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Contributions to the knowledge of Ecuadorian *Pronophilini*. Part
IV. New taxa of *Pronophila* DOUBLEDAY
(*Lepidoptera: Nymphalidae: Satyrinae*)

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ABSTRACT. Three new species and four new subspecies of *Pronophila* are described from Ecuador and northern Peru. The status of several taxa is revised. *P. deverra* THIEME, *P. brennus* THIEME and *P. bogotensis* JURRIAANSSE are regarded as subspecies of *P. unifasciata*; *P. assarhaddon* THIEME is a junior synonym of *P. rosenbergi* LATHY. All the species of *Pronophila* known to occur in Ecuador are listed and discussed.

Key words: entomology, taxonomy, zoogeography, new taxa, Andes, Ecuador, *Lepidoptera*, *Nymphalidae*, *Satyrinae*, *Pronophila*.

INTRODUCTION

Pronophila DOUBLEDAY (*Nymphalidae*, *Satyrinae*, *Pronophilini*) comprise, depending on the systematic viewpoint, between 15 and 20 species ranging from Costa Rica to northern Argentina. This is a genus that is exceptionally homogeneous as far as the wing shape and colour patterns of the adults are concerned. The wing pattern consists of a dark brown upperside, generally with a series of subapical white or orange patches extending along the veins, a series of large postmedian black ocelli pupilled with blue on the forewing underside, sometimes showing through on the upperside, and a pattern of distinct slightly lighter and darker brown bands on the hindwing underside. The differences between various taxa consist in the colour and shape of the forewing subapical patches, the number, size, colour and alignment of the forewing underside ocelli, and the

shape of the hindwing underside bands, particularly the median one. The species of *Pronophila* differ very little in their male genitalia. Surprisingly, given the highly homogenous morphology and anatomy of *Pronophila*, very few generic synapomorphies can be identified, due to the lack of any specialised characters in the colour pattern, genitalia or head morphology. One obvious qualitative synapomorphy of the genus is the presence of large and fully developed ocelli on the forewing underside.

The species of *Pronophila* inhabit tropical montane forests at elevations ranging from 1000 to 3000 metres, with a peak of species richness at about 2000 - 2300 m a.s.l., slightly below the peak of species richness reported for the tribe *Pronophilini* (ADAMS 1985, PYRCZ & WOJTUSIAK 1999). *Pronophila* do not tolerate heavily disturbed forests and have never been observed flying in open grassland, contrary to some other *Pronophilini* such as *Pedaliodes* BUTLER or *Steremnia* THIEME. Adults perch and patrol in the subcanopy (DEVRIES 1987) but can be readily attracted to the ground level by decomposing organic matter. Nothing is known about their early stages and host plants, although they certainly feed on the montane bamboo *Chusquea* (*Poaceae*), as do most *Pronophilini* (SCHULTZE 1929, PELZ 1997). THIEME'S (1907) monograph remains the only systematic survey of the genus but additional information may be found in FORSTER (1964), ADAMS & BERNARD (1977, 1979, 1981), ADAMS (1986), DEVRIES (1987), D'ABRERA (1988) and PYRCZ & WOJTUSIAK (in press).

In Ecuador, there are eight species of *Pronophila* (compared to three in Colombia). Three of them, *P. orcus*, *P. unifasciata* and *P. epidipnis*, are widely distributed, nearly Panandean, and the latter two are represented in Ecuador by more than one subspecies. All three species occur on both eastern and western slopes, the latter two as separate subspecies. Two species, *P. isobelae* and *P. margarita*, are currently known only from Ecuador but almost certainly occur also in northernmost Peru. The three remaining species, *P. rosenbergi*, *P. intercidona* and *P. attali*, are reported from Ecuador and northern Peru. Two of the latter five species, *P. isobelae* and *P. rosenbergi*, occur only on the western slopes of the Andes, as distinct subspecies in the central west and the southwest of the country. One species, *P. intercidona*, occurs only on the eastern slopes of the Andes, while the remaining two, *P. attali* and *P. margarita*, are found only in southern Ecuador.

ACRONYMS:

BMNH: The Natural History Museum, London, United Kingdom;

KWJH: Collection of Keith R. WILLMOTT and Jason P. W. HALL, Gainesville, Florida, USA;

MUSM: Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru;

MUZJ: Muzeum Zoologiczne Uniwersytetu Jagiellońskiego, Kraków, Poland

PB: Collection of Pierre BOYER, Le Puy Sainte Réparate, France;

SMTD: Staatliches Museum für Tierkunde, Dresden, Germany;

TWP: Collection of Tomasz Wilhelm PYRCZ, Warsaw, Poland;
PUCE: Pontificia Universidad Católica, Quito, Ecuador;
MNHN: Museo Nacional de Historia Natural, Quito, Ecuador.

***Pronophila isobelae* PYRCZ, new sp.**

(Fig. 1)

DIAGNOSIS

The forewing upperside subapical orange patches are similar in colour and size to *P. unifasciata* LATHY, but absent in cell Cu2. The hindwing underside patterns are more contrasting, closely resembling *P. thelebe* DOUBLEDAY (occurring in Venezuela).

