

New neotropical species of *Pseneo* (Hymenoptera, Sphecidae, Psenini)

by

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Abstract. — The following new species are described: *Psen (Pseneo) cooperi*, *Psen (Pseneo) minidentatus*, *Psen (Pseneo) nigripes*. Supplements to the earlier published key are also given as well as some new records.

Soon after the preparation of my publication on neotropical species of *Psen* and *Pseneo* (1975, *Tijdschr. Ent.* 118: 1-41) I received another small but interesting consignment of South American Psenini. They had recently been collected in Colombia by Mr. M. Cooper for the British Museum (Natural History), London. The study of this material resulted in the description of two new species of *Pseneo*. A third new form belonging to this subgenus was found in the material received from Mr. Manfredo A. Fritz, Buenos Aires.

I take this opportunity to thank Mr. Colin R. Vardy of the London Museum, Mrs. Janice C. Scott of the Museum of Comparative Zoology, Cambridge, Massachusetts, and Mr. Fritz for their cooperation.

Psen (Pseneo) cooperi sp. nov.

Female (holotype). — Length about 11.5 mm. Black; base of flagellum reddish, palpi brown and yellowish-brown, tegulae reddish-brown. Fore and mid tibiae and tarsi reddish, hind tibiae and tarsi reddish except apex of tibiae and bases of tarsal segments. Veins of wings blackish-brown, stigma distinctly paler, yellowish-brown.

Clypeus densely punctate, lower half superficially punctate, anterior margin distinctly tridentate. Frons finely densely punctate, interstices between punctures between ocelli and oculi and on vertex mostly a few times size of punctures. Third antennal segment about four times as long as broad at apex, segments 9-11 slightly longer than broad. Tempora very finely punctate.

Pronotal corners not distinctly spicate, rectangular in frontal view. Scutum with strong punctures and irregular longitudinal rugae; antero-laterally and laterally finely densely punctate only. Scutellum shining, sparsely punctate. Enclosed area of propodeum with mostly irregular oblique carinae, back of propodeum coarsely reticulate. Mesopleura and mesosternum distinctly finely punctate, interstices a few times size of punctures; hypo-epimeral area punctate and with oblique rugae, anterior plate of mesepisternum finely punctate, anterior oblique suture coarsely foveolate.

Petiole about as long as first and second gastral tergites together, lateral groove distinct on anterior half only. Gaster very finely punctate. Pygidial area narrowly triangular, with distinct median longitudinal keel, a row of large, hairbearing punctures along lateral margin.

Pubescence of face below antennae and on pronotum golden, mostly appressed. Pubescence of rest of body including mesosternum golden, of normal density. Petiole dorsally with lateral row of extremely fine punctures, each bearing a minute hair, ventrally with sparse long and erect hairs.

Male unknown.

Colombia: 1 ♀, holotype, Valle, Cali, 900 m, 21 Dec. 1974, M. Cooper (BM).

This species differs from the closely related *P. auriger*, from Peru and Brazil, by the less dense golden pubescence, the more distinct longitudinal rugae of the scutum, the partly distinct lateral grooves of the petiole, the darker scape of antennae, and darker femora and petiole.

Psen (Pseneo) minidentatus sp. nov.

Female (holotype). — Length about 9 mm, including sting. Black; basal half of antennae including scape and pedicel reddish, palpi yellowish-brown. Pronotal tubercles

dark reddish-brown. Tegulae reddish-brown. Apices of femora, and tibiae and tarsi reddish, tibiae more or less darkened on outer side, tibial spurs reddish. Veins of wings blackish, stigma paler, yellowish-brown.

Clypeus dull, densely punctate, anterior margin emarginate, median tooth very small. Frons and vertex densely punctate, frons with narrow interstices, interstices between ocelli and oculi and behind ocelli larger than punctures. Third antennal segment about four times as long as broad at apex, segments 9-11 about quadrate, segment 12 about 1½ times as long as broad at base. Tempora minutely punctate.

Pronotal corners spicate. Scutum rugoso-punctate, longitudinal rugae distinct, irregular. Anterior half of scutellum shining, with a few large punctures, posterior half longitudinally rugose. Enclosed area of propodeum shining, with regular oblique carinae, back of propodeum moderately coarsely reticulate. Mesopleura, hypo-epimeral area and mesosternum smooth, sparsely minutely punctate, hypo-epimeral area with some indistinct sculpture on upper third. Anterior plate of mesepisternum finely punctate, anterior oblique suture foveolate. Petiole longer than first two gastral tergites together, with weak lateral groove. Gaster very finely punctate. Pygidial area narrowly triangular, median longitudinal carina distinct only near apex, very low on base.

Face below antennae and pronotum golden, mostly appressed pubescent, rest of body including mesosternum golden or brownish-golden.

Male unknown.

Colombia: 1 ♀, holotype, Putumayo, Mocoa, 7 Nov. 1974, M. Cooper (BM).

