

HESPERIIDAE OF RONDÔNIA BRAZIL: *ERACON* AND A NEW RELATED GENUS, WITH DESCRIPTIONS OF TWO NEW SPECIES (LEPIDOPTERA: HESPERIIDAE: PYRGINAE)

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ABSTRACT.— Five species of *Eracon* were encountered near Cacaulândia in central Rondônia, Brazil of which one, *Eracon asymmetrica* n. sp., is described as new. *Cornuphallus* n. gen. is proposed as a new genus for *Eracon*(?) *problematica*, and *Cornuphallus alba*fascia n. sp. is described from central Rondônia. Male genitalia are illustrated for all species encountered (*E. biternata* for the first time). Female genitalia of *Eracon* have not been illustrated heretofore and those of *E. clinias*, *E. paulinus*, and *E. asymmetrica* are shown.

KEY WORDS: Argentina, *Cornuphallus* n. gen., *Cornuphallus alba*fascia n. sp., *Eracon asymmetrica* n. sp., genitalia, Guyana, Neotropical, Panama, Peru, South America, Surinam, taxonomy.

This continues a series of papers on the HesperIIDae of central Rondônia, Brazil (Austin, 1993, 1994, 1995, 1996; Austin *et al.*, 1993). Included here is a discussion of *Eracon* Godman & Salvin, 1894, proposal of a new genus for a species previously included in *Eracon*, and the description of a new species in each genus.

ERACON Godman & Salvin, 1894

Eracon is a small Neotropical genus of relatively rare and poorly known species. Evans (1953) listed eight species and one subspecies; of these nine taxa only five were in the British Museum's collection at the time and only two were represented by more than two specimens. Godman and Salvin (1894) erected *Eracon* to accommodate *Arteurotia biternata* Mabille, 1889, and included *Arteurotia bufonia* Möschler, 1878, as an additional species. Lindsey (1925) selected *A. biternata* as the type species. Evans (1953) synonymized *A. bufonia* with *Eracon paulinus* (Stoll, 1782). At least one (probably two) species included in *Eracon* by Evans (1953) is of another genus (see below). Evans' (1953) diagnosis of the genus appears contradictory stating in the key (p. 8) that the male "generally with a costal fold" and under the generic heading (p. 36) as "typically without a costal fold." Evans, however, uses the word "typically" as referring to the type species (*fide* S. R. Steinhauser). At least five taxa, *Eracon clinias* (Mabille, 1878), *Eracon pebana* Evans, 1953, *Eracon paulinus* (Stoll, 1782), *Eracon mnemon clada* Evans, 1953, and a new species described below, have a costal fold. *Eracon biternata* (Mabille, 1889) has no costal fold (Evans, 1953), and its presence is unknown on the remaining taxa. Male genitalia (where known) have a broad caudal process from the ampulla which variously overlaps the upper portion of the harpe (except for *E. mnemon clada*, see figure in Evans, 1953) and a slender aedeagus without a cornutus. Female genitalia, not previously described or illus-

trated, have a relatively narrow, somewhat triangular lamella postvaginalis, a thin lamella antevaginalis with broader lateral lobes, and a distinct and sclerotized antrum leading to a slender and membranous ductus bursae.

Five species of *Eracon* are known from the vicinity of Cacaulândia; four are described species and one is new. I will review these and describe the new species.

Eracon biternata (Mabille, 1889)

(Fig. 1-3)

This species was previously known only from the type from Panama (Evans, 1953) and is much like other brown *Eracon* (e.g., *E. pebana*, see below), but is without a costal fold and has fewer hyaline forewing macules and pale hindwing macules than most species in the genus. The male genitalia have not been previously illustrated. These are very similar to those of *E. pebana* and the new species described below and the valvae are symmetrical. A finger-like process from the ampulla extending part way across the inner valval surface has not been seen elsewhere in the genus.

In central Rondônia, a male was taken on Linha 10, 5 km S of Cacaulândia on 15 November 1995. Olaf Mielke reported (*in litt.*) taking a female specimen of this species at Fazenda Rancho Grande near Cacaulândia. This is deposited in the collection at the Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Brazil.

Eracon clinias (Mabille, 1878)

(Fig. 1-2, 4, 8)

This widespread species is uncommon in the vicinity of Cacaulândia with records in March, May, July, and September to December and has been taken at paper lures (e.g., see Austin *et al.*, 1993). Evans' (1953) illustration of the male genitalia is reasonably recognizable, but these are shown here in more detail. The female genitalia have a nearly diamond-shaped lamella post-