DESCRIPTION

MALE. Head: antennae 2/5 length of costa, dorsally dark brown, ventrally chestnut, club formed gradually; eyes brown, densely „hairy”; labial palpi twice length of head, beige, covered with short chestnut hair. Thorax: blackish brown, dorsally covered with dense, short „hair”-like scales, walking legs bare. Abdomen: dorsally blackish brown, ventrally lighter and paler, brown. Wings: forewing (mean length 37 mm, n=5) triangular, apex subacute; hindwing rounded, outer margin scalloped; forewing fringes milky white in each cell; upperside dark brown with a lighter sheen towards base and at apex; subapical light orange patch on forewing extending from costa to mid cell M3, enclosing a dark spot in cell R5, plus an extra moon-shaped small patch in cell Cu2; underside forewing subapical patches mirrored from upperside but lighter, bordered basally in cells M1 to Cu1 with black ocelli, pupilled with violet and that in M3 marked basally with orange; hindwing basal area, median band and outer margin dark brown, remainder of wing lighter brown, suffused with beige and yellowish scales; a row of small, black postmedian ocelli apparent in all cells, ringed with chestnut and that in Cu2 pupilled with violet. Male genitalia: as illustrated (Fig. 13).

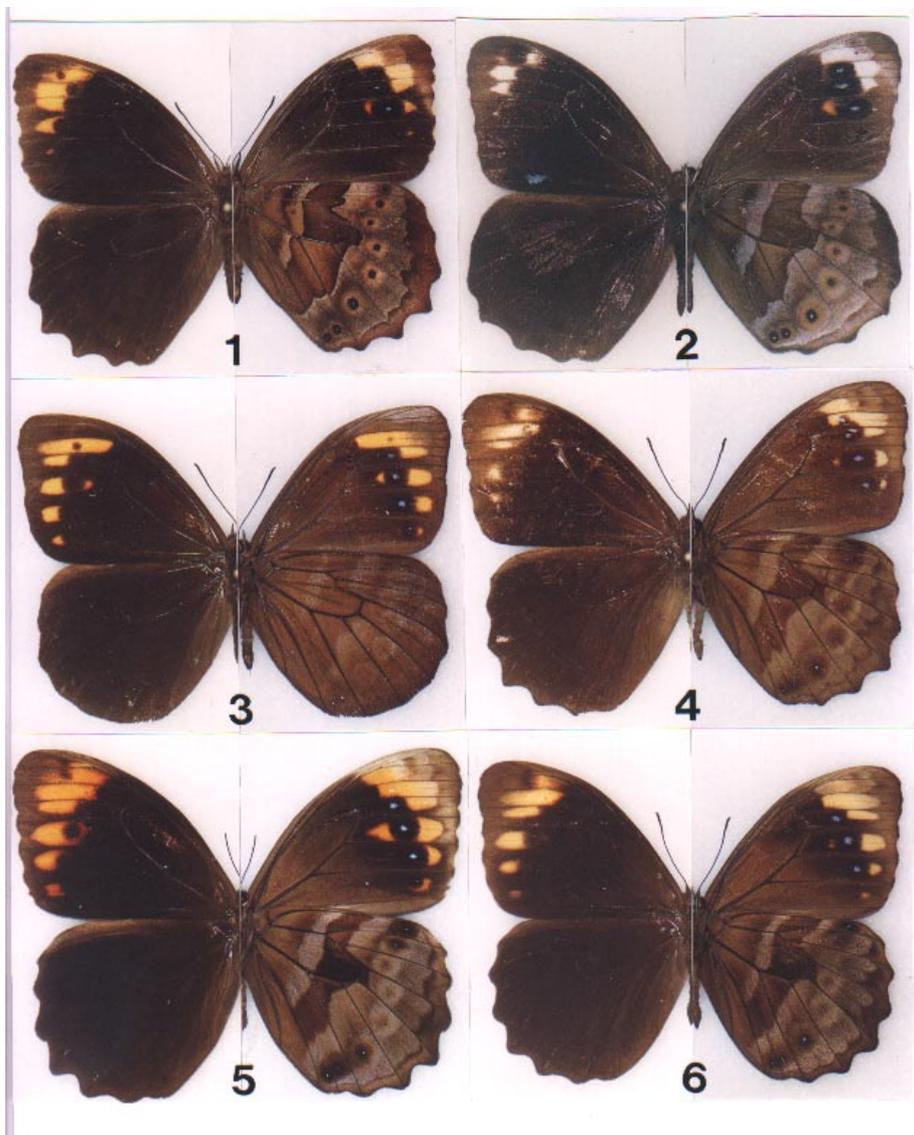
FEMALE. Hitherto unknown.

