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A NEW GENUS AND A NEW SUBSPECIES OF RIODINIDAE FROM SOUTHERN BRASIL

Curtis J. Callaghan¹

c/o IBM do Brasil, Ltda., Caixa Postal 1830-ZC 00, Rio de Janeiro, Brasil

On 1 April 1971 while collecting in the mountains near Petropolis, State of Rio de Janeiro, I caught a small, brown butterfly which on closer examination proved to be a riodinid. A search through the collections of the Museu Nacional revealed a second specimen from Novo Friburgo mixed in with a number of miscellaneous butterflies in a "to be identified" drawer. Additional investigations in the collections of Drs. Heinz Ebert and Keith S. Brown, Jr., failed to reveal additional specimens, and I long was unable to find a description of this butterfly. It was not until three years later, in March of 1974, that I captured five more specimens in the bamboo forests above Petropolis. It was even longer before the identification was accomplished — Hewitson (1875 [1872-1876]) described *Calydna catiena* from a single specimen bearing labels giving its home as "Brazil". This specimen has remained unassociated with other material since then, and examination of the additional specimens I caught shows them to be members of a new genus, instead of *Calydna*, as Hewitson had thought.

PETROCERUS, new genus

Type-species: *Calydna catiena* Hewitson (1875 [1872-1876]) [NEW COMBINATION].

Eyes naked. palpi (Fig. 3) slender, third segment nearly one-third length of the second and jutting out beyond the face when the insect is viewed dorsally. Antennae greater than half length of forewing and consisting of 33 segments, each separated by a ring of white scales; club weakly developed.

Forwing (Fig. 1) similar to that of *Pandemos*, but more pointed apically. Vein R² arises closer to R¹ than to R³, unlike *Aricoris* and *Pandemos*. Crossvein m₁-m₂ weakly developed. Hindwing (Fig. 1) also similar to that of *Pandemos*, but with humeral vein stubby and blunt, not curved outward.

Male foreleg (Fig. 4) aborted, lacking the extension of the coxa common to most riodinid genera (Stichel, 1911); tibia slightly longer than femur.

Male genitalia (Fig. 2) similar to those of *Orimba* and *Pandemos*. Penis short and blunt with a distal curved hook. Uncus culminates in a forked peak, rather than two lobes as in the other two genera.

¹The author is "pesquisador-associado" at the Museu Nacional, Rio de Janeiro.