This form seems to be very close to *P. canalicus* Van Lith, from Panama Canal Zone, which has similar clypeal median tooth, scutum, pygidial area, reddish scape and pale stigma, but which has a silvery pubescent face and mesosternum and finer punctuation of the vertex. It is also similar to *P. aurifrons* Taschenberg, from Brazil, from which it differs by the weaker punctuation of the vertex, the more distinct rugae of the scutum and the reddish scape of the antennae, which is black in *P. aurifrons*.

Psen (Pseneo) nigripes sp. nov.

Female (holotype). — Length including sting about 9 mm, gastral segments somewhat retracted. Black; palpi brown, base of flagellum reddish, tegulae yellowish-brown, tarsi dark brown. Veins of wings including stigma black, upper half of radial cell fuscate.

Clypeus densely punctate, anterior margin distinctly tridentate. Frons densely coarsely punctate, no distinct shining interstices, vertex transversely striato-punctate. Tempora finely striate. Third antennal segment over four times as long as broad at apex, segments 9-11 about quadrate, segment 12 about 1½ times as long as broad at base.

Pronotal corners spicate. Scutum and scutellum entirely densely coarsely punctate, both also with irregular longitudinal rugae. Propodeum coarsely reticulate. Mesopleura and mesosternum distinctly, rather densely, punctate and with fine longitudinal striation; hypo-epimeral area shining with coarse oblique rugae; anterior plate of mesepisternum densely striate. Anterior oblique suture foveolate. Epicnemium smooth and shining. Petiole long, with distinct lateral groove. Gaster minutely punctate. Pygidial area shining, apex with short median keel, distinct hair-bearing punctures along lateral margin.

Pubescence of face and pronotum golden, mostly appressed, of rest of body brownish-golden. Petiole dorsally with lateral row of extremely fine punctures, each with short fine hair; ventrally with few long erect hairs.

Male unknown.

Colombia: 1 ♀, holotype, Colombia Orient., Cundinamarca, Monterredondo (Coll. Fritz).

P. nigripes is most similar to *P. claviventris* (Cameron), from Mexico, but has less shining interstices on the vertex and less distinct and less shining rugae on the scutum. Moreover the pubescence of *P. claviventris* is more silvery. Because of the coarser sculpture it is not likely that *P. nigripes* is the still unknown female of *P. funicularius* Van Lith, also from Colombia.

AMENDED SECTIONS OF KEY TO THE SPECIES OF NEOTROPICAL *Pseneo*

9. Pronotal angles not strongly spicate. Stigma of fore wings pale yellowish-brown 9a.
- Pronotal angles strongly spicate. Petiole laterally flattened or with distinct groove 10.
- 9a. Head, thorax except enclosed area of propodeum, and gaster in female densely golden pubescent, on propodeum unusually dense. Petiole in both sexes with rounded or flattened sides, no distinct keel or groove. In female base of antennae including scape, mandibles, legs including trochanters and petiole reddish. Vertex distinctly punctate, interstices a few times larger than punctures. Scutum with distinct but incomplete rugae. Anterior half of scutellum not rugose, shining interstices between punctures. Mesopleura indistinctly punctate. Male: petiole, trochanters and greater part of femora dark. Small tyloides on sixth antennal segment, shining small oval tyloidea on segments 7-9. Peru, Brazil (Mato Grosso) *auriger* Van Lith
- Pubescence of normal density, golden. Petiole with distinct lateral groove on anterior half. Base of flagellum, fore and mid tibiae, tarsi, base of hind tibiae, hind tarsi reddish; hind tarsi somewhat darkened. Scutum more distinctly rugose. Scutellum shining, sparsely punctate. Mesopleura finely punctate, interstices often a few times size of punctures. Male unknown. Colombia *cooperi* sp. nov.
10. Stigma of fore wings yellowish-brown, paler than veins 10a.
- Stigma of fore wings brown or black, not much different from veins. Scutum except anterior and antero-lateral margins distinctly longitudinally striate or rugose 11.
- 10a. Scutum densely punctate with tendency to longitudinal striation. Anterior half of scutellum punctate with large interstices, posterior half rugosopunctate. Mesopleura finely punctate, in male on upper part also some fine striation. Hypo-epimeral area with coarse rugae. Vertex coarsely punctate, narrow interstices. Clypeal margin with distinct median tooth, somewhat smaller than lateral teeth. Median keel of pygidial area also distinct on base. Scape black, tibiae, tarsi, upper side and foreside of femora reddish. Pubescence of face and pronotum pale golden, vertex and scutum golden-brown, remainder of thorax including mesosternum, gaster and legs pale golden pubescent. Antennal segments 4-6 of male with narrow oblong, segments 7-10 with shining black, oval tyloidea, 11th segment with small or indistinct tyloides. Brazil *aurifrons* (Taschenberg)
- Longitudinal rugae of scutum more distinct. Hypo-epimeral area smooth on lower $\frac{2}{3}$. Vertex less strongly and less densely punctate, with distinct shining interstices. Clypeal margin emarginate, median tooth very small. Median keel of pygidial area very low on basal half. Scape, basal half of flagellum, tibiae except outer side, and tarsi reddish. Entire pubescence golden. Male unknown. Colombia *minidentatus* sp. nov.
12. Mesopleura and mesosternum yellowish-grey or whitish pubescent. Femora and tibiae black or brown, at most foreside of fore and mid tibiae dark reddish-brown 13.
- Mesopleura and mesosternum distinctly golden or pale golden pubescent 13a.
- 13a. Legs black, tarsi dark brown. Vertex densely coarsely punctate and transversely striate, very few shining interstices. Scutum and scutellum densely coarsely punctate with irregular longitudinal rugae. Mesopleura rather densely finely punctate and finely striate, hypo-epimeral area with strong rugae. Base of flagellum reddish, tarsi dark brown. Entire pubescence golden, not extraordinarily dense. Male unknown. Colombia *nigripes* sp. nov.
- Tibiae more or less reddish. Punctuation of vertex with distinct shining interstices 14.

