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PAITITIA NEGLECTA, GEN. N., SP. N. FROM PERÚ (NYMPHALIDAE: ITHOMIINAE)¹

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ABSTRACT. *Paititia neglecta*, gen. n., sp. n., from Perú, San Martín, Juanjui, is described herein. This monotypic genus is considered to be the most primitive member of the tribe Mechanitini of the Ithomiinae.

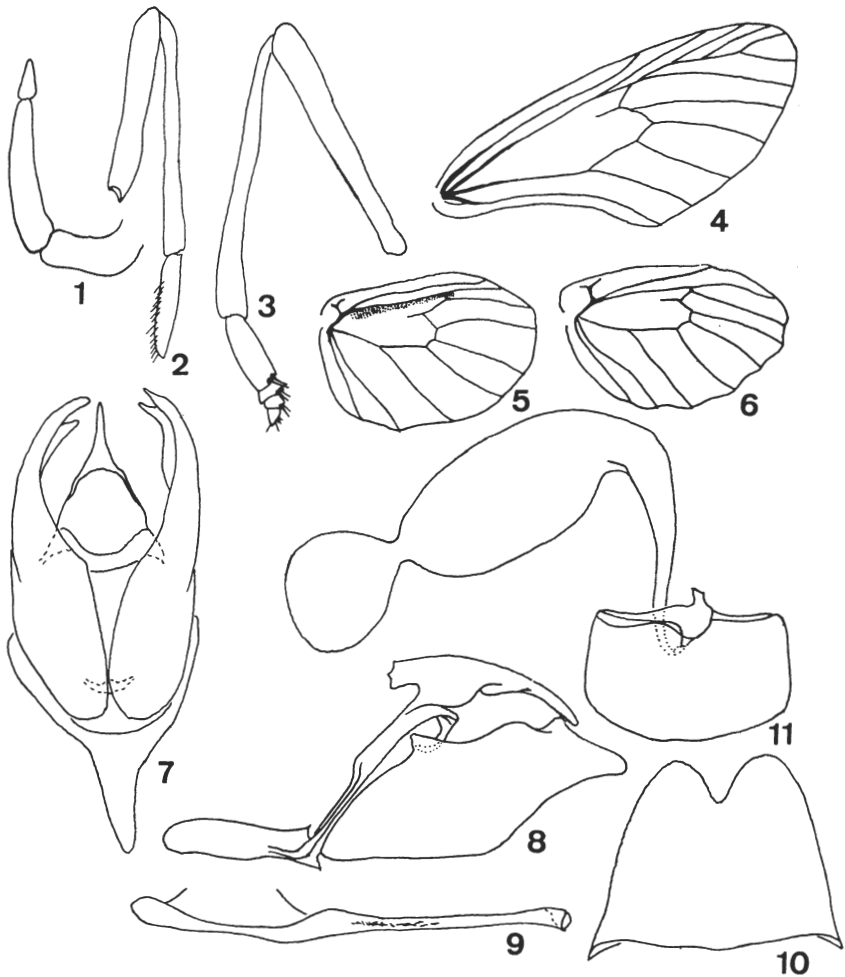
Two specimens, representing a new genus and species of Ithomiinae, lay unnoticed for almost 50 years in the collections of the British Museum (Natural History), London, and the American Museum of Natural History, New York. The BMNH female was included among a series of unidentified *Methona* examples in the Rothschild collection, while the AMNH male had been identified (and labelled) as "*Xanthocleis ino*" by the late R. M. Fox. The third known specimen (a male) was presented to the "Javier Prado" Museum in 1976 by the collector, Mr. José M. Schunke.

***Paititia* Lamas, new genus**

External diagnostic characters. Large Mechanitini (Fox, 1956), very similar in size and color pattern to *Thyridia psidii* ssp. and *Methona* spp. May be distinguished from *Thyridia psidii* (Linnaeus) by the absence of small red dots on base of forewing above, and the presence of two separate, white spots on cell Sc-R₁-R_s of hindwing below. *Paititia* may be separated from *Methona* spp. by the long hair patch extending beyond the discal cell apex of the male hindwing above, which in the latter is restricted to the basal half or two-thirds of that cell.

In Fox's key (1940), the males of *Paititia* will key out to *Xanthocleis* Boisduval (i.e., *Thyridia* Hübner), but may be readily differentiated by the characters given above. The females will key out to *Athesis* Double-day; however, they can be easily distinguished by the wing shape and

¹ The present paper forms part of a D.Sc. dissertation submitted to the Departamento de Zoologia, Instituto de Biociências, Universidade de São Paulo, São Paulo, Brasil (Lamas, 1973). As a condensed version of that thesis will not be published in the near future, I have decided to make available the new genus and species of Ithomiinae described therein.