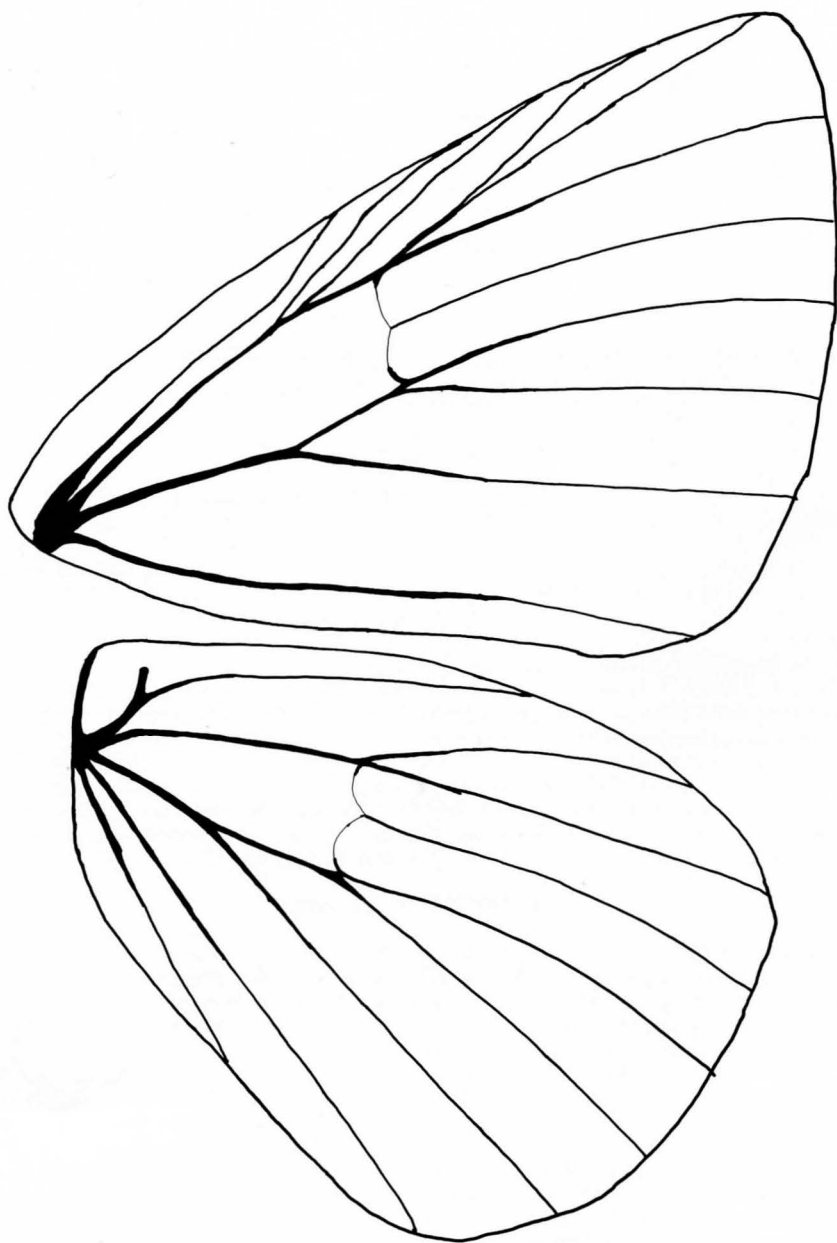


Figure 1: ♂ venation of *Petrocerus catiena* (Hewitson).

***Petrocerus catiena* (Hewitson, 1875) [NEW COMBINATION]**

A redescription of *P. catiena* follows (anatomical characters as for the genus)

Male: Head brown above, white around eyes. Antennae dark brown with white rings between segments. Palpi brown with sparse white scaling. Thorax scaled gray-brown, legs light brown; abdomen uniformly brown above, grayish-brown below.

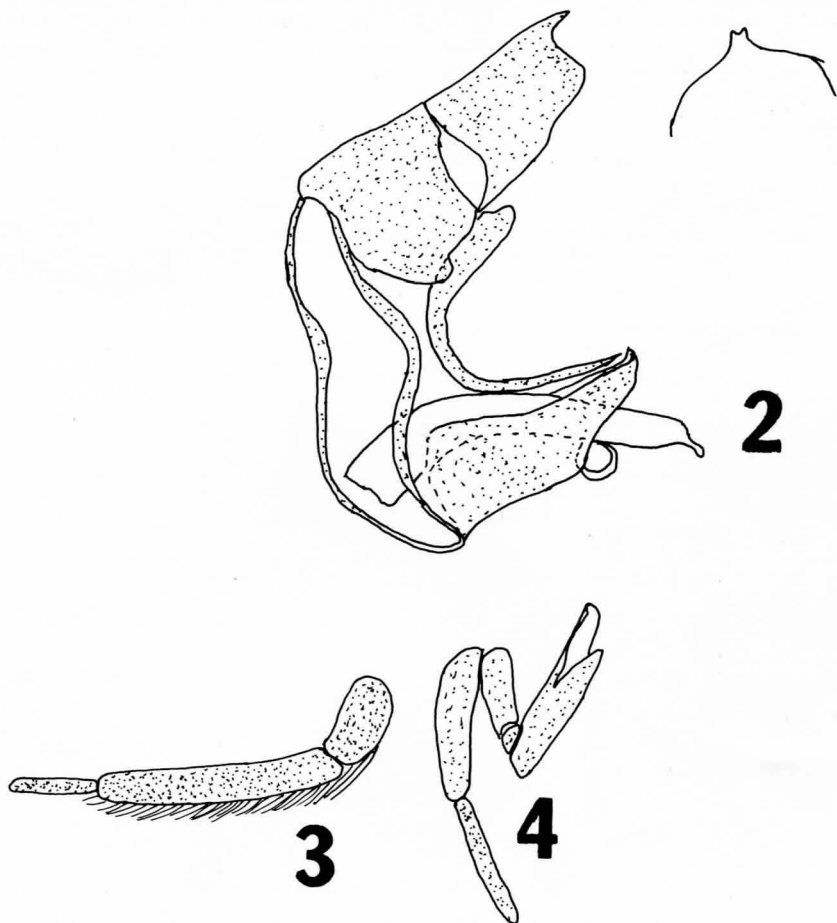
Fore- and hindwings uniformly dark brown above (Fig. 5). Under surface (Fig. 6) mottled with gray and brown scaling, the pattern rather indistinct, but paler marginad; forewing with three dark brown spots in cell and one elongated one posteriad in Cu₂-2A; hindwing with a barely distinguishable dark brown median band. Fringes of both wings dark brown.