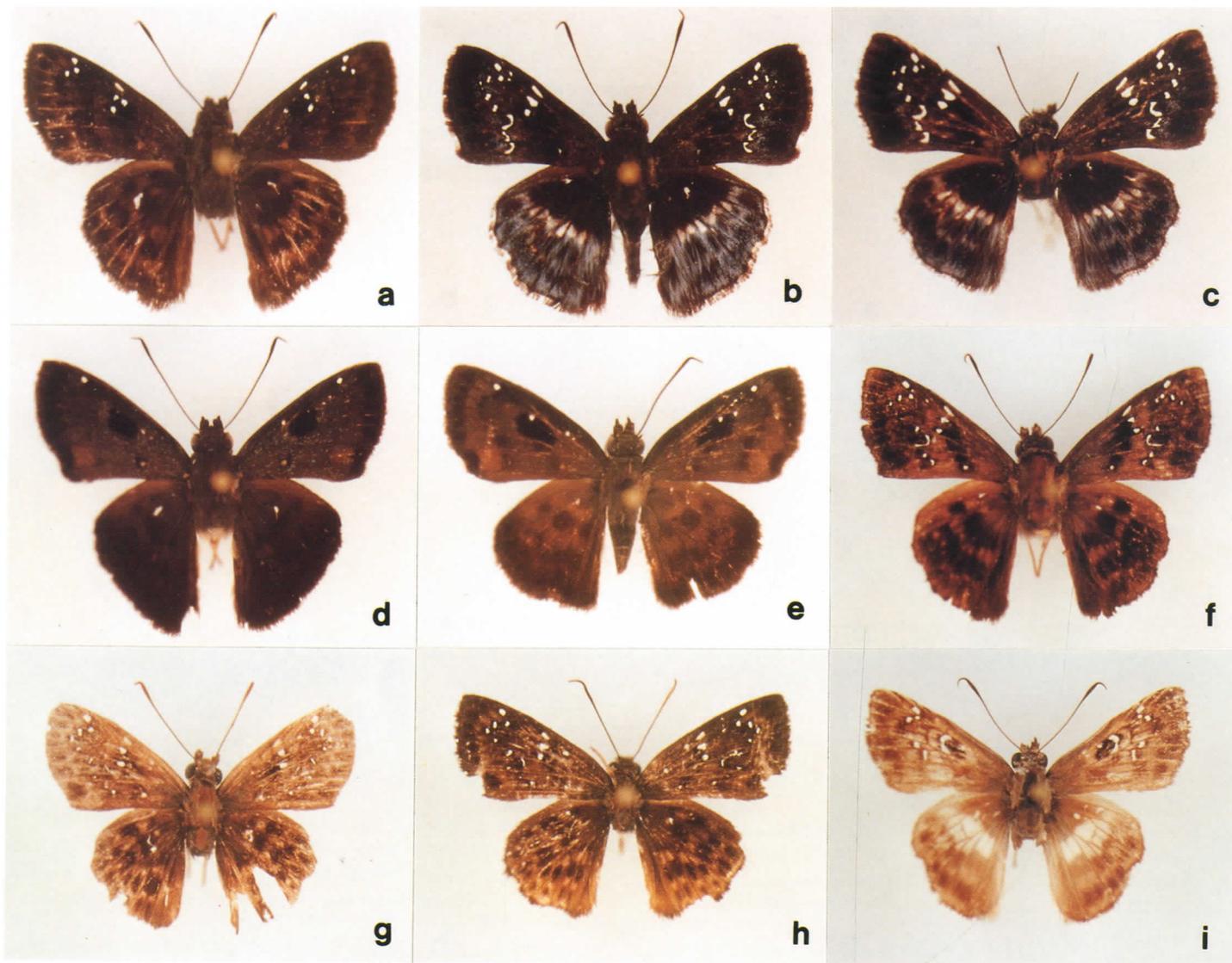


Fig. 1. *Eracon* and *Cornuphallas* from Rondônia, Brazil (dorsal): Top row: a) *E. biternata* ♂, Linha C-10, 5 km S of Cacaulândia, 15 Nov 1995; b) *E. clinias* ♂, Linha C-20, off B-65 at Rio Pardo, 17 Nov 1992; c) *E. clinias* ♀, Linha C-20, 7 km E B-65, Fazenda Rancho Grande, 9 Nov 1990. Second row: d) *E. paulinus* ♂, Fazenda Rancho Grande, 16 Jun 1993; e) *E. paulinus* ♀, Fazenda Rancho Grande, 27 May 1992; f) *E. pebana* ♂, Linha 20, 10 km E B-65, 3 km E Fazenda Rancho Grande, 24 Sep 1992. Third row: g) *E. asymmetrica*, holotype ♂; h) *E. asymmetrica*, paratype ♀, Fazenda Rancho Grande, 14 Nov 1995; i) *C. alba fascia*, holotype ♂.

vaginalis, a thin lamella antevaginalis which expands into small lateral lobes, and a simple antrum, the sclerotization of which extends well into the thin ductus bursae.