FIGS. 1-11. *Paititia neglecta*, gen. n., sp. n.: 1, palpus; 2, male foreleg; 3, female foreleg; 4, male forewing; 5, male hindwing; 6, female hindwing; 7, male genitalia, ventral view; 8, male genitalia, lateral view; 9, penis; 10, male eighth tergite, dorsal view; 11, female genitalia, ventral view.

color pattern (wings long and narrow, with yellowish transparent areas in *Paititia*, short and wide, with reddish-brown translucent areas in *Athesis*).

Palpi (Fig. 1). Basal segment curved, adpressed to the head; second free, 1.5 times longer than the basal; apical fusiform, very small, one-fifth to one-eighth the length of the basal (longer in male).

Antennae. Club yellow, with approximately 15 segments, very slightly widened,

barely more so than the pedicel, which is black; as long as the forewing discal cell, that is, slightly longer than one-half the forewing length.

Male forelegs (Fig. 2). Reduced; femur plus trochanter as long as the stout articulate coxa; tibia one-fourth longer than femur; tarsus two-fifths the length of the tibia, with slender spines on ventral side.

Female forelegs (Fig. 3). Reduced, coxa articulate; femur as long as coxa; tibia equal to femur plus trochanter; tarsus with 4 apparent segments, two-fifths the length of the tibia; basal segment twice the length of the remainder; second and third short, apical consisting of the fourth and fifth fused; first segment with two pairs of spurs, the outer ones slightly longer; second and third segments with a pair of spurs each; second, third and apical segments with trichoid sensillae.

Venation (Figs. 4-6). Sc and R₁ on forewing of both sexes running parallel, without anastomosing, Sc ending shortly beyond discal cell apex; R₁ arising from cell, base of R₂ anastomosed to R₃₊₄₊₅, well beyond cell apex; rs-m₁ absent or very short, straight; m₁-m₂ long, angular, long Rc arising from angle; m₂-m₃ also long, straight.

Male hindwing with bifid hum, both arms well developed; Sc and R separate at base, Sc ending beyond discal cell apex; rs-m₁ straight, slightly more than half as long as m₂-m₃; m₁-m₂ angular, both arms straight and of equal length, Rc on angle; m₂-m₃ straight. Hair patch complete, running along upper portion of discal cell, behind radial vein, from base to beyond cell apex.

Female hindwing. Similar to male, except that Sc ends scarcely beyond cell apex; rs-m₁ very short, less than one-third the length of m₂-m₃; no hair patch.

Male genitalia (Figs. 7-10). Eighth tergite with two short and distally widened lateral lobes, without sclerotized claws; saccus short, one-half as long as the valva; tegumen hood-like, not separated by a suture from uncus; uncus stout, posterior area with a strong claw bent downwards; juxta V-shaped, poorly developed; appendices angulares not sclerotized; gnathos lightly developed, its arms being united below the tuba analis by means of a membrane only; valvae symmetrical, long, quite wide, bearing two claw-like appendices on their caudal ends, upper claw shorter and stronger than lower; penis long, slender, curved between the anterior and middle thirds; foramen penis very long, one-third of the total length; gonoporus flared, terminal; vesica with cornuti.

Female genitalia (Fig. 11). Vaginal plate irregular, funnel-shaped, with a lateral aliform process on left side; ostium bursae located left of longitudinal axis of abdomen; caudal end of ostium bursae strongly sclerotized and slightly bent left and downwards, remainder of ductus very long; bursa copulatrix with poorly developed signa and with a globular appendix bursae.

Type-species: *Paititia neglecta* Lamas, sp. n.

Etymology. The generic name is based on the Quechua word "Paititi," which refers to the fabulous kingdom of "El Dorado," so ardently sought by explorers and adventurers in South America, almost ever since the discovery of the New World. It should be treated as being of feminine gender.