TYPES

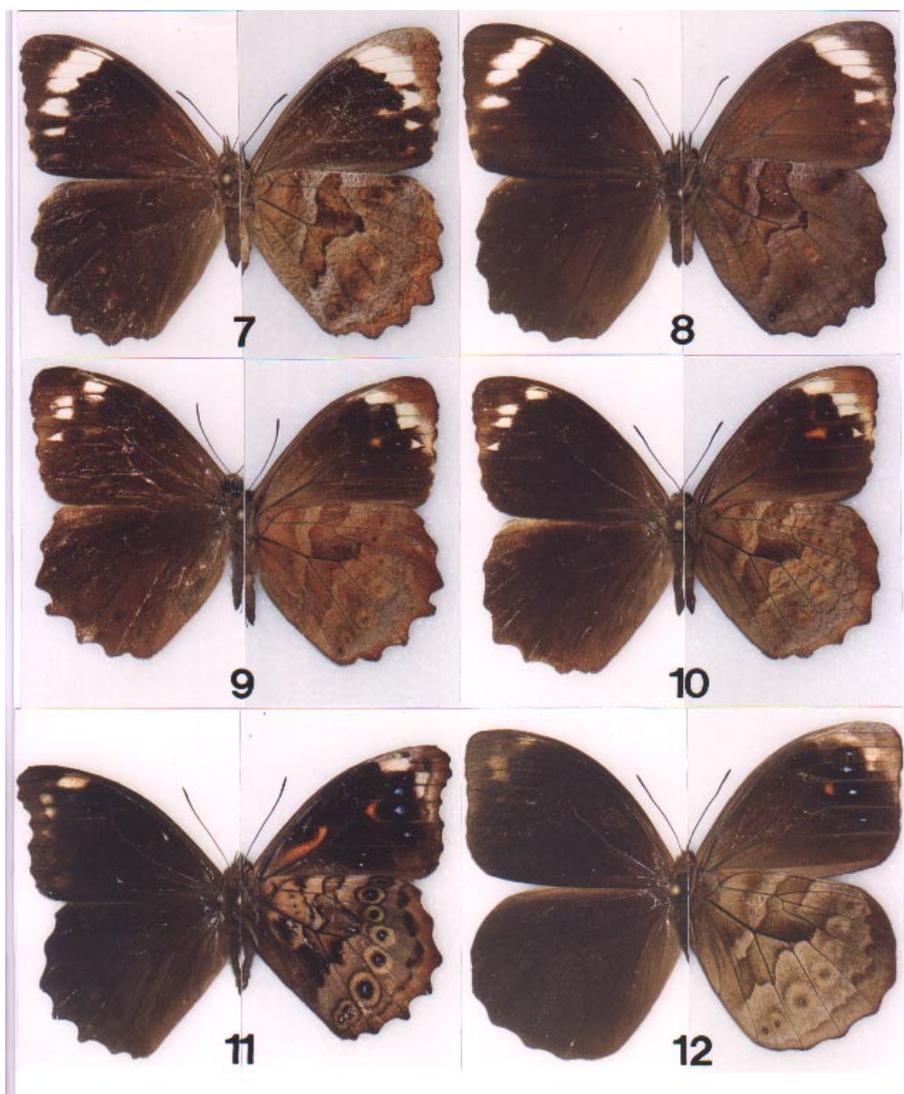
Holotype male: ECUADOR, Loja, Parque Nacional Podocarpus, Cajanuma, 2650 m, 18.VI.1998, T. PYRCZ *leg.* (baited trap), MZUJ; **Paratypes** (4 males), 1 male: ECUADOR, no precise data BMNH; 1 male: ECUADOR, Loja, road Loja - Catamayo Km 19, 2550 m, 13.02.1993, B. MÉRY & S. ATTAL *leg.* TWP; 1 male: same locality and altitude, 23.05.1996, S. ATTAL & I. ALDAS *leg.*, TWP; 1 male: same locality and altitude, 01.VIII.1998, T. PYRCZ & J. WOJTUSIAK *leg.*, TWP.

ETYMOLOGY

This species is named after Miss Isobel TALKS from Hertfordshire, England.



1-6. *Pronophila*: 1 - *P. isobelae isobelae* (male, upper/underside); 2 - *P. isobelae benevola* (male, upper/underside); 3 - *P. intercidona* (male, upper/underside); 4 - *P. unifasciata nanegalito* (male, upper/underside); 5 - *P. unifasciata unifasciata* (male, upper/underside); 6 - *P. unifasciata deverra* (male, upper/underside)



7-12. *Pronophila*: 7 - *P. rosenbergi puyango* (male, upper/underside); 8 - *P. rosenbergi puyango* (female, upper/underside); 9 - *P. attali* (male, upper/underside); 10 - *P. attali* (female, upper/underside); 11 - *P. margarita* (male, upper/underside); 12 - *P. epidipnis lathyi* (male, upper/underside)

EARLY STAGES AND HOST PLANT

Unknown.

DISTRIBUTION

So far known exclusively from southwestern Ecuador from two nearby localities, just east and westwards of the town of Loja. This taxon is apparently endemic to that area.

***Pronophila isobelae benevola* PYRCZ, new ssp.**

(Fig. 2)

DIAGNOSIS

Differs from the nominate subspecies in having white, instead of orange, forewing subapical patches and in that the basal edge of the hindwing underside median band is straight.

DESCRIPTION

MALE. Head, thorax and abdomen as in the nominate subspecies. Wings: forewing (mean length 36 mm, n=2) triangular, apex subacute; hindwing rounded, outer margin scalloped; forewing fringes milky white in each cell; upperside uniform dark brown; four small forewing subapical white patches, one barely visible dash at costa, then roughly triangular patches in R5-M1, M1-M2 and M2-M3, largest patch, still less than 3 mm long, in M1-M2; underside forewing subapical patches mirrored from upperside but larger, bordered basally in cells M1 to Cu1 with black ocelli, pupilled with violet; hindwing basal area, median band and along outer margin from apex roughly to vein M2 dark brown, remainder of wing greyish brown, liberally suffused with darker scales; a row of small, black postmedian ocelli apparent in all cells, ringed with olive and those in M3-Cu1, Cu1-Cu2 and two ocelli in Cu2-1A pupilled with violet.

FEMALE. Hitherto unknown.

TYPES

Holotype male: ECUADOR, Bolívar, Balzapamba, VIII.1997, I. ALDAS *leg.*, MZUJ; **Paratype** male: ECUADOR, Bolívar, Santa Lucía, 15.IV.(19)02, R. HAENSCH *leg.*, STAUDINGER & BANG-HAAS Dresden, Ankauf 1961, SMTD.

ETYMOLOGY

The name is derived from the Latin adjective, *benevola*, meaning kind-hearted.

EARLY STAGES AND HOST PLANTS

Unknown.

DISTRIBUTION

This subspecies is known until present only from the area of Balzapampa and Santa Lucía in Bolívar, the southern part of the Ecuadorian Chocó, but its presence in more northerly localities on the western Andean slopes of Ecuador cannot be ruled out.