NEW RECORDS

Psen (Pseneo) longiventris (Cameron)

Cameron, 1891, Biologia Centr.-Amer. 2: 137.

Van Lith, 1975, Tijdschr. Ent. 118: 23-25.

Colombia: 1 ♀, Magdalena, 7 km E Santa Marta, dry tropical forest, 6 Dec. 1974, M. Cooper (BM).

Psen (Pseneo) taschenbergi Van Lith

Van Lith, 1975, Tijdschr. Ent. 118: 35-37.

Argentina: Tucumán, 1 ♀, Villa Nougues, 1250 m, 5-8 Dec. 1964, 7 ♀, Horco Molle, 23 Jan.-30 April 1966, 2 Nov.-23 Dec. 1967, 1 ♀, Raco-Tucumán, 4 Febr. 1966, Garcia-Porter, 1 ♀, Aconquija, Mar Parque, 7 Nov. 1967, 1 ♂, Las Cejas, 1-21 Jan. 1968, 1 ♀, Trancas, Tacunas, 12 Nov. 1968; Salta, 1 ♀, Rio Pescado (Est YPF), 19-25 Nov. 1967, C. Porter, E. Willink, 1 ♀, 24 km NW Aquas Blancas, 9 May 1969, all, unless mentioned otherwise, collected by C. C. Porter (Museum Comparative Zoology, Cambridge, Massachusetts).

Brazil: Santa Catarina, 4 ♀, Nova Teutonia, Oct.-Nov. 1966, Aug.-Sept. 1967, 1 ♂, March 1951, Fritz Plaumann; 1 ♀, Santa Catarina, Serra Alta, 17 Febr. 1969, C. C. Porter; São Paulo, 1 ♀, Serra da Bocaina, S. J. Barreiros, 13-17 Jan. 1969, Porter, Garcia; Paraná, 2 ♀, Rincão, 22 Febr. 1969, C. Porter, A. Garcia (Museum Comparative Zoology, Cambridge).

These specimens, which were all labelled as paratypes, have erroneously been omitted from the records in my earlier paper.

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IPHICLIDES PODALIRIUS L. IN 1974 IN DE AMSTERDAMSE WATERLEIDINGDUINEN (LEP., PAPILIONIDAE). Op 19 augustus 1974 belde de heer Van Aartsen me op en vertelde, dat hij die middag niet minder dan drie exemplaren van *podalirius* gezien had, die op bloeiend Slangekruid vlogen dicht bij de ingang de Oase even ten noorden van Vogelenzang. Eén ervan had hij gevangen, dat vond hij genoeg. Dat was natuurlijk een wonderlijke waarneming, drie op één middag en dan nog wel van de tweede generatie, die in het noordelijke deel van het areaal altijd heel schaars is, zeker in een seizoen als 1974 was!

Enige tijd daarna ontving ik een brief van Prof. A. Stolk te Amsterdam, die al even enthousiast schreef, dat hij in hetzelfde terrein, maar veel zuidelijker, op 22 juni een Koningspage van zo dichtbij gezien had, dat hij er zelfs een goede dia van had kunnen maken. De veronderstelling lag toen voor de hand, dat de drie van 19.VIII van deze of een andere moesten afstammen.

Toch zal men *podalirius* tevergeefs in het trekverslag over 1974 zoeken. In het voorjaar van 1975 brachten v. A. en ik namelijk een kort bezoek bij de heer Verdonk, de chef van het terrein. Natuurlijk kwamen de waarnemingen van *podalirius* ter sprake. Maar toen bleek, dat onze gastheer in het voorjaar van 1974 rupsen meegebracht had uit de Ardèche en later de vlinders in het terrein had laten vliegen. Eén van deze losgelaten exemplaren heeft Prof. Stolk dus gefotografeerd. Nu behoren de Zuidfranse vlinders tot een populatie die altijd een sterke tweede generatie voortbrengt. Het opvallende is dat dit ook lukte in het voor hen toch weinig gunstige Nederlandse klimaat van 1974.

Overigens bewijst dit verhaal wel hoe voorzichtig we moeten zijn met moderne waarnemingen van Koningspages in Nederland. Toevallig kwamen we er dit keer achter hoe de vork in de steel zat, maar hoe zelden zal dat gebeuren! Eigenlijk zouden zulke zeldzame immigranten hier nooit losgelaten mogen worden. In elk geval moeten we maar hopen dat wie het toch doet dit even meldt met opgave van plaats, aantal en datum. — Lpk.