Lengths of forewings of six specimens examined averaged 17.6 mm.

Male genitalia as illustrated (Fig. 2).

Female: Unknown.

All of the specimens I have seen were from the State of Rio de Janeiro, Brasil, six from Petropolis and one additional male from Novo Friburgo. One specimen of the



Figures 2-4: *Petrocerus catiena* (Hewitson). 2, ♂ genitalia. 3, ♂ palpus. 4, ♂ foreleg.

former series is in the Allyn Museum of Entomology collection.

P. catiena is found very locally in the pygmy and bamboo forests above 1000 m. in the Serra do Mar, Rio de Janeiro. The males were observed at about 1300 hours at a curve in the Via Imperial road at km. 10 near the summit at an elevation of 1300 m. At this point the Via Imperial passes through virgin cloud forests composed of smaller trees and bamboos at the top of the escarpment above the coastal plain. The butterflies were resting on the tops of leaves about three meters above the ground and with their wings held upright. When disturbed the insects would fly off in a somewhat awkward, loping manner, not unlike that of a small satyrid. They would soon return to the same spot, again alighting with wings folded over their backs. The slow flight made the butterflies easy to capture.

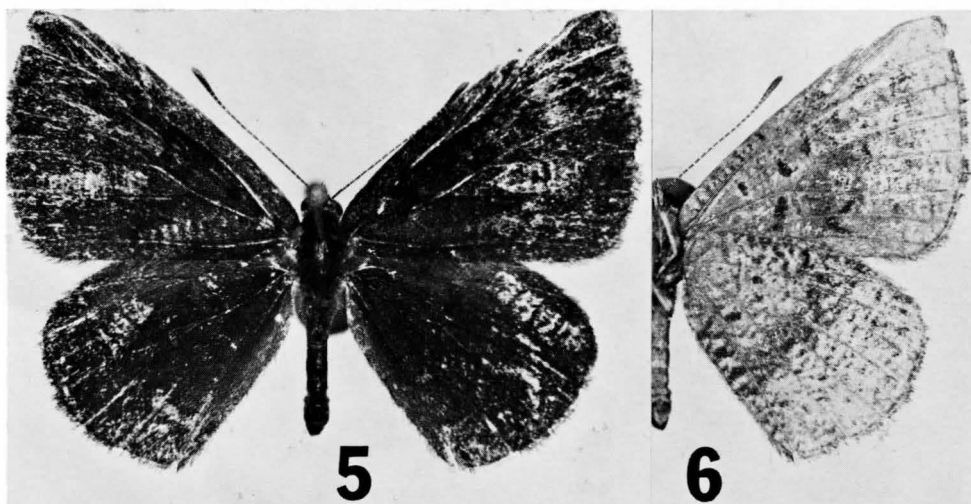
Apparently these butterflies are highly seasonal, since visits to the same locality during other times of the year have failed to locate additional specimens.

