



The genus *Parascepsis* Dognin, 1923 (Lepidoptera, Erebidae, Arctiinae, Ctenuchina) in Peru, with the description of three new species, a new combination and their geographical distributions

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Abstract

Presently, the Neotropical genus *Parascepsis* Dognin, 1923 is considered monotypic within the Ctenuchina. There are no reviews of a large part of the genera in this subtribe or an approximation to its phylogeny. The material worked with is deposited at the Museo de Historia Natural, Universidad Nacional Mayor de San Marcos (MUSM), and was compared with the original descriptions and the type species of the genus: *Parascepsis solox* Dognin, 1923. The status of *Episcepsis ockendeni* Rothschild was revised. We propose the current state of *Parascepsis* to be made up of five species, three of which are new to science, *P. lantingi* sp. nov., *P. ignobilis* sp. nov. and *P. ingenium* sp. nov., proposing also a new combination, *P. ockendeni* (Rothschild) comb. nov. Redescriptions of *Parascepsis solox* Dognin and *P. ockendeni* (Rothschild) are presented, as well as the description of the three new species. Illustrations of adults and genital structures, and distribution maps for Peru are provided for all.

Key words: Amazon, Arctiini, Neotropic, taxonomy

Introduction

The Ctenuchina occur primarily in the Neotropical region, with some species in the Nearctic region and include genera with species of nocturnal habits, such as *Aclytia* Hübner, *Episcepsis* Butler, *Delphyre* Walker, *Heliura* Butler, *Eucereon* Hübner, as well as genera with species of diurnal habit, among which we can mention, *Dinia* Walker, *Corematura* Butler, *Antichloris* Hübner, *Cyanopepla* Clemens and *Trichura* Hübner. The Ctenuchina currently comprise more than 95 genera, of which 18 are considered monotypic, defined only by external morphology or wing venation (Hampson, 1898, 1914). There is no study about the phylogeny of the group.

It is clear that our taxonomic knowledge of the group has serious limitations because many of the species are only known from their type localities, described with few specimens and in many cases with only one. In subsequent years, this has led any specimen with morphological resemblance to the type series of a described species, to be identified as such, without thorough morphological studies. These cases are somewhat more frequent among species populations in Central and South America. On the other hand, the existence of species complexes still to be studied is increasingly evident, as it has happened with species of the genus *Theages* (Grados & Mantilla 2018; Araujo et al. 2019).

The genus *Parascepsis* is one of those considered monotypic and was proposed by Dognin (1923) for the species *Parascepsis solox*. The type species was described from only one specimen collected in São Paulo de Olivença [Brazil]. Except for the mention of the genus in a taxonomic list of a faunistic study at the Lower Urubamba River, Peru (Grados 2001), there are no other references in the literature.

The ongoing work on the phylogeny of the genus *Episcepsis* Butler (Mantilla & Grados, in preparation), the

little knowledge of the genus and the evident existence of more than one species motivated this work; preliminary results show the genus *Parascepsis* Dognin in a different clade, which includes *P. ockendeni* Rothschild, considered until now within the genus *Episcepsis*

We consider *Parascepsis* as a genus composed of five species, proposing a new combination and describing three new species. We redescribe the species *P. solox* and *P. ockendeni*. Finally, we provide distribution maps of the species in Peru.

Materials and methods

The specimens for the present study have been collected since more than 20 years as part of our studies in Systematics and Biogeography of the Neotropical Arctiinae (JG), through different places in Peru; some specimens have been obtained from daily collections by guests at the Refugio Amazonas Lodge (ARA), located on the right bank of the Tambopata River (Madre de Dios, Peru), as part of the Citizen Science program, with the mutual collaboration between the Natural History Museum (MUSM) and Rainforest Expeditions. Specimens have been collected with light traps, using 250 W mixed light bulbs or mercury light bulbs, and placing them into killing jars with butyl acetate. Specimens preserved and deposited in the following institutions were also examined: Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Perú (MUSM); National Museum of Natural History, Smithsonian Institution, Washington DC, USA (USNM); Natural History Museum, London, United Kingdom (NHMUK). Terminology for venation follows Comstock and Needman (1898, 1899), Miller (1970), Wootton (1979), and Common (1990); and for genitalia, it follows Sibatani *et al.* (1954), Kuznetsov (1967) and Klots (1970). The genitalia of the specimens were dissected and prepared using a KOH solution (10%) in a water bath. For a better observation of the traits, Chlorazol black was used as a staining solution (Cannon 1937, 1941; Carayon 1969). Photographs of the adults were taken with a Nikon D80 camera, those of males genitalia with a stereoscope microscope Olympus SZX12 with an Olympus DP70 camera, and the females genitalia with stereoscope microscope Leica S APO with camera Leica MC 190 HD. Details of the wing with a camera Canon EOS Rebel T6 and a Canon MP-E 65 mm macro.

Results

Parascepsis Dognin, 1923

The genus *Parascepsis* Dognin, 1923 was proposed as a monotypic genus with *Parascepsis solox*, based only on one male specimen collected in São Paulo de Olivença [Brazil]. We propose that the genus consists of five species, including *P. ockendeni* new comb. and three new species: *P. lantingi*, *P. ingenium*, and *P. ignobilis*. The genus is characterized by brown body, brown forewings with some purple hue, androconial patches at the subproximal part of anal cell of the forewing and an elongated area with brown spicules at the costal cell of the hindwing, saccus developed, tegumen with a translucent area and lateral projections, valvae elongated, ventral process membranous and vesica with cornuti.

Parascepsis solox Dognin, 1923

(Figs. 1–8)

Parascepsis solox Dognin, 1923:3. Male holotype by monotypy: [Brazil] São Paulo de Olivença, novembre-décembre, Amazonas (Fassl) (USNM) [Specimen examined]

Diagnosis: Similar to *P. ignobilis*, and easily confused with it. The hindwings of *P. solox* have a much more pronounced white area in the posterior half, in dorsal and ventral view. *P. ignobilis* presents the first two tergites at the sternum, modified into a hexagonal androconial organ, while *P. solox* does not present them. It is the only species with a piriform translucent area at the tegumen; vesica everted dorsally with a semicircular patch of cornuti in latero-ventral position, and other subdorsal cornuti.

Redescription of the male (Figs. 1–2). **Head.** Proboscis dark brown. Labial palpi grayish brown and recurved upwards, exceeding the frontoclypeus; first palpomer brown at the dorso-proximal part; second palpomer twice as long as the first one; third palpomer one third the length of the first one, frontoclypeus light brown, at the upper part with piliform whitish gray scales. Vertex brown. Occiput with piliform whitish gray scales, with three dark brown lines: a straight central one and two lateral ones directing towards the antennae. Postgena, eye margin and ocelli brown. Antennal alveolus grayish. Antenna brown with slight metallic hue. Scape and pedicel with few gray scales and a slight metallic hue. Proximal rami small, increasing in length towards the middle part. Middle rami almost twice the width of the flagellum axis. Distal rami decrease in length towards the antennae distal end. **Thorax.** Tegulae and patagia grayish brown with an iridescent green hue. Mesoscutum and mesoscutellum grayish-brown, with a faint brown line along the central part. Metascutellum grayish. Pleura, grayish brown. Tymbal organ at the katepisternum covered with whitish scales. **Legs:** Grayish brown. First pair with the anterior part and ectal margin, whitish. Femora with the anterior part brown. Tibiae with some purple hue. **Forewing.** Forewing span (15–15.5 mm) (n = 4). **Dorsal:** Brown, with purple hue and light brown veins. A slightly fairier postdiscal spot. **Ventral:** Brown with slight purple hue. Veins slightly marked. Frenulum light brown. Retinaculum slightly grayish brown. Base of Cu_2 - CuP with scales grayish-brown. From the base to the medial part of CuP -1A + 2A, white scales that reach part of the anal cell. Androconial patch with scales creamy white at the subproximal part of the anal cell (Fig. 7), and below it, an elongated area of yellow scales. **Hindwing. Dorsal:** Costal margin down to Cu_2 , brown with some purple hue, going down in a wide band to the tornus, narrower at the anal margin. Subproximal area, rounded and elongated with brown spicules in the costal cell (Fig. 8). Whitish area at just over the proximal half of Cu_2 -1A + 2A, reaching up to near the margin of 1A + 2A-3A. **Ventral:** With a white area similar to the dorsal one, but better defined and whiter at the proximal half of Cu_1 - Cu_2 . **Abdomen.** Brown with slightly bluish hue. First tergite with abundant gray scales on the sides, in its central part with grayish brown piliform scales. Second, third and fourth tergite, with grayish brown piliform scales. Sternum grayish brown. **Male Genitalia** (Figs. 3–6) (Genitalia # JGA 777 MUSM). Anterior part of the tegumen concave, inverted “V-shaped”; the postero-lateral part bears a translucent piriform area; two membranous projections present, base sclerotized with small spicules on the ventral side, the distal part membranous. Saccus developed almost oblong with sinuous edges. Joining of tegumen and uncus membranous. Uncus short and digitiform, with few setae at the base, ending in a small sclerotized, hook-shaped tip. Juxta wide and sclerotized, lateral parts with minute structures like spicules; posterior part shaped as a “W”. Valvae straight, narrow and elongated, with setae at the base of the sacculus and along the costa. Ventral process membranous exceeding the uncus a third of its length, with setae; dorsal process almost triangular apically with a triangular and sclerotized projection towards the inner part. In ventral view, valva elongated, concave at the base and the distal part wide at its middle part; with setae at the inner margin. Aedeagus elongated. Coecum penis slightly developed. Vesica everted dorsally, as long as the aedeagus; a semicircular row of cornuti at the latero-ventral surface; several cornuti at the subdorsal part project towards the ventral part almost reaching the other cornuti.



