot, and

3 pre-apical spots black; across middle of elytron is a broad, black-bordered dark red band, Length 4 mm, width 2.6 mm.

36. *Epopterus atriventris* Strohecker, n. sp.

Fig. 80

Holotype ♂, Bolivia: Beni, 31.VII-2.VIII.1960, B. Malkin (FMNH). Allotype ♀, Beni, 26.VII-4.VIII.1960, B. Malkin (FMNH). Paratypes: ♂, same data as holotype; ♂, Brazil: Matto Grosso, Corumbá (FSCA).

Oval, elytra rather strongly convex. Venter and legs black, elytral epipleura yellow, dorsum reddish brown, elytron with 2 yellow areas. Pronotum narrowed from base forward but sides well rounded to front angles, hind angles weakly acute, disc finely and thickly, sides more coarsely and densely punctate. Elytra long-cordiform, about 4X as long as pronotum, base with yellow band enclosing dark umbo and ocellate median spot, middle 2/5 of elytron dark reddish brown. A yellow band crosses apical slope, its front edge deeply bilunate, its hind edge excised by a large round black spot. Apex pale brown. Length 4.1 mm, width 2.8 mm.

37. *Epopterus decempunctatus* Gerstaecker

Fig. 12, 13, 53, 86

Epopterus decempunctatus Gerstaecker 1858:290. Lectotype ♂, ? Venezuela: Puerto Cabello, Moritz (ZMHB). Paralectotype ♀ without data (ZMHB).

Epopterus bifasciatus Pic 1931:9. Holotype ♂, Venezuela (MNHN). (New synonym).

Oval. Venter and legs rust-red, thoracic sterna and femoral bases darker. Antennal base red, club black. Upper surface reddish yellow, elytron with brown or black markings: a rounded spot on shoulder and, near mid-line, a narrowly oblong spot, obliquely placed and remote from base; a broad band across middle, its front edge twice, its hind edge once excised; 3 spots of variable size before apex. These spots tend to coalesce to form a dark band, leaving the apex and a pre-apical, strongly undulate band pale. Length 4.3, width 3 mm.

Colombia: Antioquia, Puerto Berrio (GMFT); Norte de Santander, Cucuta, H. & A. Howden (CMNC; FSCA). Venezuela: Bolivar, Suapure, Caura R., E. A. Klages (FSCA); Lara, Sanare, 7.XII.65, J. & B. Bechyné; Aragua, Cata, 14.IX.65, Bechyné (IZAV; FSCA). Trinidad: Maracas, H. & A. Howden (CMNC).