Eracon paulinus (Stoll, 1782)

(Fig. 1-2, 5, 10)

This is another widespread species and the most common *Eracon* in the Cacaulândia area with records in March to July and September to December. Males have been seen at paper lures and on hilltops and both sexes occur in the forest and at its edge. There is variation in the breadth of the yellow macules on the ventral hindwing of both sexes which, as pointed out by Evans (1953), may coalesce into a large yellow patch covering most of the posterior 2/3 of the wing on females. Evans' (1953) figure of the male genitalia is rather poor; these structures are illustrated again here. The female genitalia have a triangular lamella postvaginalis, a thin lamella antevaginalis which expands laterally

into rather broad lobes, and a simple antrum with its sclerotization extending onto the caudal end of the ductus bursae.

Eracon pebana Evans, 1953, rev. concept

(Fig. 1-2, 6)

There has been confusion about the identity of this species (see Discussion below) and I therefore describe it in detail and illustrate it for the first time.

Description.— MALE: forewing length = 17.1mm (n = 1); forewing with narrow costal fold, termen evenly curved to Cu_2 , then excavate; hindwing produced at tornus, termen excavate in M_1 - M_3 ; dorsum medium brown, wing bases with purple sheen; forewing with prominent black submarginal, postmedian, and submedian bands, latter including large black macule in discal cell, distal edge of this macule deeply excavate centrally, arms of distal end each with prominent hyaline white macule; cell $Sc-R_1$ with elongate hyaline white macule anterior to white macules in discal cell; additional hyaline white macules as follows: four ovate subapical in R_3 - R_4 , R_4 - R_5 , R_5 - M_1 , and M_1 - M_2 , those in R_3 - R_4 (the largest)

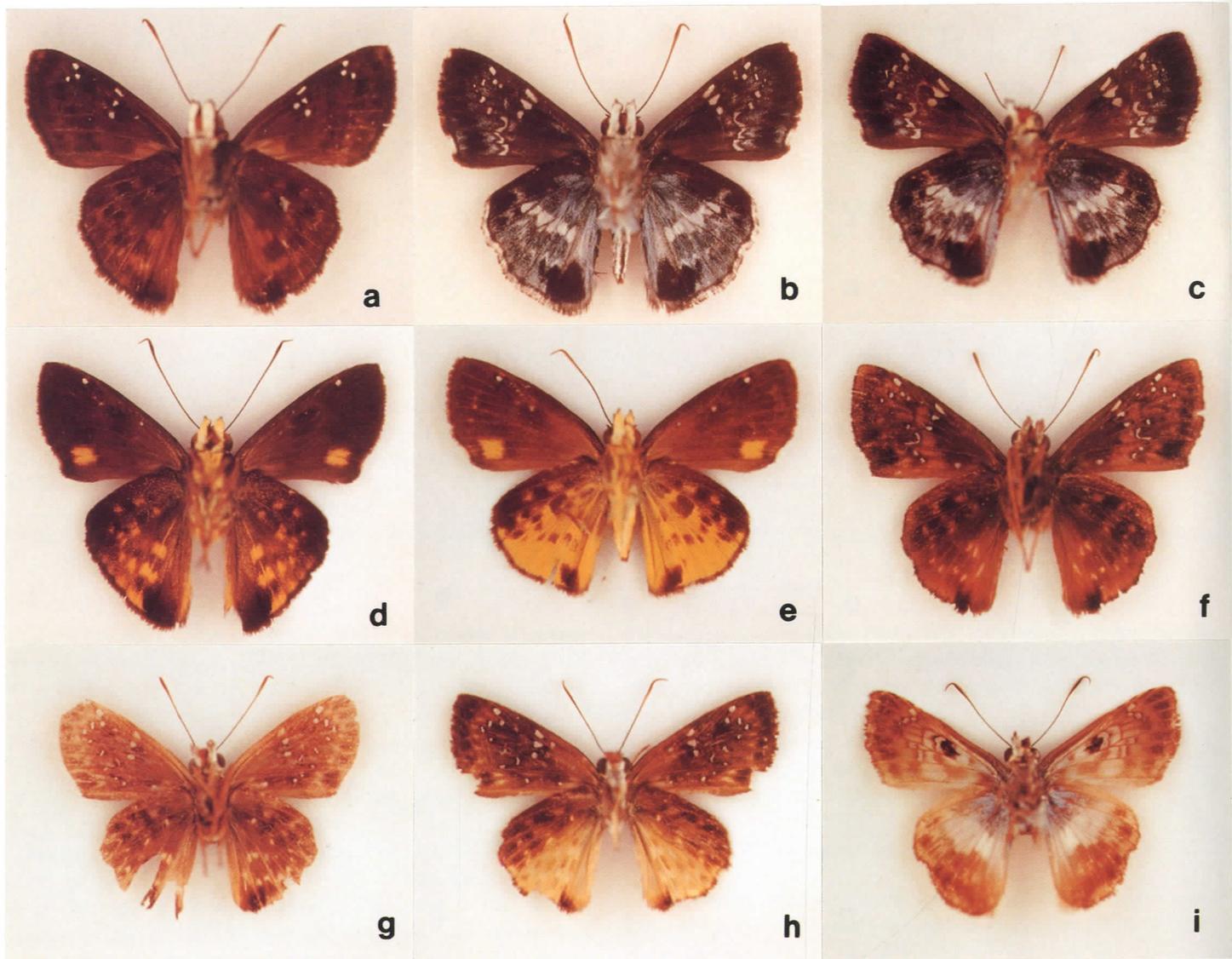


Fig. 2. *Eracon* and *Cornuphallas* from Rondônia, Brazil (ventral surface) (same specimens as in Fig. 1).