FIGURES 1–2. *Parascepsis solox* (Dognin). Male. **1.** Dorsal view (San Regis). **2.** Ventral view. Scale= 5 mm.

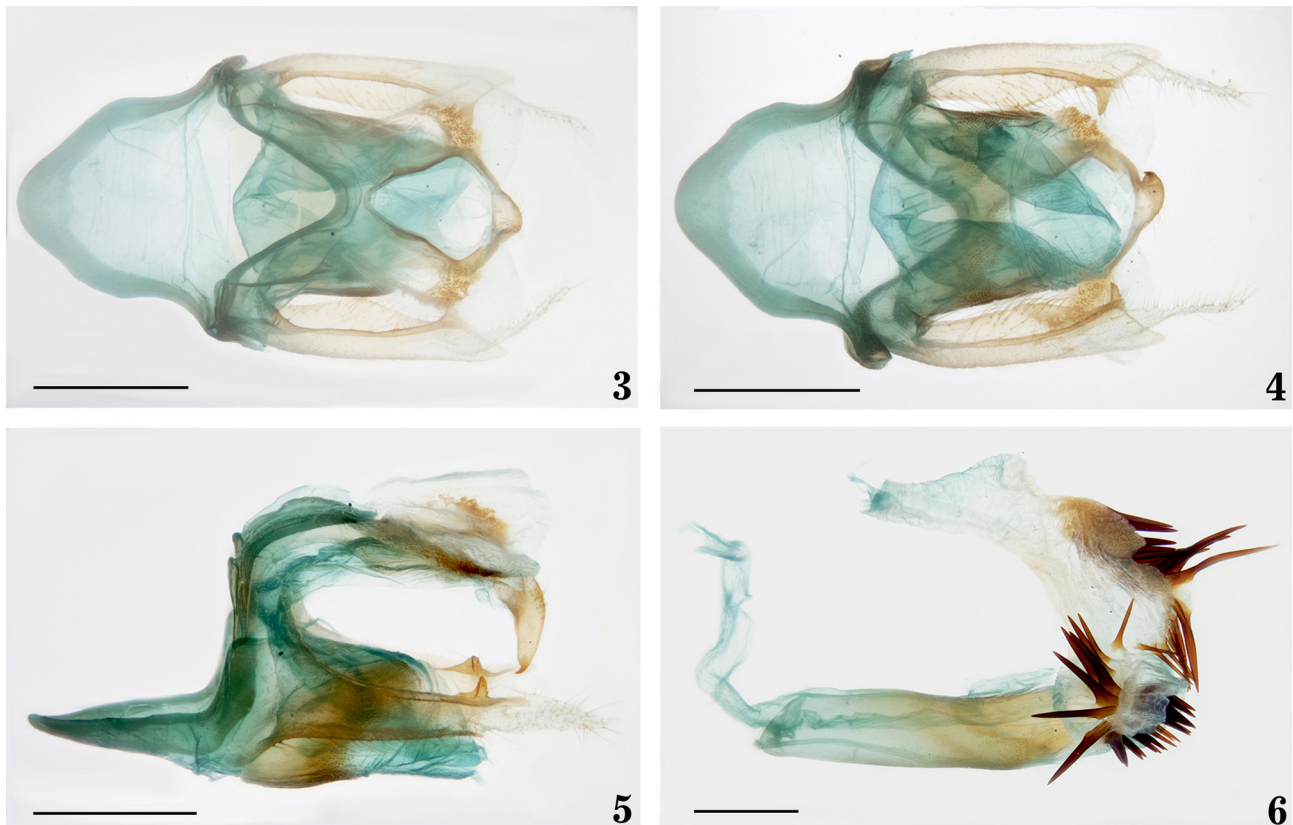
Female: Unknown.

Distribution (Fig. 59): Known from the type locality (São Paulo de Olivença, Brazil) and the department of Loreto (Peru).

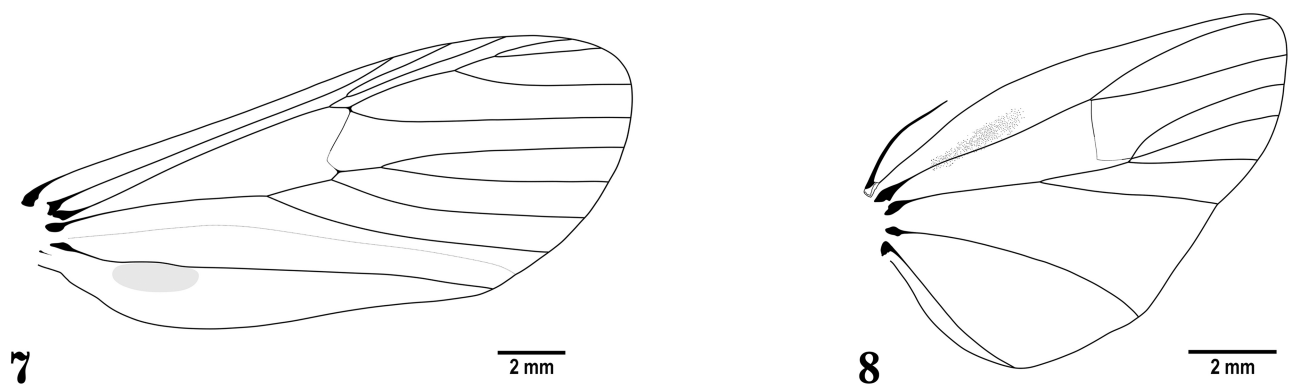
Comments: Dognin (1923) described the species from a male specimen collected by Fassl in São Paulo de Olivença, Amazon River (Brazil). Dognin (1923) provided a succinct description of the genus, based primarily on

external morphological characters and wing venation characters, which do not help much in the diagnosis of the genus. After the description of the species, there are not many records in the literature. It was reported in a work at the Amazonian area of the department of Cusco, Peru (Grados 1999), being confused, since it is actually a new species, which is described in the present work.

Material examined: PERU, Loreto. 1 male, Z.R. Allpahuayo Mishana, Agua Blanca. 03°56'S, 73°28'W, 130 m, 07.vi.2004, J.J. Ramírez (Genitalia # JGA 718 MUSM); 1 male, idem except, 14.viii.2004 (Light trap, 8: 30-9: 00 pm) (Genitalia # JGA 777 MUSM); 1 male, San Regis (Albergue La Posada), 04°30'30''S, 73°54'30''W, 130 m, 23.ix.2002, J.J. Ramírez (Light trap, MV, 8: 30-9: 00 pm); 1 male, idem except, (9: 30-10: 00 pm).



FIGURES 3–6. Male genitalia of *Parascepsis solox* (Dognin). (Genitalia # JGA 777 MUSM). 3. Dorsal view. 4. Ventral view. 5. Lateral view. 6. Aedeagus. Scale= 1 mm.



FIGURES 7–8. Wings of *Parascepsis solox* (Dognin). 7. Forewing. 8. Hindwing.