During February of 1973 while returning to Rio de Janeiro from Belo Horizonte, Minas Gerais, I decided to spend a few morning hours collecting in the Serra da Moeda, a mountain range some 30 km. south of Belo. I stopped where highway BR 135 crosses the highest part of the range and walked in the direction of a hilltop some 60-70 meters high to the west of the road. On the north-facing slope I caught a series of an odd little riordinid which upon closer examination was a new subspecies of *Apodemia paucipuncta* Spitz (1930).

***Apodemia paucipuncta moedensis*, new subspecies**

Male (Figs. 7-8): Head blackish brown above; eyes naked and ringed with white scales. Palpi white and short, reaching slightly beyond face when insect viewed from above. Antennae long (2/3 length of forewing costa) and brown with white rings of scales between segments. Thorax and abdomen brown above, gray beneath. Legs hairy and gray.

Forewing above dark blackish brown. Cell with two white spots edged basad with black; two more similar spots directly posteriad of these between cell and 2A. At end of cell is an elongate black spot finely circled with white. Postmedian area with a scatter-

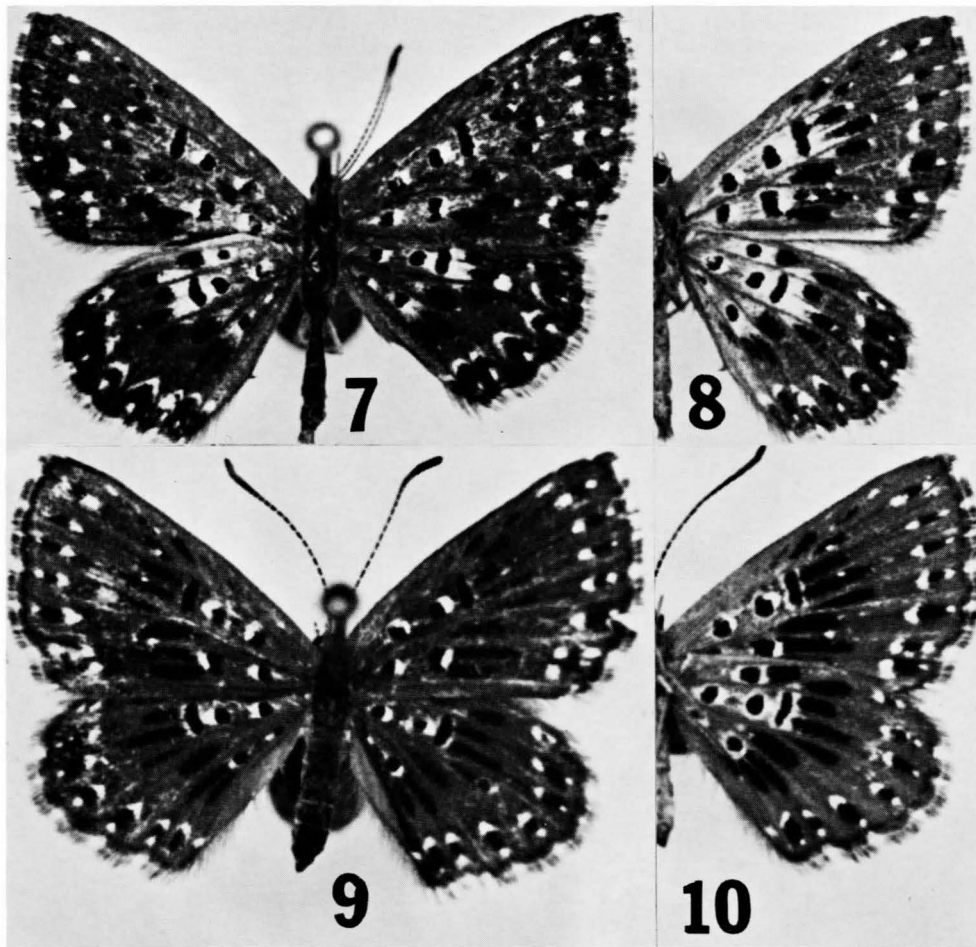


Figures 5-6: *Petrocerus catiena* (Hewitson), ♂ upper (5) and under (6) surfaces; BRASIL: RIO de JANEIRO: Petropolis.