and R_5 - M_1 perpendicular to costa, that in R_4 - R_5 offset proximad by more than its width, that in M_1 - M_2 (the smallest) offset distad by about 3X its width; M_3 - CuA_1 , small, near base of cell; CuA_1 - CuA_2 , narrow, C-shaped, lower arm much longer than upper, distal end of lower arm beneath macule in M_3 - CuA_1 ; CuA_2 -2A, two distal macules, anterior more or less round, under proximal end of macule in CuA_1 - CuA_2 , posterior lunate, offset somewhat proximad, one proximal in posterior half of cell 1/3 distance from base; hindwing with prominent black submarginal, postmedian, and submedian bands; fringes of both wings dark brown.

Venter without purple sheen; forewing similar to dorsum; hindwing browner on posterior 1/3, series of pale brown macules between dark bands; tornus with vague black macule.

Head brown above, palpi brown above, mixed gray and white beneath, white in front of eyes, gray-brown beneath, antennae black, vague white at segments proximad, yellow beneath distal end of shaft and club, nudum red-brown, 27 segments; thorax gray-brown above and beneath wings, pectus gray with scattered white scales especially cephalad, legs brown, tibiae smooth, mid tibia with one pair and hind tibia with two pairs of spurs; abdomen gray-brown above, white with broad dark central line on venter.

Genitalia: tegumen long with pair of lateral lobes at the caudal end, these aligned with uncus; uncus shorter than tegumen, undivided, slightly curved in lateral view, tip very slightly expanded at caudal end in ventral view; gnathos short, lateral arms spiculate connected by unsclerotized membrane; vinculum erect, slightly bent; saccus short, thin; valvae symmetrical, costa long, ampulla with a broad caudal structure curving ventrad to point which slightly overlaps harpe, dorsal edge prominently dentate, harpe upcurved to relatively sharp point, sacculus with prominent dorsad directed point; aedeagus thin, relatively straight, 3 minute teeth on right side of vesica opening; no cornutus; juxta narrow band with broad lobes distad on cephalad edge and twisted to lateral lobes.

FEMALE: unknown.

Discussion.— Evans (1953) briefly (as usual) described *E. pebana* from a single male from "Pebas, Amazons" [Peru], and illustrated the genitalia including the left valva. He made no mention of asymmetry in the genitalia. Steinhauser (1989) had a specimen similar to the description of *E. pebana* with asymmetrical valvae, thought this to be a new species, was assured by Mielke, however, that this was *E. pebana*, and therefore illustrated and