***Parascepsis ockendeni* (Rothschild, 1911) comb. nov.**

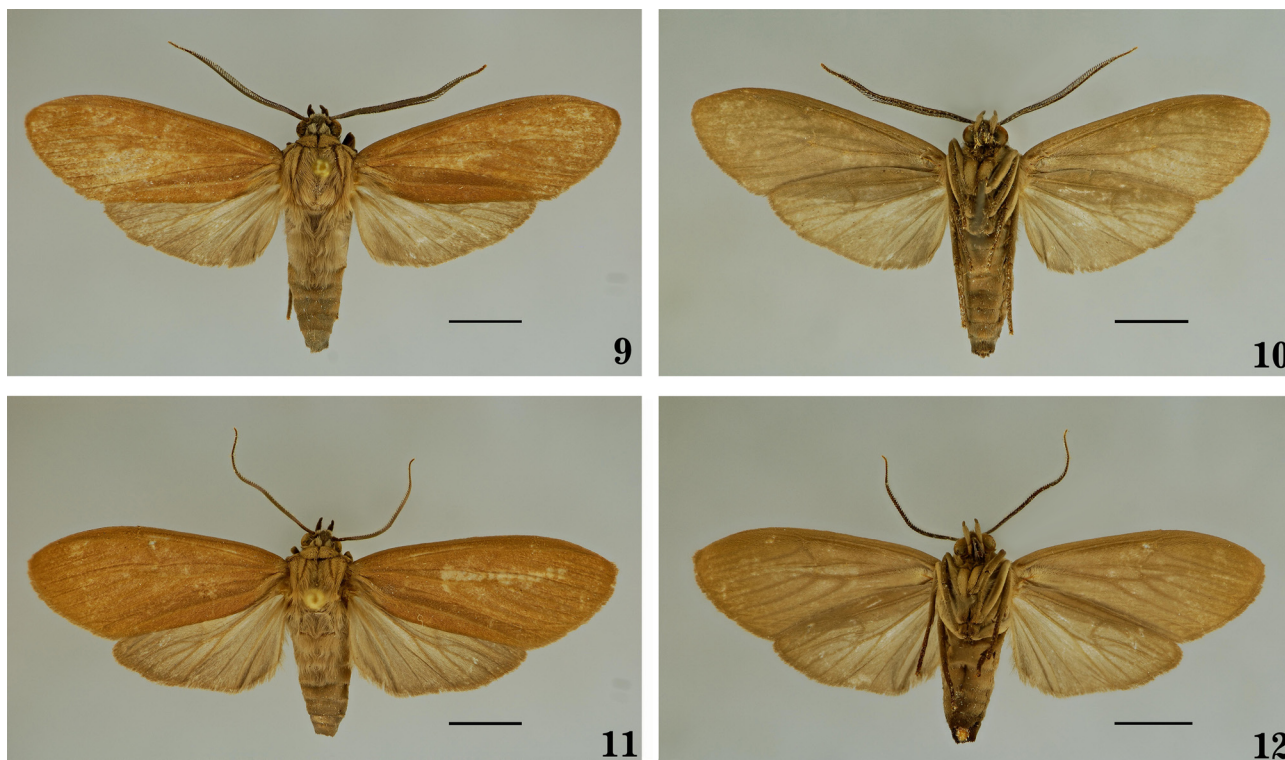
(Figs. 9–20)

Episcepsis ockendeni Rothschild, 1911: 44. Male holotype by original designation: Peru, Santo Domingo, Carabaya, 6000-

6500ft (BMNH) [Specimen examined]; Rothschild, 1912: 375, pl. 3, f. 9; *Episcepsis occendeni* [sic] Hampson, 1914: 244.

Diagnosis: Similar to *P. lantingi*. It differs in the tegulae and patagia being grayish brown, while in *P. lantingi* they are metallic green. On the forewings, *P. lantingi* presents, under 1A + 2A, a subproximal yellowish androconial patch and, at the hindwings, the costal cell with an elongated and somewhat ovoid area with small light brown spicules, absent in *P. ockendeni*. In the genital capsule, *P. ockendeni* bears a translucent subquadrate area, sclerotized spicules at the fultura superior, the vesica of the aedeagus with cornuti at the dorsal surface and projecting to the right side, while in *P. lantingi*, the translucent area is ovoid, there are no spicules at the fultura superior and the cornuti at the proximal area direct towards the right side of the posterior part.

Redescription. Male (Figs. 9–10). **Head.** Proboscis dark brown with distal end yellowish. Labial palpi recurved upwards, reaching the superior part of the frontoclypeus. Palpi grayish brown: first palpomer with its dorsal part brown; second one twice as long as the first one with lighter scales on its frontal part and; third one with scales lighter on its anterior part and almost a third of the first one. Frontoclypeus brown; superior part with whitish gray piliform scales. Vertex brown. Occiput, with whitish gray piliform scales and three dark brown lines: a straight central one and two lateral ones. Postgena brown. Eye margin light brown. Ocelli caramel brown. Antennal alveolus gray brown. Antennae brown, with slight metallic purple hue. Scape brown. Proximal rami small, increasing in length towards the middle part. Length of the middle rami almost twice the width of the shaft. Distal rami decrease in length towards their distal end. **Thorax.** Patagia grayish brown at the edges. Tegulae grayish, with brown mesal edge and an oblique brown line projecting towards the base of the wing; brown in the anterior part. Mesoscutum, mesoscutellum, and pleura grayish brown. A faint brown line along the central part of the mesoscutum and mesoscutellum. Metascutellum with grayish brown piliform scales on the side. Tymbal organ at the katapisternum covered by grayish brown scales. Legs: Grayish brown; except the first pair, with lighter scales on the anterior part. Epiphysis brown.



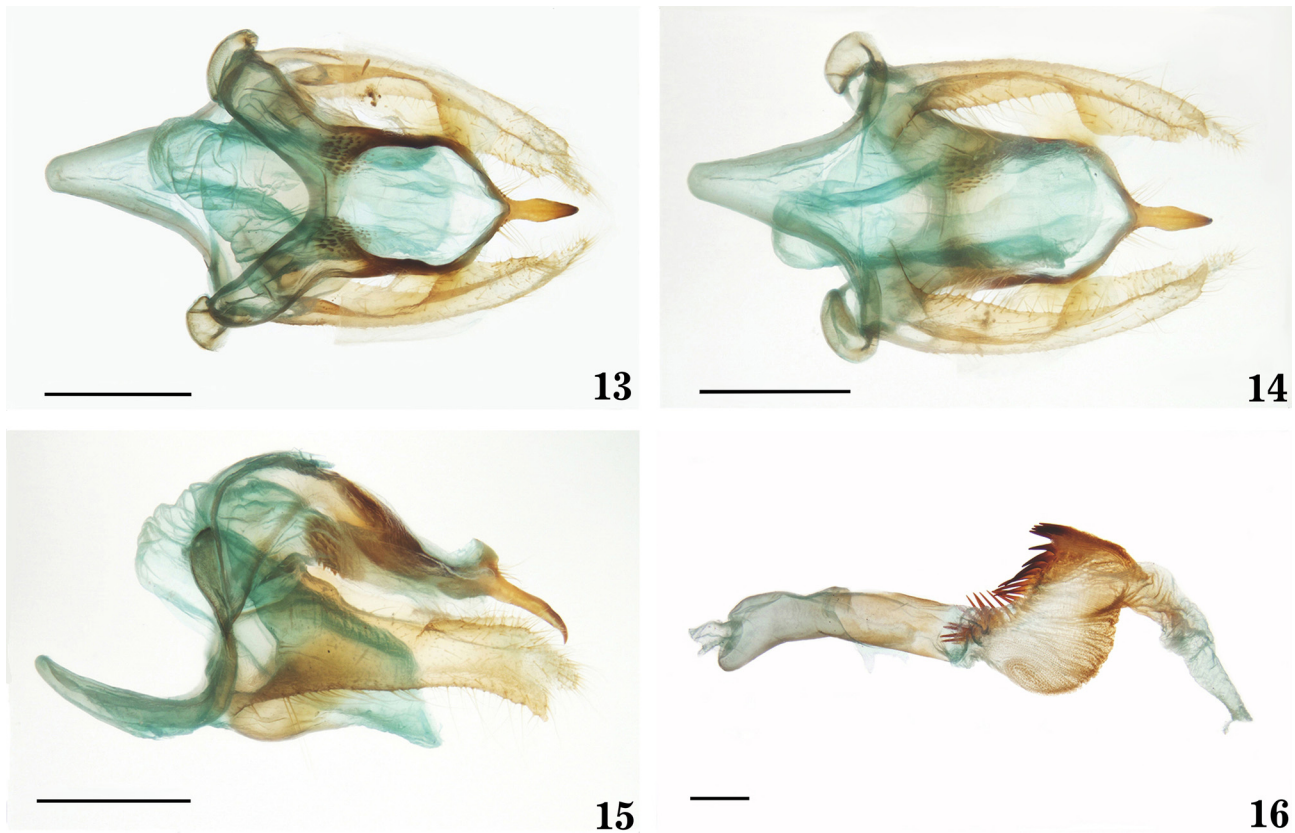
FIGURES 9–12. *Parascepsis ockendeni* Rothschild. 9–10. Male (Echarate, C.C. Ochigoteni). 9. Dorsal view. 10. Ventral view. 11–12. Female (Campamento Comercial). 11. Dorsal view. 12. Ventral view. Scale= 5 mm.

Forewing. Forewing span (17.5–19.5 mm) (n = 19). **Dorsal:** Brown with a very faint purple hue, revealing the light brown veins. **Ventral:** Brown. Frenulum brown and retinaculum grayish brown. Cu₂- CuP base with scales grayish brown. Whitish scales on the subproximal part of the anal cell. **Hindwing. Dorsal:** Brown. Costal cell, R_S-M₁ and part of the discal cell, with iridescent scales grayish brown. **Ventral:** Brown. **Abdomen.** Grayish brown,

with slightly bluish hue. The first 4 tergites with piliform scales grayish-brown. Sternum grayish brown. **Male genitalia** (Figs. 13–16) (Genitalia # JGA 775 MUSM). Tegumen somewhat elongated, anterior part concave and shaped as an inverted “V”; with a translucent subquadrate area, anterior part obtuse and posterior one sharp; on the lateral part with a somewhat sclerotized projection, almost the width of the translucent area. Saccus elongated, sharp with rounded apex. Joining of the tegumen and uncus, sclerotized. Uncus elongated, wider towards the central part; curved downward ventrally on the tip. Juxta wide and sclerotized, posterior part “W” shaped. Transtilla with an area of sclerotized spicules. Valvae elongated exceeding the length of the uncus; sacculus with numerous setae and costa with some; ventral process short, with apex sharp and sclerotized, almost a third of the length of the dorsal process; dorsal process membranous with numerous setae; in ventral view, valvae elongated, with somewhat irregular edge, arched towards the middle axis and with numerous setae at the mesal margin; dorsal view, in dorsal and distal part with a sclerotized projection towards the middle axis with setae present. Aedeagus elongated, slightly longer than the vesica; coecum penis slightly developed; vesica everted dorso-longitudinally; cornuti elongated, located on the dorsal surface and projecting to the right side; posterior part membranous with tiny spicules somewhat sclerotized on the postero-ventral part.