REMARKS

The most reliable way to evaluate the relationships between different species of *Pronophila* is by comparing the elements of their ground plan, such as the hindwing underside median, postmedian and submarginal lines. Their shape probably does not depend on selective pressure to such an extent as the more conspicuous markings of the upperside. Even though *P. isobelae* and *P. unifasciata* (Figs 4-6) have similar forewing subapical orange patches their underside hindwing patterns are quite different, which implies that they are probably not closely related. On the other hand, *P. isobelae* shares almost identical hindwing underside ground plan pattern with *P. thelebe*. Another good diagnostic character is the colour of palpal hair, which is grey in *P. thelebe*, *P. isobelae* and *P. epidipnis* and white in *P. unifasciata* and related taxa. The apparent gap in the ranges of *P. thelebe*, endemic to the Venezuelan Cordillera de la Costa, and *P. isobelae*, is not an exception in the pronophilines (see PYRCZ & WOJTUSIAK 1999). These apparent disjunctions could possibly be only an artefact of deficient sampling.

***Pronophila attali* PYRCZ, new sp.**

(Figs 9 & 10)

DIAGNOSIS

The upperside is blackish brown with a series of white forewing subapical patches shaped as in *P. isobelae benevola*, also somewhat reminiscent of *P. unifasciata bogotensis*, but the hindwing underside covered with a ripple pattern shared only with *P. rosenbergi*, which has, among other diagnostic characters, larger forewing subapical white patches and more scalloped hindwing margin.

DESCRIPTION

MALE. Head: antennae 2/5 length of costa, dorsally and ventrally dark brown, club formed gradually; eyes chocolate brown, densely „hairy”; labial palpi twice length of head, beige, covered with short chestnut hair. Thorax: blackish brown, dorsally covered with dense, short „hair”-like scales, walking legs bare. Abdomen: dorsally blackish brown, ventrally paler brown. Wings: forewing (mean length 35 mm, n=2) triangular, apex subacute; hindwing rounded, outer margin scalloped; forewing fringes white in each cell; upperside dark brown; a series of four forewing subapical white patches, one subcostal in cell R5, followed by a

second and third, displaced distally, in cells M1 and M2, and a fourth, triangular and smallest of all, in cell M3; forewing underside subapical patches mirrored from upperside but larger, merging into one patch, except that in M3, bordered basally in cells M1 to M3 with black, barely visible ocelli, pupilled with violet and that in M3 marked basally with an orange streak; hindwing underside ground colour rusty chocolate, lighter along basal edge of median band and in outer half, covered with darker ripples; median band with a slightly sinuate inner edge and a distal edge produced along discal cell; a series of submarginal dark spots, faint in Cu2. Male genitalia: as illustrated (Fig. 14).

FEMALE. Similar but slightly lighter, particularly so on underside and with a noticeably more scalloped hindwing margin.

TYPES

Holotype male: PERU, Cajamarca, Tabaconas, VII.1996, I. ALDAS *leg.*, MUSM; **Allotype** female: same locality and collector, TWP; **Paratypes** (3 males), 1 male: same data as the allotype, MZUJ; 1 male: ECUADOR, Zamora-Chinchipec, Valladolid, 17-21.V.1993, A. SURAKOV *leg.*, KWJH; PERU: Huancabamba, Pratt, BMNH.

ETYMOLOGY

This species is named after Mr. Stéphane ATTAL, a French lepidopterist from Paris who specialises in *Eurytelinae* nymphalids, who contributed significantly with data and material to the production of this paper.

EARLY STAGES AND HOST PLANTS

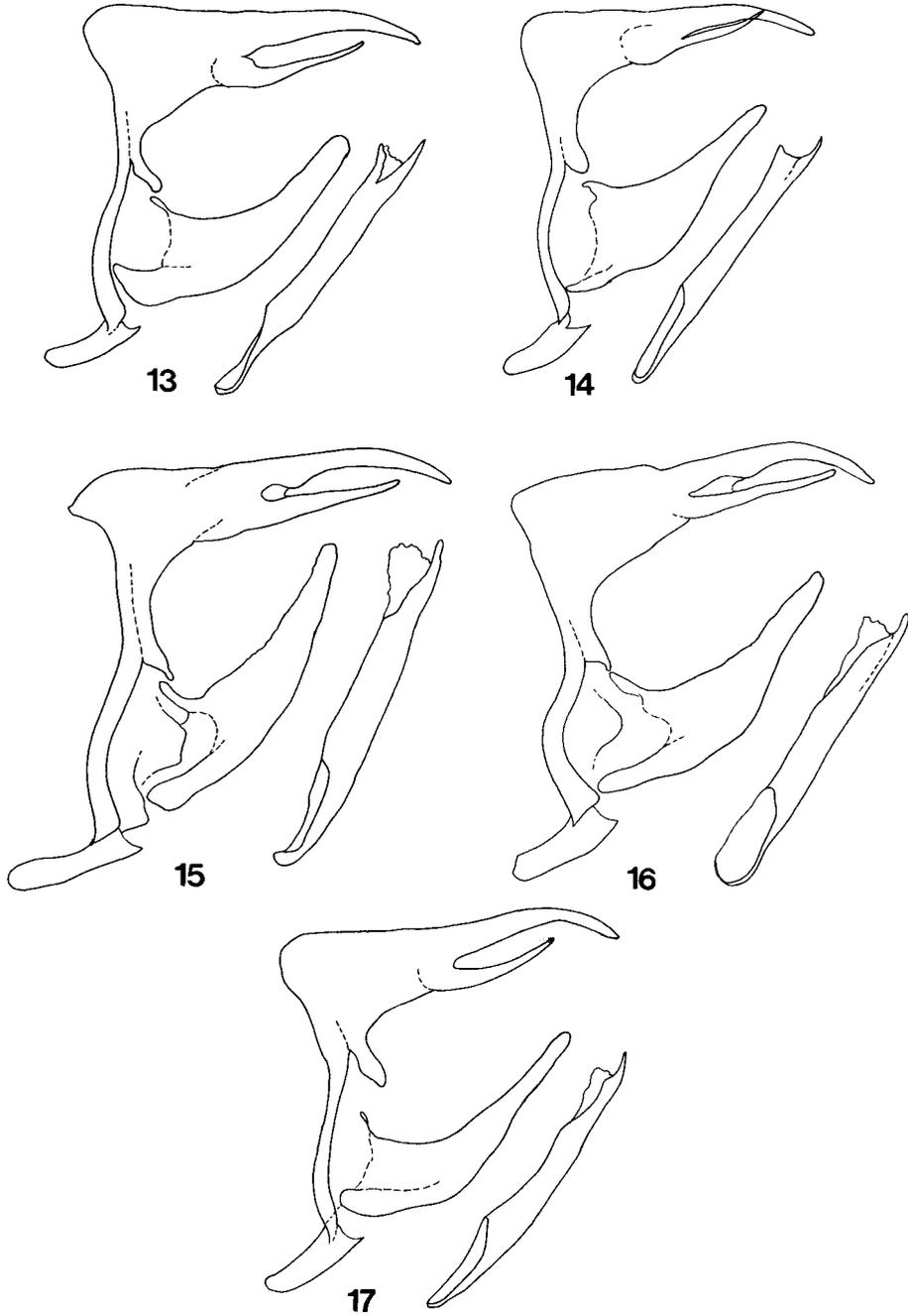
Unknown.