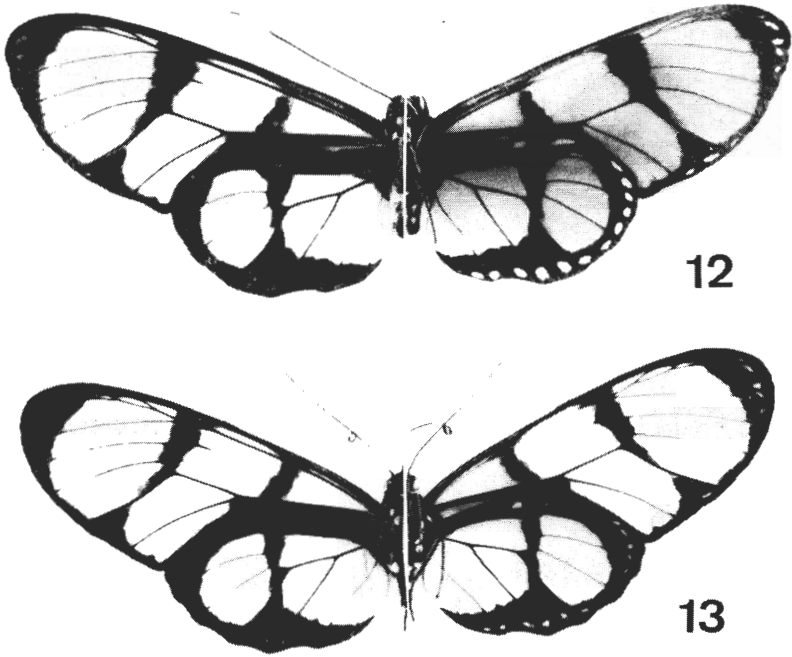
Paititia neglecta Lamas, new species

Male (Fig. 12). Wing margins and transverse bands black, transparent areas with a yellowish tinge. Hindwing below with two white spots on cell Sc + R₁-R₂, and a row of marginal double white spots on cells M₁-M₂ to Cu₂-2A. Humeral spot white, costal line pale yellow. Abdomen below, and all other body spots, white.

Female (Fig. 13). Similar to male, hindwing white, marginal spots smaller.

Types. HOLOTYPE ♀, Juanjui, San Martín, Perú; xi.34 (G. Klug), deposited in the British Museum (Natural History). One PARATYPE ♂, Achinamiza, San Martín, Perú; 14.i.26 (H. Bassler, station F6001); AMNH Acc. 33591, in the American Museum of Natural History, New York. One PARATYPE ♂, Iberia, Madre de Dios, Perú; 27.vi.75 (J. M. Schunke), in the Museo "Javier Prado," Lima.

Etymology. The specific name is the Latin word for "forgotten."



FIGS. 12-13. *Paititia neglecta*, gen. n., sp. n.: 12, paratype male, Achinamiza; 13, holotype female. Dorsal left, ventral right.

DISCUSSION

Relationships

Paititia is considered to be the most primitive member of the tribe Mechanitini (Lamas, 1973). It indeed seems to represent a link between the Tithoreini and Mechanitini.

Paititia neglecta resembles members of the genus *Olyras* Doubleday (cf. Fox, 1940, 1956), in the shape of the male forelegs, wing venation and genitalia, and even the presence of the white spots on the hindwing cell $Sc + R_1-R_s$ below (present in most forms of *Olyras*). However, *Olyras* differs by the divided hair patch and by the valvae having only one short claw-like process, the females being even more different.

Paititia is very close to *Thyridia* Hübner (= *Xanthocleis* Boisduval), both having almost identical venation, but I believe the differences presented by the male and female genitalia and foretarsi are enough to separate them.

Natural history

Nothing is known about the life-habits of *Paititia neglecta*. Two of the localities where it has been found (Juanjui and Iberia) are characterized by rather dry tropical forest. This may represent an example of a primitive species which has been displaced to marginal habitats by a more modern and aggressive species, as seems to be the case with *Melinaea mnasias* (Brown, 1977).

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LITERATURE CITED

- BROWN, K. S., JR. 1977. Geographical patterns of evolution in Neotropical Lepidoptera: differentiation of the species of *Melinaea* and *Mechanitis* (Nymphalidae, Ithomiinae). *System. Entomol.* 2: 161-197.
- FOX, R. M. 1940. A generic review of the Ithomiinae (Lepidoptera: Nymphalidae). *Trans. Amer. Entomol. Soc.* 66: 161-207.
- . 1956. A monograph of the Ithomiidae (Lepidoptera). Part I. *Bull. Amer. Mus. Nat. Hist.* 111: 1-76.
- . 1967. A monograph of the Ithomiidae (Lepidoptera). Part III. The tribe mechanitini Fox. *Mem. Amer. Entomol. Soc.* 22: 1-190.
- LAMAS, G. 1973. *Taxonomia e evolução dos gêneros Ituna Doubleday (Danainae) e Paititia, gen. n., Thyridia Hübner e Methona Doubleday (Ithomiinae) (Lepidoptera, Nymphalidae)*. D.Sc. Thesis to the Departamento de Zoologia, Instituto de Biociências, Universidade de São Paulo, vii + 225 p.