Female (Figs. 11–12). Forewing span (18–20 mm) (n = 7). Similar to the male, except for the following: rami smaller; middle rami almost half of the shaft width. Frenulum light brown with two bristles. **Female genitalia** (Figs. 17–18) (Genitalia # JGA 992 MUSM). Eighth tergite uniformly sclerotized. Anal papillae elongated, with setae scattered on the posterior and latero-ventral surface; in lateral view, the length 1.5 times its height. Posterior apophyses 1.2 times the length of the anterior ones. Ostium and antrum of central position. Antevaginal lamella membranous. Postvaginal lamella slightly sclerotized. Ductus bursae sclerotized, striate, wide and flattened dorso-ventrally. Cervix bursae membranous. Corpus bursae membranous, elongated; in dorsal view, subrectangular. A semicircular signum on the dorsal surface, in posterior and left lateral position, with some spines; another elongated signum at the right lateral surface. Ductus seminalis emerges near the first signum.

Distribution (Fig. 59): In the montane forests of the departments of San Martín, Junín, Pasco, Cusco and Madre de Dios.



FIGURES 13–16. Male genitalia of *Parascopsis ockendeni* Rothschild. (Genitalia # JGA 775 MUSM). **13.** Dorsal view. **14.** Ventral view. **15.** Lateral view. **16.** Aedeagus. Scale= 1 mm.

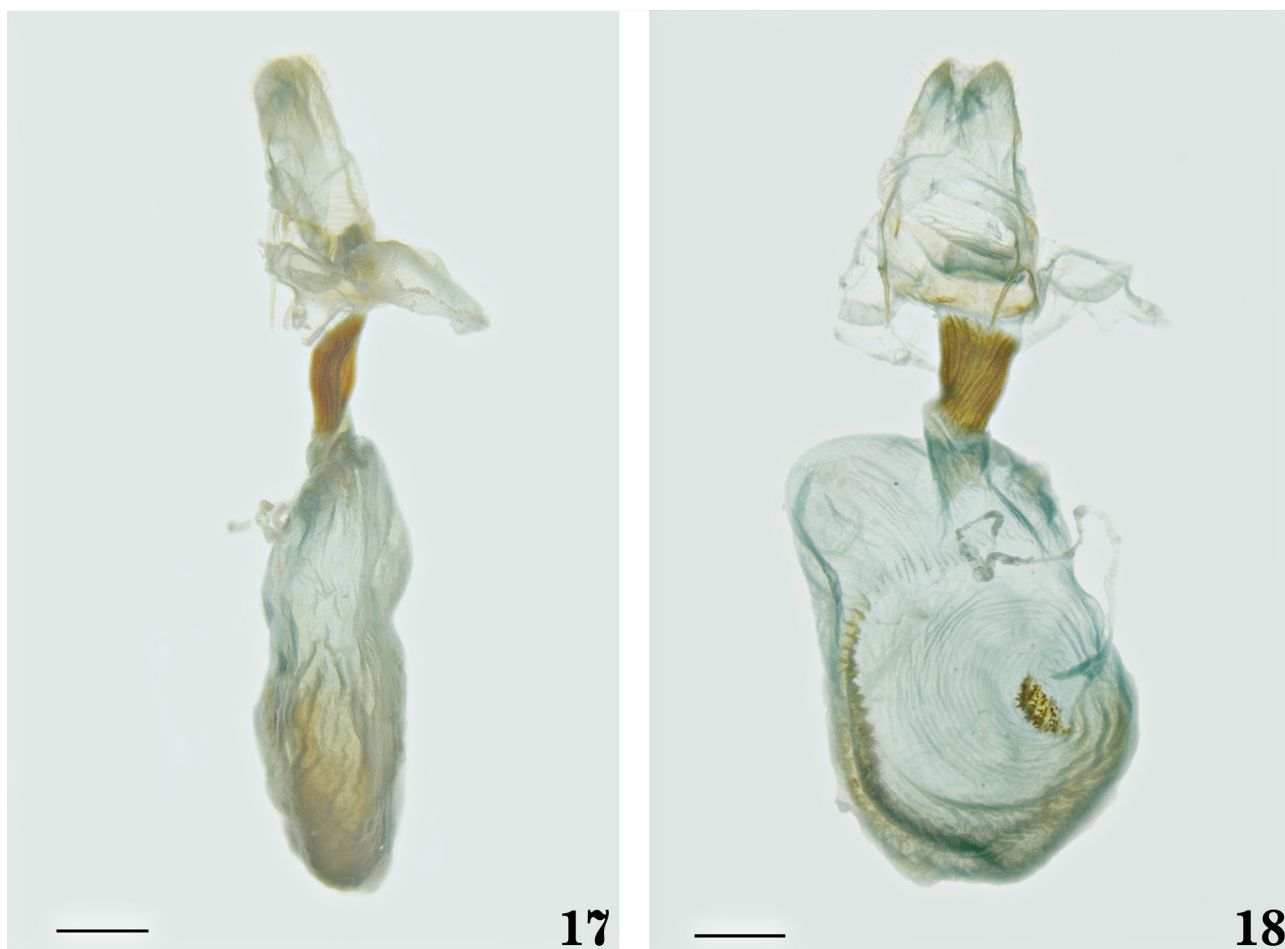
Comments: *P. ockendeni* was described by Rothschild (1911) within the genus *Episcepsis* Butler, with type location at Santo Domingo, Carabaya (department of Puno, Peru), with material collected by G.R. Ockenden, who spent several years collecting insect specimens in southeastern Peru (Grados *et al.* 2015).

According to preliminary studies of phylogeny based on morphological characters of the genus *Episcepsis* Butler, this would be polyphyletic. When including both *E. ockendeni* and *P. solox* to the phylogenetic analysis they form a different clade together, indicating *E. ockendeni* to belong to the genus *Parascepsis*.

Parascepsis is characterized for its occiput bearing whitish gray piliform scales, with three dark brown lines: a straight central one and two lateral ones in the direction of the antennae, while *Episcepsis* presents two red spots on the lateral parts of the occiput; R_1 - R_2 at the anterior wing of *Parascepsis* is bifurcated while in *Episcepsis* R_1 and R_2 are separated; in *Parascepsis* the dorsal part of the abdomen is grayish brown with a slight bluish hue, while in *Episcepsis* it is brown with an iridescent blue hue

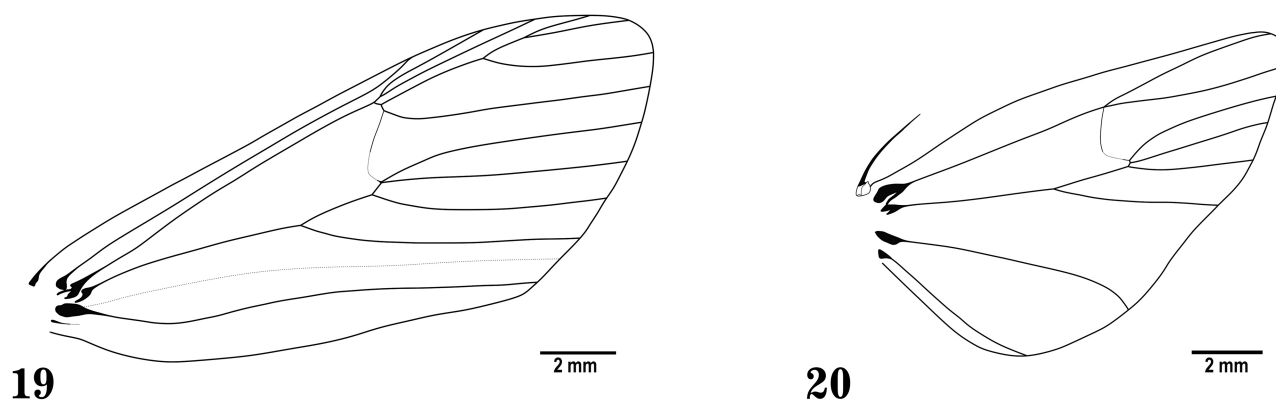
Parascepsis can present androconial patches in the anal cell of the forewings and an elongated area with brown spicules in the costal cell of the hindwings, whereas in *Episcepsis* both are absent and they bear an androconial organ (tufts of hair) in the 1A+2A-3A of the dorsal side of the hindwings; *Parascepsis* have the tegumen slightly H-shaped with posterior elongated branches that join the anterior part of the uncus and form a wide area covered with a translucent membrane that projects towards the lateral parts, while in *Episcepsis* the tegumen is wide, somewhat subrectangular and some species bear projections at the postero-lateral parts; the males of *Parascepsis* have a wide, almost straight aedeagus, while in *Episcepsis* the aedeagus is narrower, slightly sinusoid.