DISTRIBUTION

Known so far only from a small area situated in the watersheds of the Río Chinchipec and its affluent, Río Tabaconas, in northernmost Peru and southernmost Ecuador.

REMARKS

This striking species is difficult to relate with any other congener, but its hindwing underside ripple pattern and wings shape is reminiscent of *P. rosenbergi*. The male genitalia reveal little, as with other *Pronophila*. The discovery of a cloud forest species apparently restricted to the upper valley of the Río Chinchipec and its tributary, the Río Tabaconas, confirms this area as a local centre of endemism of cloud forest butterflies, although typically endemism is apparent at the subspecific level (*Perisama*, *Catasticta*, *Pedaliodes*).



13-17. Male genitalia: 13 - *Pronophila margarita*, 14 - *P. attali*, 15 - *P. isobelae isobelae*, 16 - *P. epidipnis lathyi*, 17 - *P. a. rosenbergi puyango*

Pronophila margarita PYRCZ, new sp.

(Fig. 11)

DIAGNOSIS

Differs from all other congeners in its singularly shaped wings, the forewing deeply incised below the apex, and the scalloped margins of both fore and hindwing.

DESCRIPTION

MALE. Head: antennae 2/5 length of costa, dark brown, club formed gradually; eyes chocolate brown, lustrous, densely „hairy”; labial palpi twice length of head, laterally white, dorsally third segment black, second segment grey, covered with short grey hair. Thorax: blackish brown, dorsally covered with short, brown „hair”-like scales. Abdomen: dorsally blackish brown, ventrally paler, brown. Wings: forewing (mean length 38 mm, n=2) triangular, costa slightly arched, apex subacute, outer margin produced at apex and concave below, scalloped; hindwing rounded, outer margin scalloped; fringes of both wings snow white in each cell; upperside of fore and hindwing uniform blackish brown, lustrous, except for a series of four small whitish patches, suffused with grey, in forewing subapical region, largest in R5-M1, remaining three in M1-M2 to M3-Cu1 faint, displaced distally and parallel to outer margin; forewing underside ground colour blackish brown, apex brown and grey, whitish along outer margin between veins M1 and Cu1, subapical white patches shaped as on the upperside but slightly larger, a row of four black ocelli arched basally in M1-M2, M2-M3, M3-Cu1 and Cu1-Cu2, pupilled with light blue, largest in M3-Cu1 edged basally with orange, an orange discal streak from wing base to mid discal cell; hindwing underside pattern typical for genus, darker median band and marginal area and slightly lighter basal and postmedian areas; median band centrally brown and bordered basally and distally with black, a median black line starting at costa joins it roughly at base of vein Cu2, three black dots in discal cell; postmedian area grey, enclosing a row of ocelli apparent in all cells, parallel to outer margin except that on costa which is displaced distally, of approximately equal size, each black, pupilled with violet and circled with yellow, heavily dusted with grey, and additionally bordered with black, except those in M2-M3 and M3-Cu1; submarginal line black, marginal area light chocolate brown. Male genitalia: as illustrated (Fig. 15).

FEMALE. Hitherto unknown.

TYPES

Holotype male: ECUADOR, Zamora-Chinchipec, road Valladolid-Yangana, 2700 m, 14.VIII.1998, S. ATTAL & T. PYRCZ *leg.*, MZUJ; **Paratypes** (2 males), 1 male: ECUADOR, Zamora-Chinchipec, Cordillera de Lagunillas, Km. 34 road Jimbura – San Andrés, 2900 m, 23.IX.1997, K. WILLMOTT *leg.*, KWJH; 1 male: same locality and altitude as the holotype, XII.1998, P. BOYER *leg.*, PB.

ETYMOLOGY

This species is named after Miss Margarita Penareta from Zumba.

EARLY STAGES AND HOST PLANTS

Unknown.

DISTRIBUTION

Thus far reported only from two localities, situated just east of the continental divide between the valley of the Río Catamayo, which flows into the Pacific, and the Río Chinchipe a tributary of the Río Marañon.