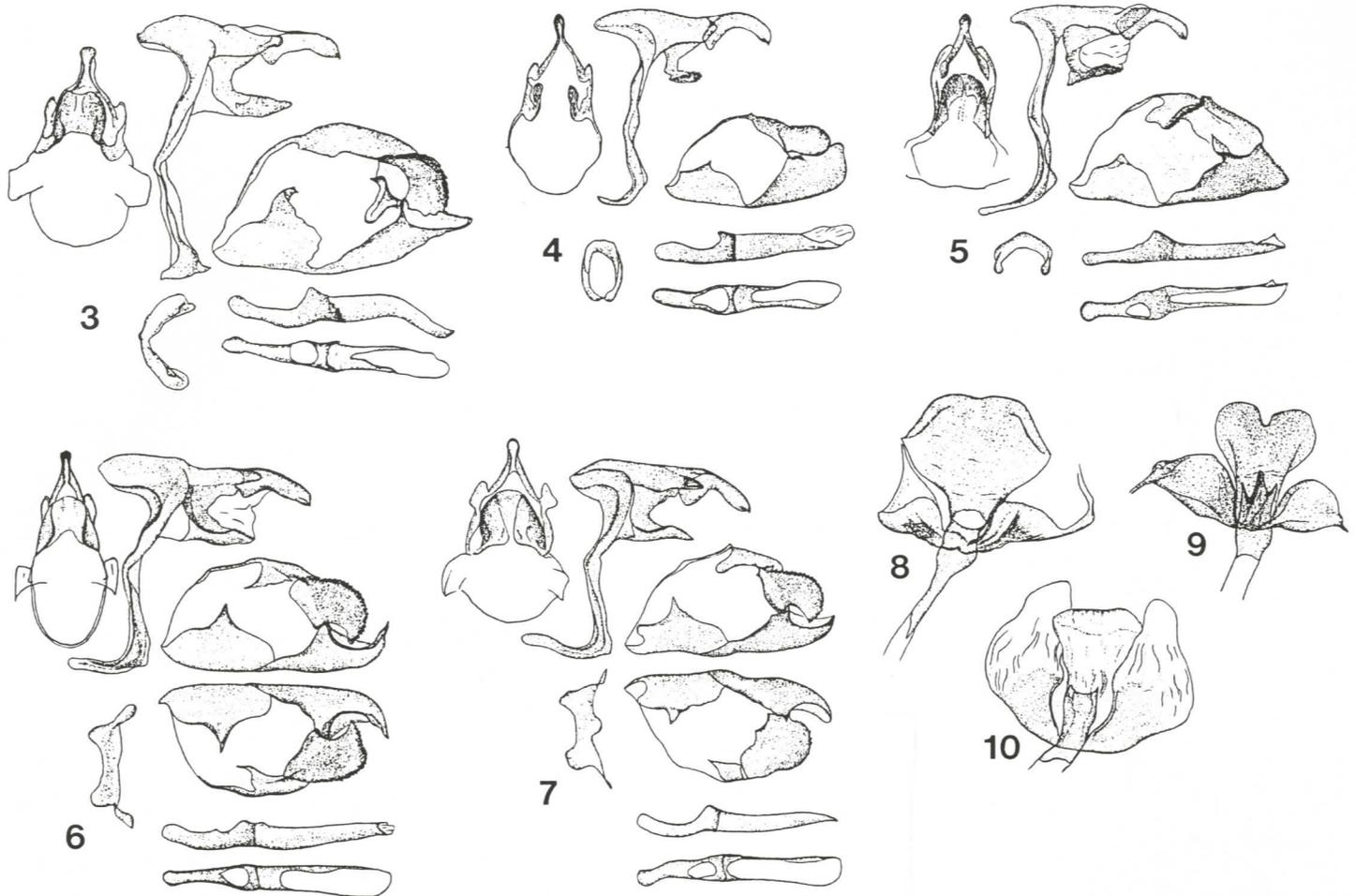


Fig. 3-10. Genitalia of *Eracon* from Rondônia, Brazil (shown for ♂ genitalia are lateral view of uncus, gnathos, tegumen, vinculum, and saccus; internal view of right valva; also left valva for *E. pebana* and *E. asymmetrica*; left lateral and dorsal views of aedeagus; ventral view of uncus, gnathos, and tegumen; and juxta and ventral view of ♀ lamellae): 3. *E. biternata* ♂ (vial GTA #6427); 4. *E. clinias* ♂ (vial GTA #5554); 5. *E. paulinus* ♂ (vial GTA #900); 6. *E. pebana* ♂ (vial GTA #2533); 7. *E. asymmetrica*, holotype ♂ (vial GTA #5340); 8. *E. clinias* ♀ (vial GTA #5553); 9. *E. asymmetrica* ♀ (vial GTA #6246); 10. *E. paulinus* ♀ (vial GTA #5252).

described its genitalia as those of *E. pebana*. The discovery of two *E. pebana*-like phenotypes from central Rondônia, one with symmetrical valvae and one with asymmetrical valvae, indicated that Steinhauser (1989) was correct in his original thinking that two species were involved. I sent drawings of both genitalic types (a copy of Steinhauser's 1989 illustration and an illustration I made of a specimen with symmetrical valvae) with indications of other observed differences to P. R. Ackery, at The Natural History Museum (London, England), to compare with the genitalia of Evans' (1953) type of *E. pebana*. He found (*in litt.*) "that the valvae of *pebana* are symmetrical, with strongly upturned harpae, and the processes of the tegumen are backward pointing rather than flared. This, I think, matches your sketch rather than Steinhauser's." *E. pebana* thus represents a blackish species with symmetrical valvae as illustrated here and the species with asymmetrical valvae will be described below. Three males of *E. pebana* were taken in the Cacaulândia area on 24 September 1992, and 13 and 17 November 1994.

***Eracon asymmetrica* Austin, new sp.**

(Fig. 1-2, 7, 9)

Eracon pebana: Steinhauser 1989 (not Evans 1953)

Description.— MALE: forewing length = 14.3mm (holotype); forewing with narrow costal fold, termen evenly curved to CuA_2 , then excavate;

hindwing produced at tornus, termen excavate in M_1-M_3 ; dorsum medium brown, wing bases with purple sheen; forewing with prominent black submarginal, postmedian, and submedian bands, latter including large black macule in discal cell, distal end of this macule with prominent upper and lower hyaline white macules; cell $Sc-R_1$ with elongate hyaline white macule anterior to white macules in discal cell; additional hyaline white macules as follows: five quadrate subapical in R_3-R_4 , R_4-R_5 , R_5-M_1 , M_1-M_2 , and M_2-M_3 , those in R_3-R_4 (the largest), R_5-M_1 , and M_1-M_2 aligned, those in R_4-R_5 and M_2-M_3 (the smallest) offset proximad by more than their width; M_3-CuA_1 , small, narrow, 1/3 distance from base of cell; CuA_1-CuA_2 , upper macule narrow, just distad of origin of CuA_2 , lower macule small point beneath macule in M_3-CuA_1 ; CuA_2-2A , two distal macules, more or less round, anterior macule offset proximad from macule in CuA_1-CuA_2 , posterior offset somewhat proximad, one proximal in posterior half of cell 1/3 distance from base; hindwing with prominent black submarginal, postmedian, and submedian bands, pale macules between bands giving wing mottled aspect; fringes worn.