On the other hand, there is *Hyaleucerea lugubris* Schaus, 1901, a species described from Colombia, unfortunately without an exact type locality, whose holotype is in the USNM. Based on the external morphological characters that have been possible to analyze for both species, *P. ockendeni* is very similar to *Hyaleucerea lugubris*. For now, it has not been possible to review the morphological characters of the latter's genital capsule, so it is not possible to state that *P. ockendeni* is a junior synonym of *H. lugubris*.



FIGURES 17–18. Female genitalia of *P. ockendeni* Rothschild. (Genitalia # JGA 992 MUSM). 17. Lateral view. 18. Dorsal view. Scale= 1 mm.

Examined material: PERU. **San Martín**, 1 male, San Martín, Carretera Tarapoto-Yurimaguas, 06°28'S, 76°18'W, 1000 m, 14.xi.1998, J. Grados; 1 female, idem except (Genitalia #JGA 636 MUSM). **Junin**. 1 male, 1.2 km O de San Miguel de Autiki, 10°48'19"S, 74°49'31"W, 1418 m, 06.vi.2014, E. Rázuri (Voucher DNA-Artc # 00836-JGA MUSM). **Pasco**. 1 male, 1 female, Qda. Atarraz, 4.5 km O de Bajo Bocaz, 10°38'17"S, 75°12'34"W, 1640 m, 06-10.viii.2012, E. Rázuri & P. Sánchez; 1 female, idem except, (Genitalia #JGA 992 MUSM); 1 female, idem except, (Voucher DNA-Artc # 00890-JGA MUSM). **Cusco**. 1 male, Cashiriari, 11°52'S, 72°39'W, 690 m, 02.xii.1997, J. Grados (Light trap); 1 male, Campamento Mangoriari, 12° 21'S, 73°02'W, 1500 m, 04.xii.2002, J. Grados; 1 male, idem except, 07.xii.2002; 1 male, 3.5 km ONO de Monte Carmelo, Echarate, 12°26'21.0"S, 72°59'21.1"W, 1349 m, 23.ii.2011, M. Alvarado & E. Rázuri; 1 male, 6 km N de Managua (Río Urubamba y Río Cumpirisiato), 12°33'51.49"S, 73°5'38.33"W, 1700 m, 19.ix.2010, M. Alvarado & J. Peralta; 1 male, La Convención, Echarate, CC. Ochigoteni, 12°39'31.36"S, 73°08'57.71"W, 1449 m, 17.x.2009, C. Carranza & C. Rossi (Light trap) (Genitalia #JGA 776 MUSM); 1 male, idem except, (Genitalia #JGA 775 MUSM); 1 female, La Convención, Echarate, CC. Ochigoteni, 12°39'31.36"S, 73°08'57.71"W, 1449 m, 18.x.2009, C. Carranza & C. Rossi (Light trap); 1 male, idem except, 19.x.2009, (Voucher DNA-Artc # 00837-JGA MUSM); 1 male, idem except, (Genitalia #JGA 880 MUSM); 1 male, Campamento Segakiato, 12°43'S, 73°18'W, 1850 m, 02.xi.2002, J. Grados; 1 male, idem except, 08.xi.2002; 1 male, idem except, (Genitalia #JGA 555 MUSM); 1 female, Campamento Comerciato, 12°47'S, 73°22'W, 1350 m, 15.xi.2002, J. Grados; 1 male, idem except, (Genitalia #JGA 556 MUSM); 1 male, idem except, 23.xi.2002; 1 female, Qda. Quitacalzón, 13°01'19"S, 71°29'50"W, 967 m, 14.viii.2012, J. Grados (Voucher DNA-Artc # 00838-JGA MUSM); 1 male, San Pedro, 13°03'S, 71°33'W, 1400 m, 05.xi.2001, J. Grados. **Madre de Dios**. 1 male, Río Alto Madre de Dios, ca. Atalaya, 12°53'S, 71°22'W, 587 m, 21.ii.2007, P. Centeno (MV Light Trap) (2:00-3:00 am). **Puno**. 5 males, 1 female, Santo Domingo, Carabaya, 13°50'S, 69°40'W, 6000–6500 ft. (1828 m–1981 m), iii.1901, xi.1901, v.1902, xi.1902, xii.1902; 2 females, La Unión, Río Huacamayo, Carabaya, 13°32'S, 69°38'W, 2000 ft. (610 m), xi. 1904; 1 male, Tinguri, Carabaya, 13°52'50"S, 69°40'00"W 3400 ft. (1036 m), viii.1904; 1 male, La Oroya, Río Inambari, 13°50'S, 69°40'W, 3100 ft. (945 m), xii.1905 (G.R. Ockenden) (All specimen from Puno in NHMUK).



FIGURES 19–20. Wings of *Parascepsis ockendeni* Rothschild. 19. Forewing. 20. Hindwing.

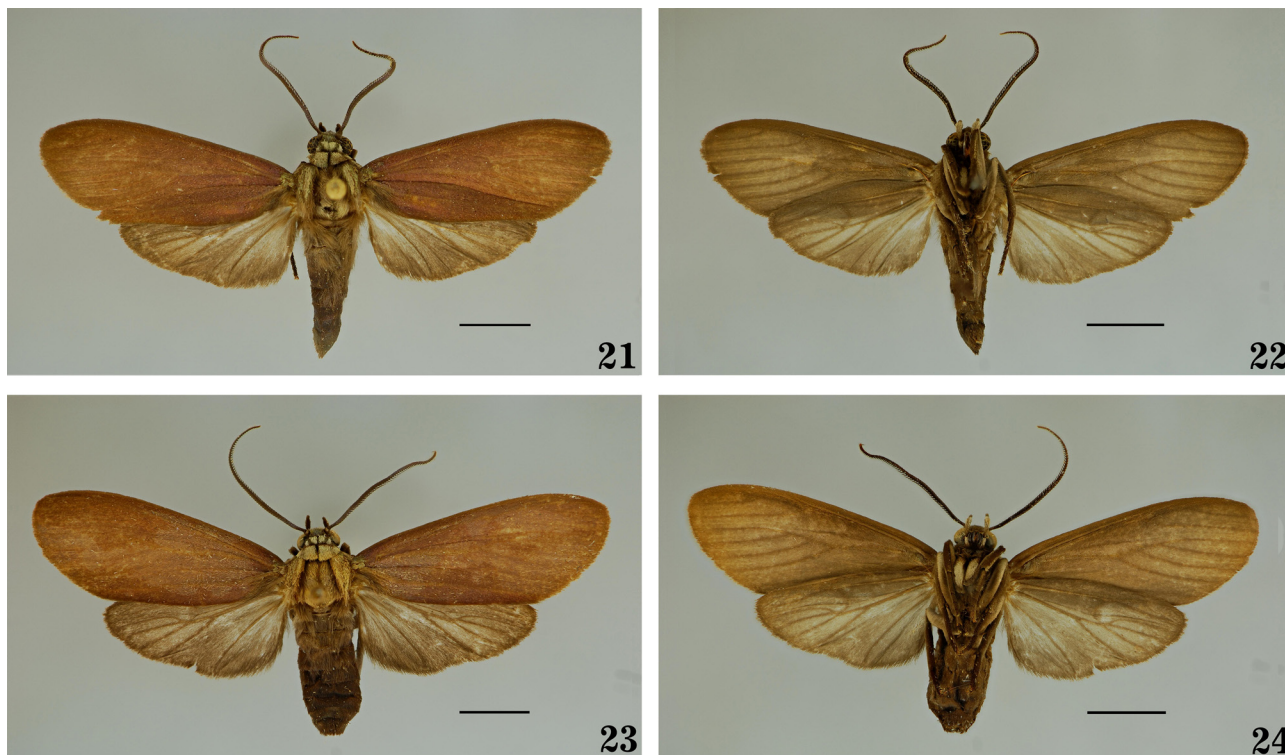
Parascepsis lantingi Grados, sp. nov

(Figs. 21–32)

Diagnosis: Similar to *P. ockendeni*, with patagia and tegulae metallic green, forewings with a yellowish androconial patch below 1A+2A, hindwings with an area somewhat ovoid with small light brown spicules, while in *P. ockendeni* patagia and tegulae are grayish brown and have no specialized structures on the wings. The translucent area of the tegumen in *P. lantingi* is ovoid, while in *P. ockendeni* it is subquadrate. Transtilla bears spicules and the cornuti at the vesica are located on the dorsal surface in *P. ockendeni*, while in *P. lantingi* transtilla has no spicules and the cornuti are located at the proximal region of the ventral surface.