REMARKS

The discovery of this beautiful species is most unexpected and its relationships within the genus are difficult to evaluate. The high elevation at which it occurs suggests an affinity with *P. epidipnis*, which flies in similar habitats. The wing shape however, with falcate forewing apex and dentate outer margin is unlike any other described *Pronophila*. The arrangement of the hindwing bands and ocelli indicate a possible closer phyletic relationship with *P. colocasia* THIEME, which occurs on the eastern bank of the Río Marañon in northern Peru. The systematic status of *P. margarita* will be open to debate until more diagnostic features of adult (female genitalia, microstructures of head) or larval morphology are available.

***Pronophila unifasciata unifasciata* LATHY, stat. rev.**

(Fig. 5)

Pronophila unifasciata LATHY, 1906 (39): 77. Holotype male: Ecuador, H. J. ADAMS collection, in BMNH [examined].

***Pronophila unifasciata deverra* THIEME, new stat.**

(Fig. 6)

Pronophila deverra THIEME, 1907 (51): 195, pl. 3, fig. 2 (upperside). Holotype male: Mirador, Santa Inés, Ecuador, in O. THIEME collection [whereabouts unknown].

***Pronophila unifasciata bogotensis* JURIAANSEE, new stat.**

Pronophila bogotensis JURIAANSEE, 1926: 51. Holotype male: Colombia, Bogotá, in RNHL [not examined].

***Pronophila unifasciata brennus* THIEME, new stat.**

Pronophila brennus THIEME, 1907: 199. Syntypes: Western Colombia, in O. THIEME collection [whereabouts unknown].

***Pronophila unifasciata donachui* ADAMS & BERNARD, new stat.**

Pronophila bogotensis donachui ADAMS & BERNARD, 1977: 277, figs 24 & 25. Holotype male: Colombia, S.E. Sierra Nevada de Santa Marta, Donachui valley, 1600 m, 19.VII.1971, M. J. ADAMS leg., in BMNH [examined].

The descriptions of *P. unifasciata* LATHY and *P. deverra* THIEME were contained in 1906 volumes of *The Entomologist* and *Berliner Entomologische Zeitschrift* respectively, but THIEME's paper was actually published in 1907, hence the priority of LATHY's name. The description of *P. unifasciata* is not illustrated and no precise type locality is given, but the characters are good enough to conclude that LATHY referred to specimen from the south-east Ecuadorian population (Morona-Santiago, Zamora-Chinchipec). THIEME's *P. deverra* represents the same species but to a different population, which is found exclusively in north east of Ecuador (Tungurahua, Napo, Pastaza). It differs in the reduced size and colour of the forewing subapical patches, which are light orange instead of the darker or reddish orange of the nominate subspecies. The differences between the two populations are consistent and support retaining of the name *deverra* THIEME as a subspecies of *P. unifasciata* LATHY. The syntypes of *P. deverra* have not been found in the ZMHU, Berlin and therefore a lectotype could not be designated.

Pronophila bogotensis JURRIAANSEE and *Pronophila brennus* THIEME are not sufficiently differentiated from *P. unifasciata* to be considered as specifically distinct. They have the same wing shape and hindwing underside patterns, and indistinguishable genitalia. The only apparent difference is the colour of the forewing subapical patches, which is orange in *unifasciata*, dull orange in *brennus* and white in *bogotensis*. A population of *P. unifasciata* was recently discovered in SW Ecuador-Loja (Guaiquichuma) and El Oro. Although its phenotype does not differ noticeably from the ssp. *bogotensis* found in Colombia, on zoogeographical ground it would be likely to represent a separate subspecies (PYRCZ in prep.).

The taxon *donachui* ADAMS & BERNARD, originally described as a subspecies of *P. bogotensis* from the Sierra Nevada de Santa Marta in Colombia (and which also occurs in the northern part of the Venezuelan Cordillera de Mérida), from which it differs in having beige, rather than white, markings on the forewing upperside, becomes *de iure* a subspecies of *P. unifasciata*.

***Pronophila unifasciata nanegalito* PYRCZ, new ssp.**

(Fig. 4)

DIAGNOSIS

Differs from *deverra* and the nominate subspecies in having smaller forewing subapical patches which are pale yellow and scales dusted with brown towards

their basal and distal margins. It has an additional ocellus in cell M1. Its under-side overall colour pattern is lighter than in these two subspecies.

DESCRIPTION

MALE. Head, thorax and abdomen as in nominate subspecies. Wings: forewing (length 38 mm, n=1) triangular, apex blunt, outer margin straight; hindwing rounded, outer margin scalloped; fringes of both fore and hindwing milky white in each cell; upperside of both wings dull brown except for a series of forewing subapical patches, pale yellow dusted with brown, in spaces R5-M1 to M1-M2, upper three elongated, larger, joined together and separated only by brown venal stripes, two lower, in M3-Cu1 and Cu1-Cu2 faint and moon-shaped; forewing underside dull brown, lighter in basal half and along outer margin, subapical patches shaped as on upperside but more yellowish and less overcast with brown; a row of four black submarginal ocelli in spaces M1-M2 to Cu1-Cu2, pupilled with light violet and that in M3-Cu1 faintly bordered basally with orange; hindwing underside ground colour light brown with only slightly darker median band and marginal area, postmedian ocelli pupilled with minute whitish dots.

FEMALE. Hitherto unknown.

TYPES

Holotype male: ECUADOR: Pichincha, Nanegalito, V.1994, I. ALDAS *leg.*, MZUJ.

ETYMOLOGY

This subspecies is named after its type locality.

EARLY STAGES AND HOST PLANTS

Unknown.

DISTRIBUTION

This is the only population of *P. unifasciata* known to occur on the western slopes of the Andes in northern Ecuador. Thus far reported only from its type locality, Nanegalito, situated in the valley of Guallabamba river north west of Quito.