Venter without purple sheen; forewing similar to dorsum; hindwing paler ochreous-brown on posterior 1/3, series of pale brown macules between dark bands; tornus with large black area.

Head brown above, palpi brown above, mixed gray and white beneath, white in front of eyes, gray-brown beneath, antennae black, vague white at segments proximad, yellow beneath distal end of shaft and on club, nudum red-brown, more than 21 segments (tips broken); thorax gray-brown above and beneath wings, pectus whitish, legs brown, tibiae

smooth, mid tibia with one pair and hind tibia with two pairs of spurs; abdomen brown above, white with narrow, interrupted dark central line on venter.

Genitalia: tegumen short with pair of relatively short lateral lobes at the caudal end, these flared and out of line with uncus; uncus shorter than tegumen, undivided, curved in lateral view, tip expanded at caudal end in ventral view; gnathos short, lateral arms spiculose connected by unsclerotized membrane; vinculum erect, slightly bent; saccus moderately long, thin; valvae asymmetrical, costa long, right ampulla with a broad caudal structure curving ventrad to point which slightly overlaps harpe, dorsal edge prominently dentate, left ampulla broadly extended caudad and not curving ventrad to overlap harpe, weakly dentate, harpe slightly upcurved to broad point, sacculus with prominent dorsad directed point; aedeagus thin, 3 fine teeth on right side, phallobase upcurved; no cornutus; juxta broad band, lobate.

FEMALE: forewing length = 15.7mm; wings broader and more rounded than on male; dorsum similar to male, no obvious purple sheen; venter similar to male but posterior 1/2 of hindwing prominently ochreous, nearly obscuring other markings, nudum = 26 segments.

Genitalia: lamella postvaginalis heart-shaped, central indentation on caudal edge very prominent; lamella antevaginalis thin centrally, expanding into broad, lightly sclerotized lateral lobes; antrum well-developed, caudal end trifurcate; caudal end of ductus bursae membranous; corpus bursae not seen.

Types.— *Holotype* ♂ with the following labels: white, printed - BRASIL: Rondonia / 65 km S Ariquemes / linea C-20, 7 km E / B-65, Fazenda / Rancho Grande / 9 November 1994 / leg. G. T. Austin; white, printed and handprinted - Genitalia Vial / GTA - 5340; red, printed - HOLOTYPE / *Eracon asymmetrica* / Austin.

Paratypes: Brazil: Mato Grosso; Sinope [*sic* = Sinop], km 500 Cuiaba-Santarem Hwy, 13 Jul 1978, leg. C. Callaghan (1 ♂); same location as holotype, 14 Nov 1995 (1 ♀).

Deposition of types.— The holotype male and paratype female will be deposited at the Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Brazil. The male paratype is at the Allyn Museum of Entomology.

Type locality.— BRAZIL: Rondônia; 65 km south of Ariquemes, Linha C-20, 7 km east of road B-65, Fazenda Rancho Grande, 180 meters in elevation in typical lowland tropical rainforest. This is about 5 km northeast of Cacaúlândia.

Etymology.— The species is named after its asymmetrical valvae differentiating it from its most similar species (see below).

Distribution and phenology.— The species is known only from its holotype and two paratypes.

Diagnosis and discussion.— The Rondônia specimens of *E. asymmetrica* are very similar to the specimen of this species illustrated by Steinhauser (1989) as *E. pebana*, but are smaller and with more prominent discal hyaline markings on the forewing and a lower white macule in the discal cell. The male genitalia of *E. asymmetrica* are very similar to those of *E. pebana*. The most notable difference is the symmetry of the valvae on *E. pebana*; both are like the right valva of *E. asymmetrica* (see also Steinhauser, 1989). The aedeagus of *E. pebana* is as long as the valva and nearly straight (the aedeagus of *E. asymmetrica* is shorter than the valva and has a prominently upcurved phallobase). Additionally, the lobes of the tegumen on *E. asymmetrica* flare laterad whereas they are parallel to the uncus on *E. pebana*.

CORNUPHALLUS Austin, new genus

Type species: *Eracon*(?) *problematica* Williams & Bell, 1940

Description.— MALE: forewing narrow with broad costal fold, nearly 2/3

width of costal cell, extending to end of vein Sc; costa slightly concave along costal fold; termen angled at CuA₁, slightly convex anterior and slightly concave posterior to this; anal margin slightly concave in middle; discal cell with distal end rectangular, about 60% costal length; vein CuA₂ originating nearer CuA₁ than wing base (55% distance), vein Sc ends on the costa far short of the distal end of the discal cell, vein R₁ short, ending just basad of distal end of discal cell.

