

Three unusual species of *Paracles* from South America (Lepidoptera: Arctiidae)

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Abstract. Two new species of *Paracles* Walker are described from the northern Andes, which differ from congeners by their small size and uniform brown coloration: *Paracles minuta* n. sp. (Colombia) and *P. diminuta* n. sp. (Venezuela). *Thagona medinata* (Dognin) is recognized as a *Paracles*, and transferred from Lymantriidae; it differs from other *Paracles* in its immaculate white coloration.

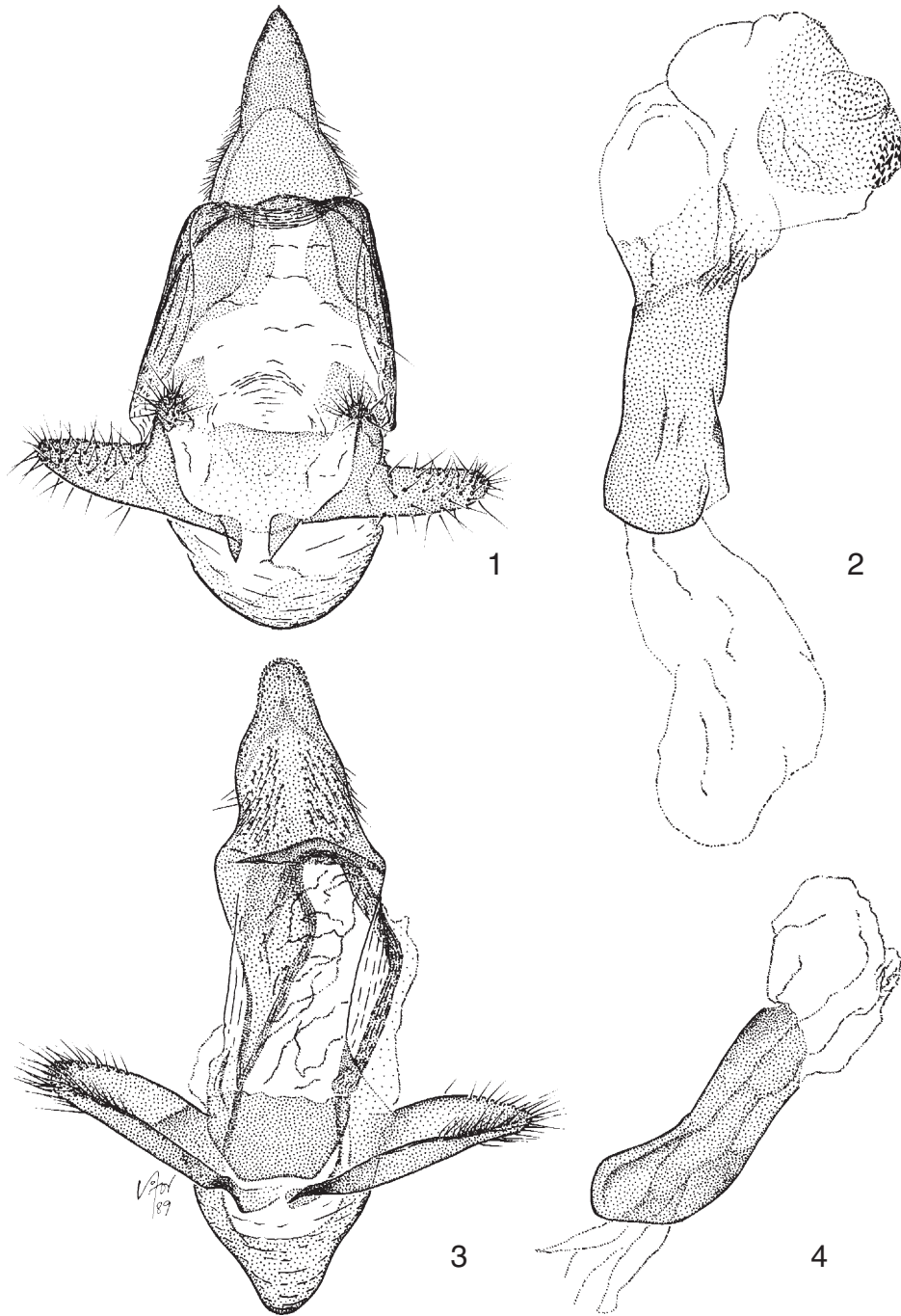
INTRODUCTION

In the course of research on zygaenoid moths, we encountered two undescribed species of the arctiid genus *Paracles* Walker which superficially resemble megalopygids, especially *Podalia bolivari* (Heylaerts) (Miller and Becker, in press). These two species are very similar to the few uniform brown species of *Paracles*, especially *P. obscurior* (Schaus) (see Watson, 1973: 33, pls. 31d, 89a, b), but differ from these in their much smaller size (forewing lengths of about 9 mm versus 18 mm). Both the new species are known only from males. It is possible that the females are brachypterous, as are some others in the genus, e.g., *Paracles deserticola* (Berg, 1875: 212) and *P. imitatrix* (Rothschild, 1922: 493).