Pronophila epidipnis lathyi PYRCZ, new ssp.

(Fig. 12)

Pronophila epidipnis THIEME, 1907: 204. 4 syntypes (males): Venezuela, Mérida, in collection O. THIEME [whereabouts unknown].

DIAGNOSIS

This subspecies differs from other populations of *P. epidipnis*, except for a subspecies found in the Sierra El Tamá in Venezuela (PYRCZ & VILORIA, MS)

which is considerably smaller, in lacking the forewing upperside subapical whitish or grey patches, and instead having only faint, barely visible lighter traces. On the forewing underside the ocellus in cell M3 has less orange at its basal edge than in all examined specimens of other populations.

DESCRIPTION

MALE: Head, thorax and abdomen as in the nominate subspecies. Wings: forewing (mean length 39 mm, n=2) triangular, costa slightly arched, apex subacute, outer margin slightly convex; fringes of both wings white, very short; upperside of both wings blackish brown, slightly lighter on the forewing apex with barely visible greyish subapical markings; forewing underside blackish brown, except for a lighter and duller area in basal third, grey-brown apex and parallel silver grey subapical markings; a row, arched basally, of four black ocelli in cells M1-M2 to Cu1-Cu2, pupilled with pale violet and that in M3-Cu1 edged basally with red; hindwing steely grey, slightly darker in basal area, median band and along outer margin in apical area; pattern barely distinguishable from ground colour. Male genitalia: as illustrated (Fig. 16).

FEMALE. Hitherto unknown.

TYPES

Holotype male: ECUADOR, Bolívar, Balzapamba, Río Alcacer, 2500 m, 04.XI.1996, S. ATTAL *leg.* MZUJ; **Paratypes** (5 males): 1 male: same data, TWP; 2 males: ECUADOR, Pichincha, Río Chisinche, 1800 m, 11.VII.1993, J. HALL *leg.*, KWJH; 1 male: ECUADOR, Carchi, El Corazón, Reserva Las Golondrinas near La Carolina, 27.XI.1996, K. WILLMOTT *leg.*, KWJH; 1 male: ECUADOR: Carchi, road Tulcán – Maldonado, 2400 m, 24.VI.1994, J. HALL *leg.*, KWJH.

ETYMOLOGY

This subspecies is named after an early Twentieth century British entomologist, Percy LATHY, who described, among other species, two Ecuadorian *Pronophila*.

EARLY STAGES AND HOST PLANTS

Unknown.

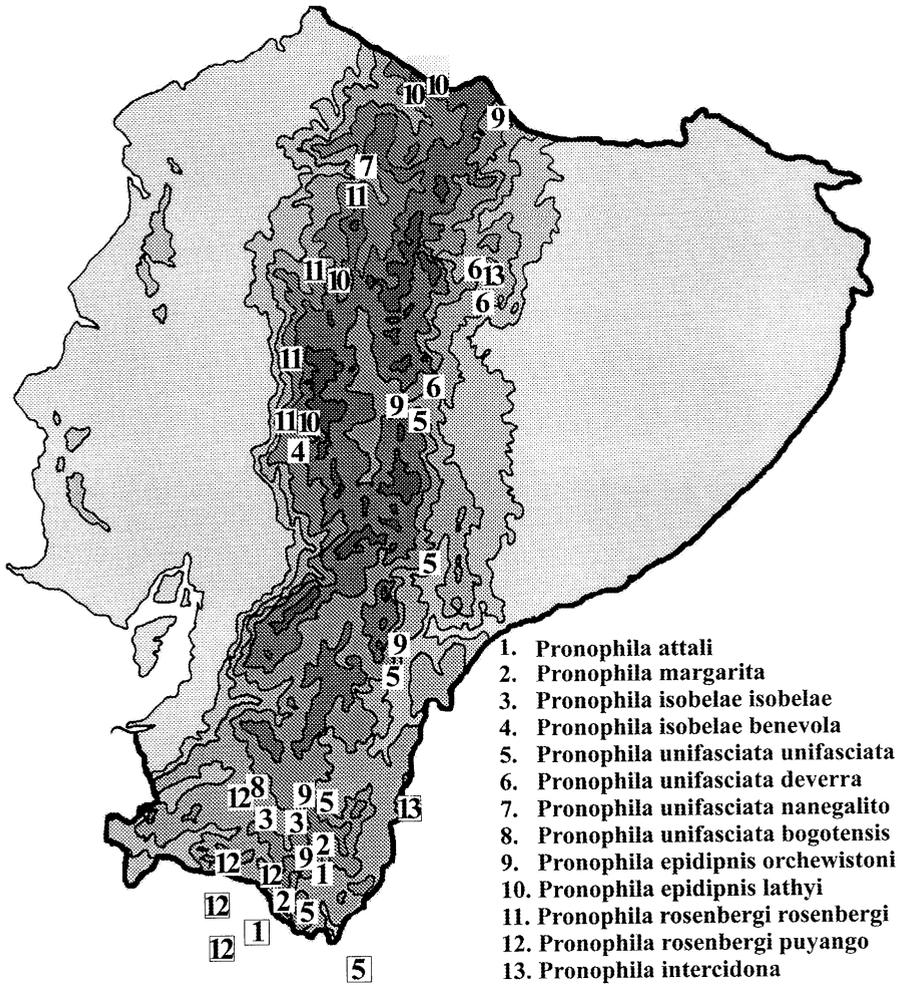
DISTRIBUTION

Reported until now only from northwestern Ecuador. The nominate subspecies of *P. epidipnis* occurs in the Cordillera de Mérida (Venezuela), whereas *P. epidipnis orchewitsoni* ADAMS occurs on the eastern slopes of the Andes in Ecuador and in the Colombian Central and Eastern Cordilleras. In the Colombian Western Cordillera and in the Sierra El Tamá (Venezuela) fly two, thus far undescribed, subspecies (PYRCZ M/S; PYRCZ & VILORIA M/S).