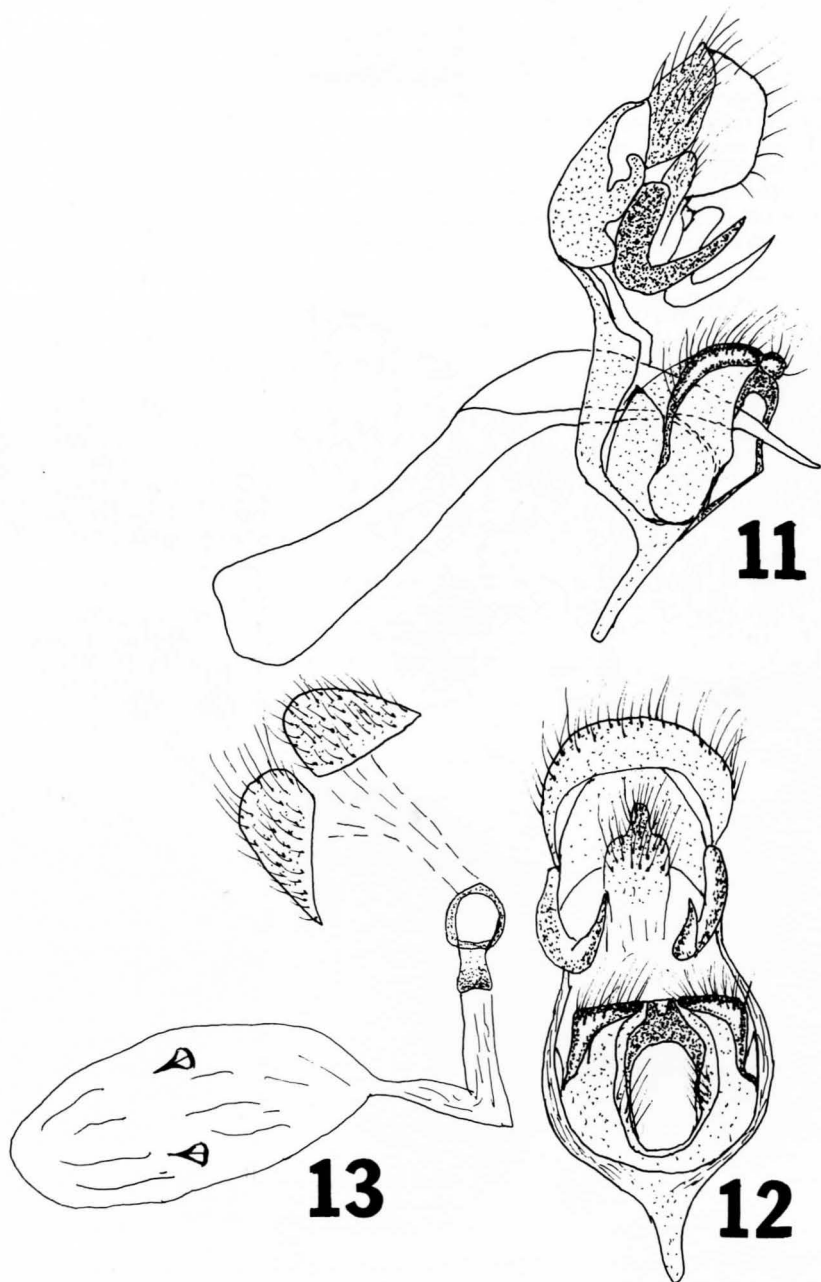
ing of black spots distally edged with white, all spots in interspaces. Interspaces with a submarginal row of black spots, edged both distally and proximally with white, the proximal white markings the larger and in the shape of caps or arrowheads. Hindwing pattern similar, but with an additional white-edged spot between the cell and the costa. There is considerable white scaling from postmedian spots to base. Submarginal black spots are capped basad with a series of unconnected white crescent marks as on forewing, but more pronounced, especially posteriad. Fringes of both wings brown with white checkering at ends of veins.