Description. Male (Figs. 21–22). **Head.** Proboscis dark brown. Labial palpi curved upwards, exceeding the vertex. Palpi brown; first palpomer with whitish scales on the distal part; second one with whitish scales scattered on the frontal part and twice the length of the first one; third one, one third of the first one, with whitish scales on

the anterior part. Frontoclypeus grayish brown; superior part with scales whitish gray. Vertex with scales opaque metallic green. Occiput with piliform scales whitish gray, with three opaque metallic green lines: a straight central one and two lateral ones curved towards the antennae. Postgena brown. Eye margin and antennal alveolus grayish. Ocelli light brown. Antenna brown with a faint metallic purple hue. Scape and pedicel opaque metallic green. Proximal rami small, increasing in length towards the middle part. Middle rami twice the width of the flagellum axis. Distal rami decreasing in length towards their end. **Thorax.** Patagia and tegulae metallic green with whitish scales in the central part. In ventral view, tegulae whitish at the anterior part. *Mesoscutum* grayish brown; metascutellum gray; a weak brown line along the central part of both; with scales opaque metallic green. Pleura grayish brown. Tymbal organ at the katepisternum covered with grayish brown scales. **First pair of legs.** Grayish brown; coxae with a whitish area at the anterior part; ectal part grayish. Epiphysis brown. **Second and third pairs of legs.** Grayish brown; femora and tibiae somewhat whitish at the mesal part.

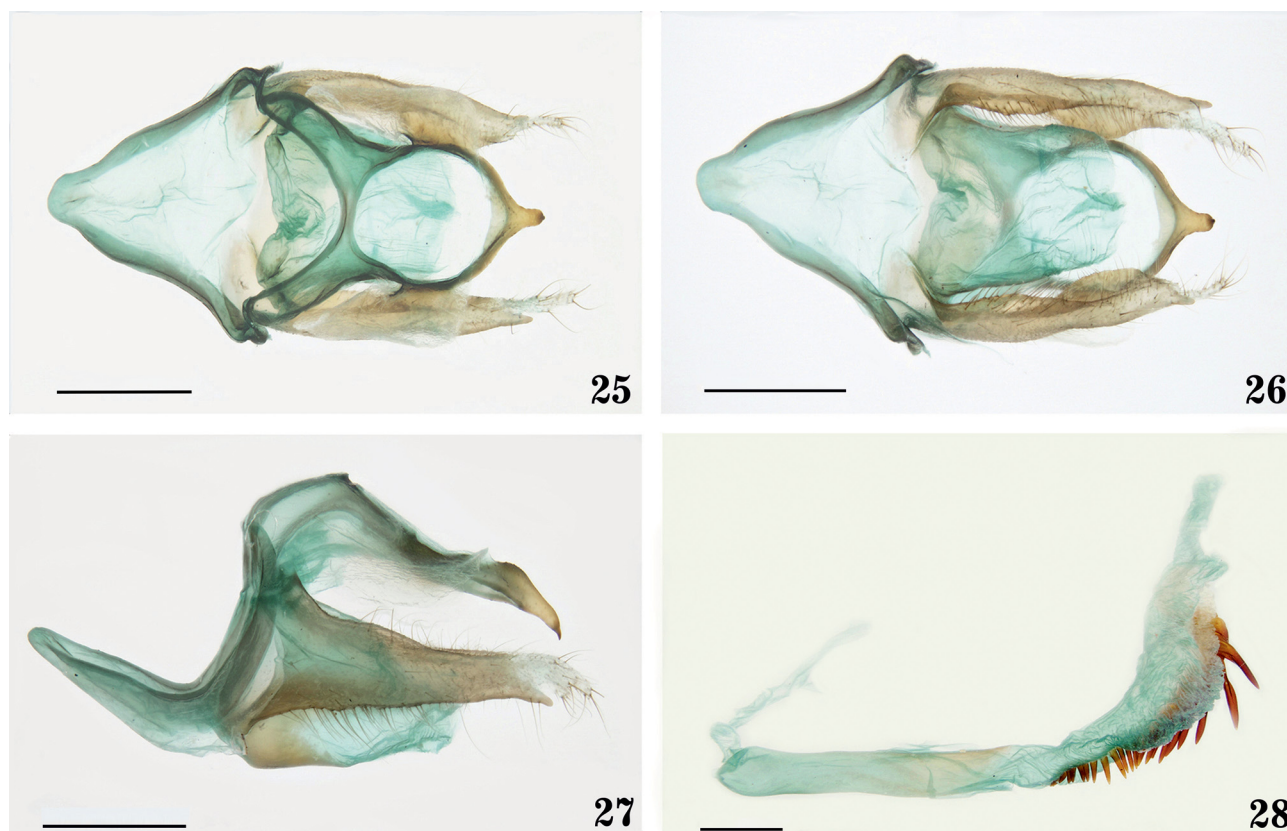


FIGURES 21–24. *Parascepsis lantingi* Grados new species. 21–22. Holotype male. 21. Dorsal view. 22. Ventral view. 23–24. Paratype female (Tambopata Research Center). 23. Dorsal view. 24. Ventral view. Scale= 5 mm.

Forewing. Forewing span (16–17.5 mm) (n = 23). **Dorsal:** Brown with some purple hue. **Ventral:** Brown. Frenulum brown and retinaculum grayish brown. At the base of Cu_2 -CuP, an area of slightly iridescent grayish brown scales. CuP-1A+2A and anal cell, slightly iridescent. At CuP-1A+2A an area of white scales up to the medial part involving part of the anal cell. At the anal cell, below the vein 1A+2A, a yellowish subproximal androconial patch. Below this, yellow piliform scales. **Hindwing. Dorsal:** Brown; central part slightly diaphanous. The costal margin down to R_s - M_1 and part of the discal cell, whitish somewhat iridescent. Costal cell with an elongated area with small light brown spicules. **Ventral:** The costal margin up to R_s - M_1 and the discal cell, brown, with a faint purple hue, the remaining part grayish brown, somewhat diaphanous. **Abdomen.** Grayish brown, with a faint bluish hue. First four tergites, with piliform scales grayish brown. Sternum grayish brown.

Genitalia (Figs. 25–28). (Genitalia # JGA 720 MUSM). Tegumen H-shaped; anterior part wider than the posterior one, with branches arched and in somewhat oblong shape; posterior part an inverted U-shaped; an almost semicircular translucent area present at the central-lateral part of each side, a projection somewhat sclerotized, extending towards the anterior part. Joining of the tegumen and uncus membranous. Saccus acute with rounded apex. Anterior part of the uncus with two short and sclerotized extensions converging towards the center, forming a digitiform structure; in lateral view of the structure digitiform, the base twice the width of the distal end; distal end formed by a sclerotized hook. Valvae elongated, straight, sclerotized, wider at the base; with long setae at the dorsal and ventral part; ventral process small, sclerotized, slightly pointed; dorsal process elongated, membranous

and with setae, slightly exceeding the uncus; in ventral view, valvae slightly concave at the base; an internal projection at the two anterior distal thirds, before reaching the terminal processes; numerous setae at the internal margin. Juxta subtriangular, somewhat sclerotized, postero-medial part as inverted V-shaped. Aedeagus elongated. Coecum penis slightly developed. Vesica longer than the aedeagus; patch of cornuti increases in size and thickness in all its extension, from the ventral part of the proximal region, towards the right side of the posterior part; dorsal part with a membranous projection.



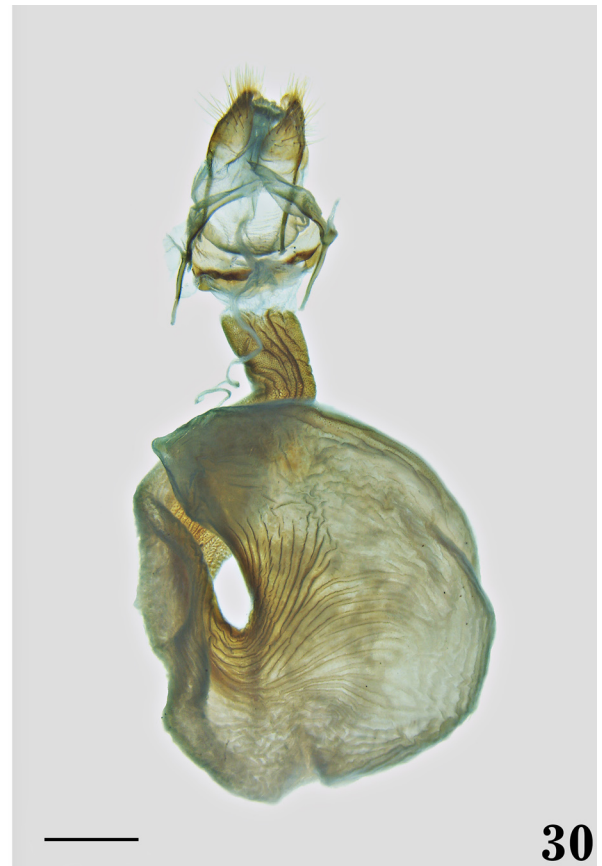
FIGURES 25–28. Male genitalia of *Parascepsis lantingi* Grados new species. (Genitalia # JGA 720 MUSM). **25.** Dorsal view. **26.** Ventral view. **27.** Lateral view. **28.** Aedeagus. Scale= 1 mm.