Pronophila rosenbergi LATHY

Pronophila rosenbergi LATHY, 1906: 77. Holotype male: Ecuador, H. J. ADAMS collection, in BMNH [examined].

Pronophila assarhaddon THIEME, 1907: 196, pl. 3, fig. 26 (underside). Holotype male: Ecuador, Santa Lucía, in O. THIEME collection [whereabouts unknown], **new syn.**



18. Distribution of *Pronophila* species in Ecuador

Pronophila rosenbergi LATHY has priority over *Pronophila assarhaddon* THIEME for the same reason as *P. unifasciata* over *P. deverra*. Again, the description by LATHY is not illustrated and the type locality *P. rosenbergi* is not specified. The text provides however a few distinctive features, which indicate that LATHY referred to the same population as THIEME. The description of *P. rosenbergi* is supplemented here because it does not take into account the full range of individual and interpopulation variation of the nominate subspecies. Five examined males from Pululahua, one male from Calacali (Pichincha) and one male from Santa Lucía (Bolívar) have a series of very clearly marked hindwing upperside dark brown ocelli ringed with red. THIEME does not specify this feature in his five specimens of *P. assarhaddon*, even though they come from Santa Lucía. Four males from Pululahua have very bright hindwing undersides, milky white in the postbasal and postmedian area. The amount of white suffusion varies between individuals and is much more pronounced in the females. The distal and basal margin of the hindwing underside median band tend to merge before reaching the costa in some specimens.

***Pronophila rosenbergi puyango* PYRCZ new ssp.**

(Figs 7 & 8)

DIAGNOSIS

This subspecies is smaller than the nominate. It has a less undulated hindwing margin, smaller forewing subapical white patch, indistinct hindwing upperside postmedian ocelli and darker hindwing underside ground colour with a less contrasting pattern, without any white scaling.

DESCRIPTION

MALE. Head, thorax and abdomen as in nominate subspecies. Wings: forewing (mean length: 35.5 mm, n=10; nominate: mean: 38.1 mm, n=6) triangular, apex blunt, outer margin slightly sinuate; hindwing oval, outer margin scalloped. Fringes white in each cell; upperside colour uniform blackish brown, except for a forewing subapical patch extending from costa into space M2-M3, a white submarginal patch in space M3-Cu1, and occasionally another white faint or vestigial patch below, in Cu1-Cu2; forewing underside dull dark brown; white markings shaped as on upperside; two submarginal black ocelli, pupilled with light blue, in M3-Cu1 and Cu1-Cu2, and occasionally a third, barely visible black ocellus in Cu2-1A; hindwing underside pale brown with a dark brown median band and marginal area; postmedian ocelli apparent in all cells but faint, barely showing on the slightly lighter ground colour, occasionally ringed with dull yellow or pupilled with light blue, most often the two ocelli in Cu2-1A, and that in M1-M2 displaced basally in relation to remainder, nearly touching median band. Male genitalia: as illustrated (Fig. 17).

FEMALE. Similar to male but lighter on both the upper and underside. Forewing length: 35 - 39, mean 37.0 mm, n=4. Hindwing upperside black, row of ocelli ringed with brick red.

TYPES

Holotype male: ECUADOR, Loja, Sozoranga, 2200 m, 24.VII.1998, T. PYRCZ *leg.*, in MZUJ; **Allotype** female: same data as the holotype, in MZUJ; **Paratypes** (17 males and 4 females): 2 males: ECUADOR, Loja, Guayiquichuma, 1800-2000 m, 17.IV.1997, A. JASIŃSKI *leg.*; 1 male: ECUADOR, Loja, Route Principale Loja - Porto Velo, 2000 m, 08.VIII.1988, S. ATTAL & A. CROSSON-DU-CORMIER *leg.*; 4 males: ECUADOR, Loja, Route Catamayo - Porto Velo, 1950 m, 16.II.1993, B. MÉRY & S. ATTAL *leg.*; 3 males: Ecuador, Loja, Guayiquichuma, 1800 m, 28.V.1996, S. ATTAL & I. ALDAS *leg.*, in MZUJ; 1 male: ECUADOR, Loja, Cordillera de Lagunillas, South of Amaluza, 2600-3000 m, 03.V.1997, A. JASIŃSKI *leg.*; 2 females: ECUADOR, Loja, Guayiquichuma, 1800-2000 m, 15.IV.1997, A. JASIŃSKI *leg.*; 2 females: ECUADOR, Loja, Route Catamayo - Porto Velo, 2000 m, 09.II.1993, B. MÉRY & S. ATTAL *leg.*; 3 males: ECUADOR, same data as the holotype, all in TWP; 2 males: ECUADOR, Loja, South East of Zambi, 2000 m, 23.V.1994, J. HALL *leg.*, KWJH.

ETYMOLOGY

This subspecies is named after the valley of the Río Puyango situated in southwestern Ecuador where most individuals of this subspecies were collected.

EARLY STAGES AND HOST PLANTS

Unknown.

DISTRIBUTION

The nominate subspecies of *P. rosenbergi* occurs throughout northern and central western Ecuador. *P. rosenbergi puyango* replaces it in the southwest of the country (Loja) and in northwestern Peru (Piura). A population related to this subspecies has been recently discovered on the east bank of the Río Marañon in northern Peru (Amazonas, Luya). Another, as yet unnamed subspecies (PYRCZ, MS), characterised by yellow forewing subapical patches is found in another north Peruvian locality (Amazonas, Pomacocha).

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