Hindwing narrow, tornus produced, broadly rounded; costa convex to rounded apex, much shorter than forewing anal margin; termen undulate with prominent excavation between M₁ and M₃; dorsum of cell 2A-3A with thick, but inconspicuous hair-like scales extending from vein 2A, ending short of tornus.

Palpi of moderate length, porrect, parallel third segments protruding about length of second segments; antennae short, slightly more than 1/2 (55%) costal length, club arcuate beyond thickest point to apiculus, apiculus relatively long, nudum long, of 28 segments; mid tibia smooth with pair of spurs, hind tibia smooth with sparse hair tuft on posterior surface and two pairs of spurs.

Genitalia: uncus relatively long, thin caudad, more or less straight, undivided, tip in ventral view narrow and blunt; gnathos thin in lateral view, divided as pair of broad, pointed lobes in ventral view; valva broad, ampulla with broad lobe extending to interior surface and with a finely dentate style-like extension dorsad, harpe with broadly triangular dorsal margin, this dentate on caudal margin; aedeagus stout, curved upward, caudal end broadly flared, cornuti as cluster of short spikes; juxta large, well sclerotized, spiculose, clasping large portion of ventral aedeagus before curving to narrow ventral arm.

FEMALE: unknown.

Distribution.— *Cornuphallas* is known from one species in Argentina, another in central Rondônia, Brazil, and a possible third species elsewhere (see below).

Etymology.— The genus is named after the flared, trumpet-like aedeagus.

Diagnosis and discussion.— The species of *Cornuphallas* are superficially similar to those of *Eracon*. Both the forewing and hindwing of *Cornuphallas* are broader than on *Eracon*. The costal fold is conspicuous and much broader, that on *Eracon* species examined (see previous section) is inconspicuous and very narrow (about 1/5 width of costal cell) or absent. Vein R₁ on *Eracon* is longer extending distad beyond end of the discal cell and the forewing termen is distinctly excavate behind CuA₂. The hindwing tornus is more narrowly rounded on *Eracon* than on *Cornuphallas* and the third segment of the palpus is relatively shorter. The nudum of *Cornuphallas* at 28 segments is more than the 22 segments for *Eracon* reported by Evans (1953); *E. pebana*, however, has 27 segments.

The male genitalia of *Cornuphallas* are particularly distinctive. The uncus is thinner than on *Eracon*, the tegumen is more robust as are the valvae, the ampulla has a plate-like lobe with a narrow dorsal extension (*Eracon* has a broad caudal lobe), the aedeagus is more robust and expanded caudad (aedeagus thin and tubular on *Eracon*) and with a prominent cornutus (no cornutus evident on *Eracon*), and the juxta is unusual in being prominent, strongly sclerotized, clasping the ventral surface of the aedeagus, and curving ventrad (inconspicuous, lightly sclerotized, and narrow on *Eracon*).

Cornuphallas problematica (Williams & Bell, 1940), new comb.

(Fig. 12)

Eracon(?) *problematica* Williams & Bell, 1940

Williams and Bell (1940) described this species from Argen-

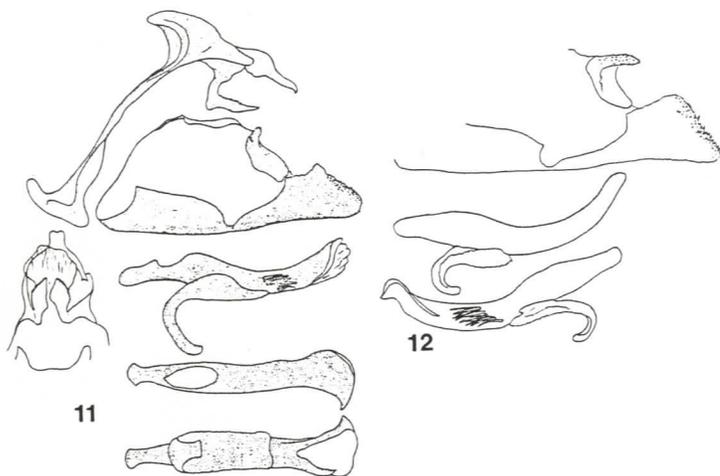


Fig. 11-12. Male genitalia of *Cornuphallus*: **11.** *C. alba fascia*, holotype, same structures as in Figs. 3-10 plus ventral view of aedeagus (vial GTA #3672); **12.** *C. problematica*, holotype, internal view of posterior end of right valva, right and left lateral views of aedeagus (AMNH slide #G966).

tina. They questioned its placement in *Eracon*, based somewhat on their misunderstanding of the concept of that genus. I examined the genitalia of the holotype (slide #G966 at the American Museum of Natural History): these have the distinctive characters as noted in the generic description above.

Cornuphallus alba fascia Austin, new sp.