Under surface similar to upper surface, but with a lighter ground color and a greater infusion of white scaling in discal area. Postmedian black spots darker and more elongated. Margins of both wings overscaled with ochreous.

Length of forewing of Holotype 12 mm., those of the seven ♂ Paratypes ranging



Figures 7-10: *Apodemia paucipuncta moedensis*, new subspecies. 7-8: Holotype ♂ upper (7) and under (8) surfaces; BRASIL: MINAS GERAIS: km. 447, Rio-Belo Horizonte Hwy. 9-10: Paratype ♀ upper (9) and under (10) surfaces; same data as Holotype.



Figures 11-13: *Apodemia paucipuncta moedensis*, new subspecies. 11-12: ♂ genitalia lateral (11) and ventral (12) aspects. 13: ♀ genitalia ventral aspect.

from 11 to 12 mm.

Male genitalia as figured (Figs. 11-12) showing no significant differences with those of the nominate subspecies.

Female (Figs. 9-10): Markings as in ♂, chief difference being the more rounded wings.

Female genitalia as figured (Fig. 13).

Lengths of forewings of the five ♀ Paratypes range from 12.5 to 13 mm.

There is significant variation in the amounts of white scaling and in the sizes of black markings within the series, but in no specimen was this variation such as to lead to confusion with the nominate subspecies.

Described from 13 specimens, eight males and five females, from the Serra da Moeda, Minas Gerais, Brasil.

HOLOTYPE ♂: BRASIL: Minas Gerais, Rio-Belo Horizonte Hwy. km. 437, 1500 m.; 11.ii.1973 (C. Callaghan).

PARATYPES: 7 ♂ 5 ♀, same data as Holotype.

Disposition of type-series: Holotype ♂, one ♂ and one ♀ Paratypes in Allyn Museum of Entomology; one ♂ and one ♀ paratypes in Museu Nacional collection; one ♂ and one ♀ Paratypes in collection of Heinz Ebert and three ♂ and two ♀ Paratypes in my collection.

This subspecies is named for the mountain range in which it was discovered.

The present subspecies may be separated easily from nominate *paucipuncta* by the prominence of the white markings, especially the arrowhead-shaped submarginal ones, and by the discal white scaling. Neither of these characteristics was mentioned by Spitz (1930).

The habitat of *moedensis* is at about 1500 meters elevation in the Serra da Moeda immediately south of Belo Horizonte, Minas Gerais. The vegetation consists of rolling grasslands except on the rocky outcroppings where low bushes and a profusion of smaller plants, such as orchids and lichens, cling precariously to existence in cracks in the iron-rich rocks. At lower levels gallery forests choke the canyons through which small streams flow. The type-locality for *moedensis* is a rocky hillside west and about sixty or seventy meters above km. 447 on the Rio-Belo highway. The butterflies were observed in the morning sunning themselves near the ground on twigs and small bushes. They fly rapidly, but not far, always alighting with the wings outspread in typical *Apodemia* fashion on the upper surfaces of leaves and twigs.

The butterflies appear to be very local, and no individuals were noted outside this particular rocky area. They completely shun the grassy areas, a habit in complete contrast to the nominate subspecies. These insects may be seasonal; a visit to the colony in May of 1975, at the end of the wet season, failed to turn up additional specimens.

Though the known range of *moedensis* is thus far only the Serra da Moeda, a more thorough search of the Serra de Espinhaco may reveal additional colonies.

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