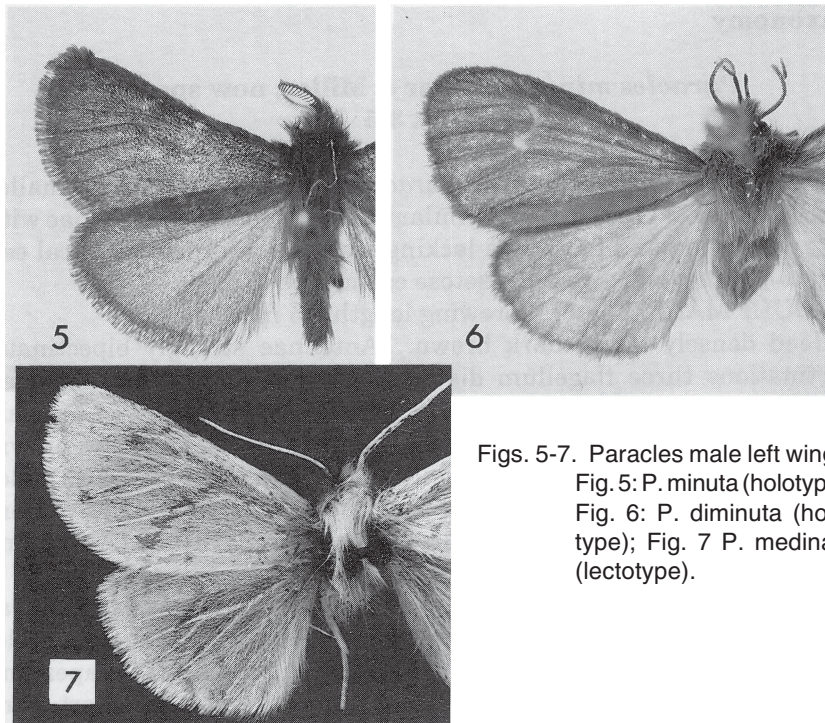
We also take the opportunity to transfer *Thagona medinata* (Dognin) from the Lymantriidae to its proper place among *Paracles*, and give illustrations to permit its identification.

The proper generic name of this group has been confused in the past. We follow Watson (1980) and Watson and Goodger (1986: 32) in using *Paracles*. Before Watson and Goodger (1986), most of the species were placed in *Palustra*, *Antarctia*, or *Maenas*.

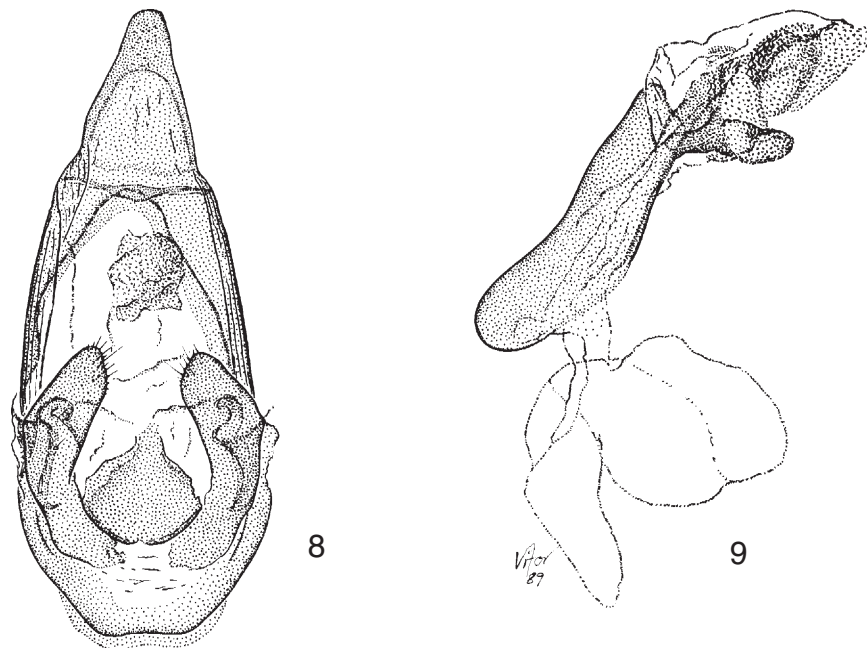
Holotypes are deposited in the National Museum of Natural History (USNM). Other collection acronyms follow Heppner and Lamas (1982).