(Fig. 1-2, 11)

Description.— MALE: forewing length = 15.4mm (holotype); forewing with broad costal fold, termen angled at vein CuA_1 , slightly concave in CuA_2-2A ; hindwing produced at tornus, slightly excavate in M_1-M_3 ; dorsum pale brown; forewing mottled with darker brown in submargin, postmedian, and at base; discal cell with large subterminal oval black macule, distal end completely separated from proximal end by narrow, curved, white hyaline macule; additional hyaline white macules as follows: subapical in R_3-R_4 , R_4-R_5 , and R_5-M_1 , that in R_3-R_4 rectangular and perpendicular to costa with square macule in R_5-M_1 , macule in R_4-R_5 round, offset basad and contiguous with macule in R_3-R_4 but not overlapping that in R_5-M_1 ; postmedian in CuA_1-CuA_2 (vertical bar) and M_3-CuA_1 (more or less quadrate); hindwing with darker postmedian (Rs to CuA_2) and submarginal (Rs to 2A) bands and wing base; opaque, broad median white band from Rs to 2A, about equally wide within and outside discal cell; veins of both wings darker than ground color; fringes on both wings brown.

Venter similar to dorsum but paler; basal 1/3 of hindwing overscaled with pale blue.

Head pale brown with white between antennae, palpi brown above, white beneath, white around eyes, antennae dark brown with white at segments on inner surface, pale yellow beneath distal end of shaft and on club, nudum red-brown, 28 segments; thorax brown above, gray-brown beneath wings, pectus and legs whitish, tibiae smooth, mid tibia with single pair of spurs, hind tibia with two pairs; dorsal abdomen gray, ventral abdomen whitish.

Genitalia: tegumen long, sloping with short and blunt lateral lobes; uncus undivided, slightly shorter than tegumen, humped with narrow caudal end in lateral view, narrow and blunt caudad and expanding cephalad in ventral view; gnathos shorter than uncus, divided into two relatively broad and spiculate arms; vinculum narrow, slightly curved, sloping caudad; saccus short, stout, blunt; valva with broad costa/ampulla, ampulla with caudal plate facing dorso-caudad, this with narrow

spiculate process extending dorsad of ampulla margin, harpe relatively long with finely dentate dorsal margin, produced into triangular dorsal lobe; aedeagus relatively slender with short phallobase, caudal end of aedeagus upcurved opening ventro-caudad, expanded, prominently flared to the left; cornuti as cluster of spikes; juxta robust and very prominent, ventral portion heavily sclerotized and spiculate, covering nearly 1/2 ventral surface of aedeagus, curving ventrad as narrow sclerotized arm from cephalad end, juxta membranous laterad and dorsad.

FEMALE: unknown.

Type.— Holotype δ with the following labels: white, printed - BRASIL: Rondonia / linea 10 (at Rio / Pardo) off B-65 / 5 km S of / Cacaulandia / 18 August 1993 / leg. G. T. Austin; white, printed and handprinted - Genitalia Vial / GTA - 3672; red, printed - HOLOTYPE / *Cornuphallus alba fascia* / Austin.

Deposition of types.— The holotype male will be deposited at the Departamento de Zoologia, Universidade Federal do Paran, Curitiba, Brazil.

Type locality.— BRAZIL: Rondnia, 67 km south of Ariquemes, Linha C-10 off road B-65 about 5 km south of Cacaulndia near Rio Pardo in typical lowland tropical rainforest.

Etymology.— The name refers to the "white band" on the dorsal hindwing.

Distribution and phenology.— The species is known only from its holotype.

Diagnosis and discussion.— *Cornuphallus alba fascia* is similar to *C. problematica*. The dark discal cell macule of *C. problematica* has two white pupils in contrast to the vertical white line on *C. alba fascia*, no discal hyaline macules and no white area on the dorsal hindwing. The male genitalia of *C. problematica* have a longer valva than *C. alba fascia*, a somewhat more robust harpe, the style of the ampulla is more horizontal and points cephalad, the aedeagus is more curved, and the juxta is smaller. *Achlyodes onorbo* Mschler, 1883, described from Surinam was included in *Eracon* by Evans (1953). It is also known from British Guiana (Guyana) (Evans, 1953) and Peru (Comunidad Infierno, Puerto Maldonado, female, leg. O. Mielke) and is superficially similar to *C. alba fascia* (see Fig. 178a in Seitz, 1924). It is known only from females and may also belong to *Cornuphallus*. Mielke (*in litt.*) suggested to me that *Achlyodes onorbo* may be the senior synonym of *C. problematica*. This yet needs to be investigated with same sex specimens of these apparently very rare species. It also has three subapical hyaline macules, hyaline discal macules, and a white central area on the hindwing, but the black discal cell macule is outlined distad by a white line (white line across distal end but within black macule on *C. alba fascia*) and there are additional hyaline macules in the forewing cells M_1-M_2 , M_2-M_3 , and at the base of CuA_1-CuA_2 .

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