Female (Figs. 23–24). Forewing span (16–18 mm) (n = 11). Similar to the male, except for the following: rami smaller; middle rami almost half the width of the shaft. Frenulum light brown with two bristles. **Forewing. Ventral:** Without androconial patch. **Hindwing. Dorsal:** Without spicules. **Female Genitalia** (Figs. 29–30) (Genitalia # JGA 722 MUSM). Eighth tergite slightly sclerotized to the sides. Anal papillae developed, with setae almost as long as the papillae on the posterior and latero-ventral surface; in lateral view, the length is 0.5 times its height. Posterior apophyses somewhat larger than the anterior ones. Ostium and antrum of central position. Antevaginal lamella membranous. Postvaginal lamella sclerotized. Ductus bursae and cervix bursae almost undifferentiated, wide and flattened, membranous at the ventral surface and sclerotized at the dorsal one. Corpus bursae globose, with a turn towards the dorsal part. No signum is observed. Ductus seminalis emerges at the distal end.

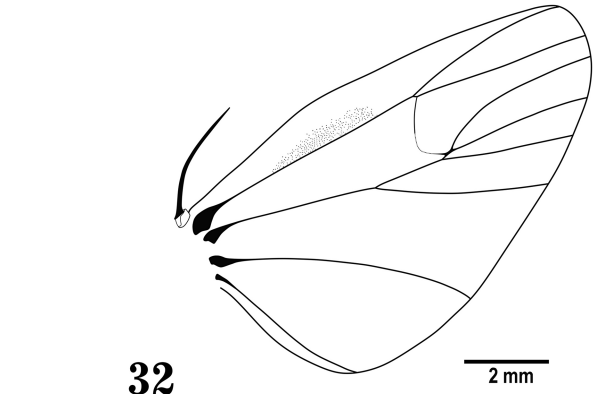
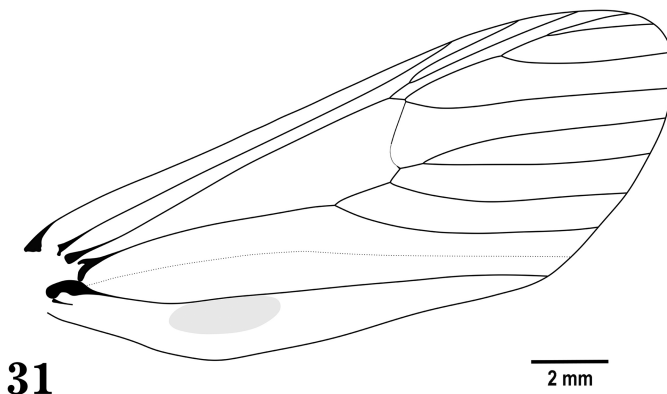
Etymology: *lantingi* is a latinized noun in genitive singular. The first author and Rainforest Expeditions SAC, which support the project “Discovery new species” in Tambopata would like to dedicate the discovery of this new species to Frans Lanting, whom with wife Christine Eckstrom were key players in raising awareness and establishing the international standing of Tambopata so that it became known in every corner of the world.

Distribution (Fig. 59): Cusco and Madre de Dios.

Comments: This species has surely been confused in several collections. It can be distinguished from the other similar species by the metallic green color of the head and the thorax. By now only known in the Amazonian area of southeastern Peru, reaching the lower parts of the mountain forests of the Eastern Slope of the Andes (890 m, 6 km WSW of the Pongo de Mainique).



FIGURES 29–30. Female genitalia of *P. lantigni* Grados new species. (Genitalia # JGA 722 MUSM). **29.** Lateral view. **30.** Dorsal view. Scale= 1 mm.



FIGURES 31–32. Wings of *Parascepsis lantigni* Grados new species. **31.** Forewing. **32** Hindwing.

Holotype male (Figs. 21–22): **PERU, Cusco**, San Martín C, 11°47'S, 72°41'W, 480 m, 28.iii.1997, J. Grados. 33 paratypes (22 males and 11 females). **PERU, Cusco**, 1 male, R.C. Machiguenga, Campamento Mapi OX, 35.5 Km O de Nuevo Mundo, 11°31'24''S, 73°28'32''W, 712 m, 13-18.i.2010, J. Grados, (Voucher DNA-Artc # 00833-JGA MUSM); 1 male, San Martín C, 11°47'S, 72°41'W, 480 m, 30.iii.1997, J. Grados; 1 female, idem except, (Genitalia # JGA 723 MUSM); 1 male, idem except, 31.iii.1997, (LT trap / MV); 1 male, idem except, 02.iv.1997; 1 male, Las Malvinas, Río Urubamba, 11°52'S, 72°55'W, 480 m, 23.ix.1997, J. Grados, (Genitalia # JGA 778 MUSM) (LT/MV); 1 female, Cashiriari, 11°52'S, 72°39'W, 690 m, 04.xii.1997, J. Grados, (7:00-8:00); 1 male, 6 km OSO del Pongo de Mainique, 12°15'02''S, 72°52'28''W, 890 m, 01.x.2010, C. Carranza & C. Cavero; 1 male, La Convención, Echarate, CC. Pomareni, 12°15'24.42''S, 72°50'27.18''W, 598 m, 12.xi.2009, C. Carranza & C. Rossi, (LT); 1 male, La Convención, Echarate, CC. Pomareni, 12°15'28.38''S, 72°50'8.89''W, 477 m, 09.xi.2009, C. Carranza & C. Rossi, (LT); 1 male, idem except, (Voucher DNA-Artc # 00834-JGA MUSM). **Madre de Dios**,

1 female, Río Los Amigos, CICRA, 12°35'S, 70°05'W, 09.iii.2005, P. Centeno, (Genitalia # JGA 722 MUSM); 1 male, Albergue Refugio Amazonas, 12°52'30"S, 69°24'35"W, 241 m, 19.ix.2017, D. Couceiro, (Voucher DNA-Artc # 00606-JGA MUSM); 1 male, Albergue Refugio Amazonas, 12°52'30"S, 69°24'35"W, 241 m, 7.xi.2018, J.D. Shoobridge (Voucher DNA-Artc # 00864 JGA MUSM); 1 male, idem except, 18.xi.2018 (Voucher DNA-Artc # 867-JGA MUSM); 1 female, idem except, 29.xi.2018 (Voucher DNA-Artc # 00863-JGA MUSM); 1 female, idem except, 03.i.2019 (Voucher DNA-Artc # 00865-JGA MUSM); 1 male, Río Los Amigos, CICRA, 12°33'S, 70°06'W, 280 m, 25.vii.2006, A. Asenjo, (Genitalia # JGA 721 MUSM); 1 male, Río Alto Madre de Dios, ca. Atalaya, 12°53'S, 71°22'W, 587 m, 23.vi.2006, P. Centeno, (MV Light Trap; 11:00-00:00 am); 1 male, idem except, 20.viii.2006, P. Centeno, (MV Light Trap; 9:00-10:00 pm); 1 male, idem except, (MV Light Trap; 8:00-9:00 pm); 1 male, idem except, 24.viii.2016; 1 female, idem except, 27.viii.2006, (MV Light Trap; 11:00-0:00 am); 1 male, idem except, 18.x.2006, (MV Light Trap; 6:00-7:00 pm); 1 male, idem except, 20.x.2006, (MV Light Trap; 11:00-00:00 am); 1 female, 15.ii.2007, (MV Light Trap; 11:00-0:00 am); 1 male, idem except, 18.ii.2007, (MV Light Trap; 11:00-0:00 am); 1 female, idem except, (MV Light Trap; 9:00-10:00 pm); 2 males, idem except, 20.ii.2007, (MV Light Trap; 8:00-9:00 pm); 1 female, idem except, 20.viii.2006, (Genitalia # JGA 724 MUSM) (MV Light Trap; 6:00-7:00 pm); 1 female, idem except, 20.viii.2006 (MV Light Trap; 8:00-9:00 pm); 1 female, Tambopata Research Center, 13°08'S, 69°36'W, 300 m, 15.v.2001, J. Grados, (Light Trap MV).

Parascepsis ingenium Grados & Mantilla, sp. nov.

(Figs. 33–49)

Diagnosis: Similar to *P. ignobilis*, it is possible to differentiate it by the presence of a whitish postdiscal spot on the forewings and, on the hindwings, the whitish area near the posterior margin is less pronounced. The valvae in *P. ingenium* are elongated and narrow, dorsal process membranous, the same width as the base of the valvae in almost all its extension, while the valvae in *P. ignobilis* are wide, somewhat more in the middle part, the beginning of the dorsal process narrower than the base of the valvae, decreasing in thickness towards the distal end. Both species have two patches of cornuti, the difference being that *P. ingenium* presents a developed patch of cornuti, located at the dorsal and right part of the vesica, while in *P. ignobilis* the patch of cornuti has the same location but is small.

Description. Male (Figs. 33–34). **Head.** Proboscis dark brown. Labial palpi turned upwards, exceeding the vertex. Palpi grayish brown; the second palpomer twice as long as the first; the third one third of the second; second and third ones with somewhat lighter scales on the frontal part. Frontoclypeus brown; upper part with whitish gray piliform scales. Vertex brown. Occiput whitish gray, with three brown lines: a straight central one and two lateral ones directing towards the antennae. Postgena grayish brown. Eye margin gray. Ocelli light brown. Antennal socket whitish. Antennae brown, with a slight metallic hue. Scape and pedicel grayish brown. Proximal rami small, increasing in length towards the middle part. Middle rami twice the width of the flagellum. Distal rami decreasing in length towards their end. **Thorax.** Patagia and tegulae grayish with brown edges; tegulae with a brown line from the anterior part towards the base of the wing; tegulae in ventral view, brown in the anterior part. Mesoscutum and mesoscutellum grayish brown, with a brown line along the central part. Metascutellum grayish. Pleura gray. Tymbal organ in the katapisternum with gray scales. **First pair of legs.** Grayish brown with bluish hue; coxae with an area at the anterior and ectal parts whitish. Femura with the anterior and proximal-ectal part brown. Epiphysis brown. **Second and third pairs of legs.** Grayish brown with bluish hue; femora with the anterior and proximal-ectal part brown.