Figs. 1-4. *Paracles* male genitalia, ventral view, aedeagus removed (paratypes);
Figs. 1-2: *P. diminuta*; Figs. 3-4: *P. minuta*.



Figs. 5-7. *Paracles* male left wings; Fig. 5: *P. minuta* (holotype); Fig. 6: *P. diminuta* (holotype); Fig. 7 *P. medinata* (lectotype).



Figs. 8-9. *Paracles medinata*, male genitalia, ventral view, aedeagus removed (paralectotype).

Taxonomy

Paracles minuta Becker & Miller, new species

Figs. 3-5

DIAGNOSIS.-Very similar to *Paracles obscurior*, but much smaller and with darker ground color. Similar to *P. diminuta*, but antennae with longer ciliation and forewings lacking maculation at end of discal cell (Fig. 5); base of valva lacking setose costal lobe (Fig. 3).

ADULT MALE (Fig. 5).-Forewing length 8.5 mm.

Head densely hairy, dark brown. Antennae strongly bipectinate, pectinations three flagellum diameters long. Thorax and abdomen densely hairy, dark brown dorsally, pale brown ventrally. Legs pale brown, tarsi with light and dark brown banding. Forewings dark brown, costal margin slightly concave, thinly scaled with elongate scales yielding translucent appearance. Hindwings similar, slightly lighter. Ventral wings lighter, except costal margins which are dark brown with some patches of lighter scales.

MALE GENITALIA (Figs. 3, 4).-Uncus tapered, slightly expanded at middle, apex rounded; tegumen long, bent ventrad; valvae short, simple, covered with short setae distally; juxta an inverted, broad trapezium; saccus triangular, slightly rounded anteriorly. Aedeagus short, bent ventrad at middle; vesica smooth (one of two preparations has a very long, thin cornutus; presumably lost in preparation of the second specimen).

ADULT FEMALE.-Unknown.

TYPE LOCALITY.-Colombia, Cundinamarca, Bogotá, "Pueblo Guasca".

IMMATURE STAGES.-Unknown.

FLIGHT PERIOD.-Unknown.

DISTRIBUTION.-Known only from the vicinity of Bogotá, Colombia.

MATERIAL EXAMINED.-Holotype (USNM) and 33 male paratypes: COLOMBIA: *Cundinamarca*: Bogotá, 2800-3200 m [no date], A.H. Fassl (USNM); "Pueblo Guasca, Bogotá", [no date], "F. Johnson/donor" (BMNH, BPBM, CMNH, LACM, USNM, VOB, ZSBS).

Paracles diminuta Becker & Miller, new species

Figs. 1, 2, 6

DIAGNOSIS.-Similar to *Paracles minuta*, but forewings more rounded and with pale mark across end of discal cell (Fig. 6), and antennae with shorter ciliation; base of valva with setose costal lobe (Fig. 1).

ADULT MALE (Fig. 6).-Forewing length 9 mm.

Entirely brown, except vertical tan line at end of discal cell. Hindwing slightly lighter than forewing. Antennae narrow, without pectination; ciliation as long as flagellum diameter.

MALE GENITALIA (Figs. 1, 2).-Uncus tapered, slightly constricted at

middle; apex pointed; tegumen rounded; valvae simple, narrow, base of costa expanded into a short, irregular lobe covered with short setae; juxta weak, nearly rectangular, slightly constricted laterally; saccus broadly rounded. Aedeagus nearly straight; vesica expanded, with a broad scobinate area; a small area with short, triangular spines at edge of scobinate area.

ADULT FEMALE.-Unknown.

TYPE LOCALITY.-Venezuela, Meridá, Mucuy Fish Hatchery, 7 km E of Tabay, 6600 feet [2000 m].

IMMATURE STAGES.-Unknown.

FLIGHT PERIOD.-February.

DISTRIBUTION.-Known only from the type locality.

MATERIAL EXAMINED.-10 males from the type locality (holotype [USNM] and 9 paratypes), all collected 10-13-II-1978 by J.B. Heppner at blacklight (BMNH, LACM, UCV, USNM, VOB).

***Paracles medinata* (Dognin), new combination**

Figs. 7-9

?*Trochuda medinata* Dognin, 1920: 4.

Thagona medinata: Schaus, 1927: 549, pl. 74c.

This species was described from an unspecified number of males and one female from "Medina, est de la Colombie, 500 metres (Fassl)". Three males and one female from the Dognin Collection are present in the USNM; we hereby designate the male which bears Dognin's "type" label, as well as USNM type number 29743, as lectotype. We hereby transfer this species to Arctiidae. The characters of wing venation, antennae, and male genitalia are typical of *Paracles*, and very similar to others in the genus (as illustrated by Watson, 1971, 1973).

A series of specimens has been collected at Planaltina, DF, Brazil, by the first author.

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