

The Original Descriptions of *Pantherodes*

(Lepidoptera: Geometridae)

Compiled and translated from the original literature. The genus and its first four species were established by Guénée (1858); a fifth species was added by Warren (1894).

Genus *PANTHERODES* Hübner

(= *Panthera* Hübner, *Verzeichniss*) — Guénée, 1858, *Species Général des Lépidoptères* **10** (*Uranides et Phalénites II*): 199, in family Zerenidae.

Caterpillars: unknown. — **Antennae** cylindrical, completely filiform (thread-like) in both sexes. — **Head** prominent, with a rounded front. — **Palps** fairly thick, curved up against the front but not projecting beyond it. — **Proboscis** rather short. — **Thorax** globular, half-hairy. — **Abdomen** very long and extending beyond the wings, cylindrical, smooth, silky, and in the males ending in long hairs. — **Legs** robust: the hind legs with the tibiae almost twice the length of the femur, much swollen and enclosing pencils (tufts) of hairs. — **Wings** broad, thick, velvety, yellow, with large black ocellate (eye-spotted) blotches. — Veins 1 and 2 of the forewing arising on a common stalk.

This pretty genus is extremely easy to recognize by its wings of a beautiful yellow, scattered with large grey blotches that are ringed and eye-spotted in black, exactly like those of leopards and panthers. Indeed, Hübner copied his genus name literally from that of the latter mammal, and I have only changed its ending to make the resemblance less jarring. To *pardalaria* — the sole species that originally composed the genus — I have added three others, doubtless very close to it, but specifically distinct. I have also given, as varieties, two further races that may well in time come to rank as species, and I even have a third in the same situation; but these handsome moths do not yet reach us in sufficient numbers to allow definitive study. They are all American, and each part of that vast continent might well have its own species.

Pantherodes pardalaria Hübner

1248

Hübner, *Zuträge* 335–336.

45 mm. Wings golden-yellow, mottled with large black blotches having grey centres (“irises”). The **forewings** bear seven such blotches: the 2nd, band-shaped, touches both margins and has three “pupils”; the 6th, at the inner margin, is likewise three-pupilled; the one facing it, toward the costa, is two-pupilled; and the apical one has no pupils. The **hindwings** have only five blotches, of which only the anal one and the one just above it have grey centres, the others being solid black. Thorax grey-black, with the back and the tegulae (“shoulder-pieces”) spotted yellow. Abdomen yellow along the sides. — **Female** similar.

Brazil. Various collections.

Variety A. (Guénée, pl. 14 fig. 7.) Larger. Blotches broader, with the grey “iris” more extensive. The three outer blotches of the hindwings often touching. Abdomen entirely grey.

Rio de Janeiro. Two males. Museum collection.

This may perhaps constitute a separate species. However, I have seen two males of the same origin that differ from the type only in their larger size and seem to bridge the gap.

Consistently larger than *pardalaria* (male 50 mm, female 55 mm) and with more developed wings. The ground colour of the forewings is tinged olive, while that of the hindwings stays golden-yellow and is only washed with grey along the abdominal (inner) margin. The blotches are broader, and their overall field is grey — or, if you prefer, their borders and pupils are more constricted. Abdomen wholly grey. — **Female** similar.

Nova Friburgo (Brazil). One male, one female. Guénée collection.

I have seen several other specimens of this fine species, and I do not doubt that its caterpillar differs from that of *pardalaria*.

Variety A. The forewings still more olive, while the hindwings are canary-yellow. The 5th blotch of the forewings (the two-pupilled one) drawn out below into a sharp point. The discoidal blotch of the hindwings small and isolated. (The three outer ones are confluent in my specimen.)

Colombia. One female. Guénée collection.

It is quite possible that this forms a separate species; but I dare not establish one on a single individual.

Pantherodes unciaria Guénée

1250

Smaller than *pardalaria*, not exceeding 40 mm. It most resembles *colubraria*, but differs in its **yellow abdomen**, marked in the female with blackish triangular spots, the last two segments being of that colour. The wing blotches are arranged in the same way, but those of the hindwings are blacker, and their pupils are barely distinguishable except for the one at the anal angle. The cell blotch is proportionally smaller, more isolated, and rounder.

Mexico. One male, one female. Guénée collection. Mr. Sallé brought back a great quantity of it from his last voyage.

Pantherodes leonaria Guénée

1251

40 mm. Wings short, rounded, concolorous, of a gamboge-yellow (gum-resin yellow), mottled with large black blotches **without iris or pupils**. Those of the forewings are arranged as in *pardalaria*, but take up more space; the two outer ones are confluent — as are those on the hindwings. The discal (disc) blotch, far from being smaller than the others, is the largest of all; and the one at the inner angle joins the one below it, while the middle one stays isolated, though larger. Thorax entirely black.

Montevideo. One male. Guénée collection.

It is quite distinct from the others and forms the transition to the following genus (*Abraxas*).

Pantherodes conglomerata (Warren, 1894)

Originally described as *Panthera conglomerata* sp. nov. — Warren, 1894, "New genera and species of Geometridae," *Novitates Zoologicae* 1(2): 422–423. Verbatim, lightly de-OCR'd; this is in English in the original.

Wings bright pale straw-yellow; markings fuscous purple — viz., a small basal patch; a curved, darker-edged fascia with three darker central spots, not quite touching the inner margin; an elliptical costal blotch, also dark-edged, and containing the large dark discal spot; and a broad irregular marginal band, formed by the conglomeration of all the other usual blotches, leaving only a small yellow spot near the hindmargin above the anal angle. Hindwings with a large round discal spot, a costal blotch above it, and a round blotch on the inner margin above the anal angle; the anal angle itself occupied by a larger roundish spot; marginal fascia about half as broad as in the forewings, with a small yellow spot on the hindmargin below the apex. Underside the same.

Head, thorax, and abdomen fuscous grey; anal tuft and sides of the pectus beneath yellowish.
Expanse of wings: 46 mm.

One male in the Felder collection without locality; another example in the British Museum is from **Bogotá**. I think this form must be considered to indicate a good species; the ground colour is decidedly paler and less yellow than in any of the other forms, and the markings are in proportion darker and deeper. The outline basewards of the marginal band will no doubt vary in different examples, according to the size and shape of the conglomerated spots.

Comparative key to the original five species

Species	Author	Size	Key distinguishing features	Locality
<i>pardalaria</i>	Hübner, 1823	45 mm	Blotches grey-centred; forewing 7 / hindwing 5 blotches; abdomen yellow-sided	Brazil
<i>colubraria</i>	Guénée, 1858	♂50 / ♀55 mm	Forewing ground olive-tinged; blotches broad, field mostly grey; abdomen all grey	SE Brazil, Colombia
<i>unciaria</i>	Guénée, 1858	≤40 mm	Like <i>colubraria</i> but abdomen yellow (♀ with black triangles); hindwing blotches blacker, pupils nearly gone	Mexico
<i>leonaria</i>	Guénée, 1858	40 mm	Gamboge-yellow; blotches solid black , no iris/pupils ; thorax entirely black	Uruguay (Montevideo)
<i>conglomerata</i>	Warren, 1894	46 mm	Pale straw-yellow , paler than all others; markings fuscous-purple, conglomerated into a broad marginal band ; head/thorax/abdomen fuscous grey	Colombia (Bogotá)

Note: Warren described conglomerata in the genus Panthera; it was subsequently transferred to Pantherodes. The other genera in his text (Zerenopsis, Xanthabraxas, Carpella, etc.) are unrelated and omitted here.