Forewing. Forewing span (16–18 mm) (n = 50). **Dorsal:** Brown with a purple hue. A slightly whitish postdiscal spot below the costal margin, including the base of R_5-R_4 , the subproximal part of R_5-M_1 and the middle part of M_1-M_2 , M_2-M_3 and M_3-Cu_1 . **Ventral:** Brown with the veins slightly darker. Frenulum brown and retinaculum grayish brown. Iridescent on the proximal half of the discal cell. $CuP-1A+2A$ with white scales from its base to just over half its length. Anal cell with an androconial patch creamy white covering the subproximal area to its middle part (Fig. 45). Under the patch, yellow piliform scales. **Hindwing. Dorsal:** Brown. Costal margin to R_5-M_1 , includes the discal cell and near the subproximal area of M_1-M_2 bears whitish scales, slightly iridescent. Costal cell with an area elongated and somewhat ovoid with small light brown spicules (Figs. 46–48). Area comprising the proximal half of $Cu_2-1A+2A$ a slightly whitish gray. Anal cell a diffuse whitish in the proximal two thirds. **Ventral:** Except for the area with spicules, the same as the dorsal side. **Abdomen.** Brown with bluish hue, more intense in the first four

segments. First two tergites with modified scales forming a structure that could be an androconial organ of hexagonal shape; margins of the first tergite with whitish scales; internal part of the androconial organ with modified dark brown scales (Fig. 49). Sternites brown. **Male Genitalia** (Figs. 37–40) (Genitalia # JGA 769 MUSM). Tegumen “H” shaped; anterior part wider than the posterior one, with branches wide; anterior part concave and oblong; posterior part somewhat semicircular; translucent oblong area with the posterior part somewhat sharp; lateral parts of the area translucent, from the base to near the sharp area, with a projection weakly sclerotized. Joining of the tegumen and uncus weakly sclerotized. Saccus elongated, spatulate with rounded apex. Uncus with the two anterior processes elongated, sclerotized, with setae; the branches converge towards the center, forming an elongated structure, wide at its base, with elongated setae, constrained in its central part and expanding towards the distal part: in lateral view, with the distal part somewhat rounded, ending in a sclerotized hook in ventral direction. Valvae elongated, straight, somewhat sclerotized, the base twice as wide as the remaining part; presence of setae on the ventral side, few on the dorsal side; ventral process not developed; dorsal process elongated, membranous with short setae; a somewhat circular evagination in the dorso-distal position, directed towards the internal part, sclerotized, with setae; ventral view, elongated, narrow and curved inward. Juxta slightly subtriangular and sclerotized, posterior part slightly concave, with tiny ornamentations resembling spicules at the postero-lateral areas. Aedeagus elongated. Coecum penis slightly developed. Vesica longer than aedeagus, arising ventrally, with a narrow and elongated tip; presence of two patches of cornuti; one at the ventral left part and the other, in dorsal and right position.

Female (Figs. 35–36). Forewing span (16 mm–18 mm) (n = 37). Similar to the male except for the following: proximal rami almost a third the width of the flagellum axis; middle rami almost half the width of the shaft. Frenulum light brown with two bristles. Forewing (ventral) without androconial patch. Hindwing (dorsal) without the spicule area. Abdomen without androconial organ. **Female Genitalia** (Figs. 41–42). Genitalia # JGA 772 MUSM). Eighth tergite slightly sclerotized. Anal papillae well developed, with setae all over the surface; in lateral view, longer at the ventral margin. Posterior and anterior apophyses of same size. Ostium and antrum of central position, the latter slightly sclerotized. Antevaginal and postvaginal lamella membranous. Ductus bursae sclerotized and curved. Cervix bursae sclerotized ventrally and membranous dorsally. Corpus bursae slightly sclerotized, striate, somewhat globose and sinusoid; in dorsal view, a sinusoid turn to the left side. No signum is observed. Ductus seminalis emerges at the distal end.



FIGURES 33–36. *Parascepsis ingenium* Grados & Mantilla new species. **33–34.** Holotype male. **33.** Dorsal view. **34.** Ventral view. **35–36.** Paratype female (ca. Atalaya, Madre de Dios river). **35.** Dorsal view. **36.** Ventral view. Scale= 5 mm.



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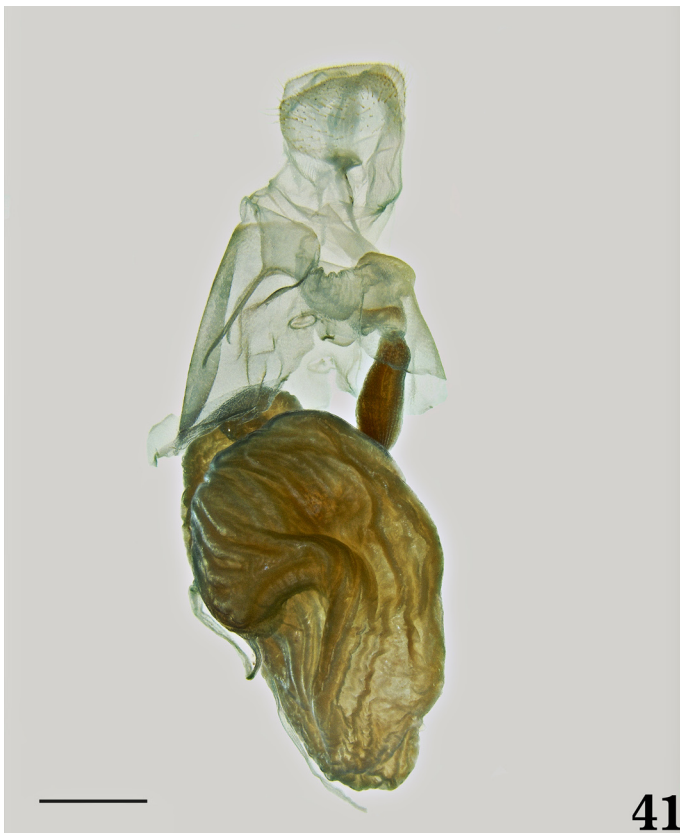


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FIGURES 37–40. Male genitalia of *Parascepsis ingenium* Grados & Mantilla new species. (Genitalia # JGA 769 MUSM). **37.** Dorsal view. **38.** Ventral view. **39.** Lateral view. **40.** Aedeagus. Scale= 1 mm.



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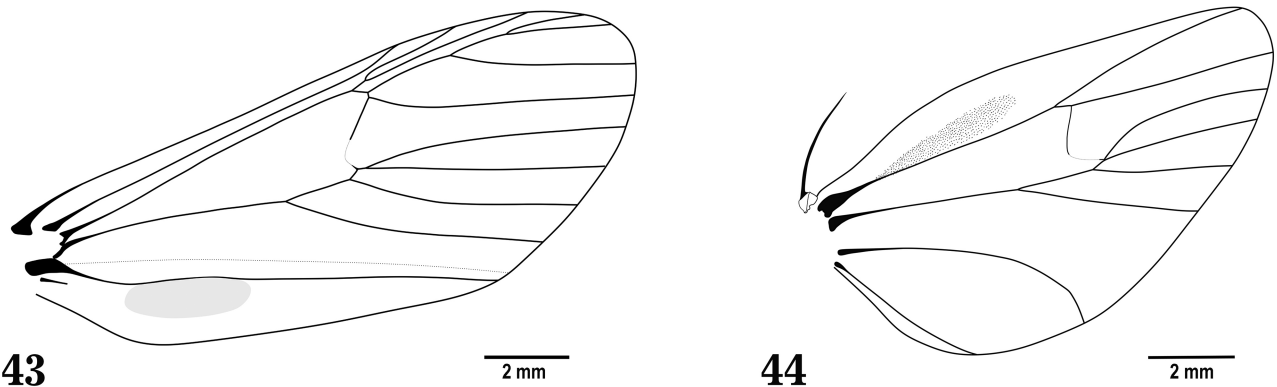
FIGURES 41–42. Female genitalia of *P. ingenium* Grados & Mantilla new species. (Genitalia # JGA 772 MUSM). **41.** Lateral view. **42.** Dorsal view. Scale= 1 mm.

Etymology: *ingenium* is a noun in nominative singular in apposition, which means talent, intelligence.

Distribution (Fig. 60): Pasco, Ucayali, Junín, Cusco, Madre de Dios and Puno.

Comments: Together with *E. ignobilis* they are the only two species with the first two tergites modified into an androconial organ. Regarding the females, they are the only ones that present the sclerotized bursa copulatrix. The species can be differentiated by the presence of a whitish postdiscal band on the dorsal side of the first pair of wings.

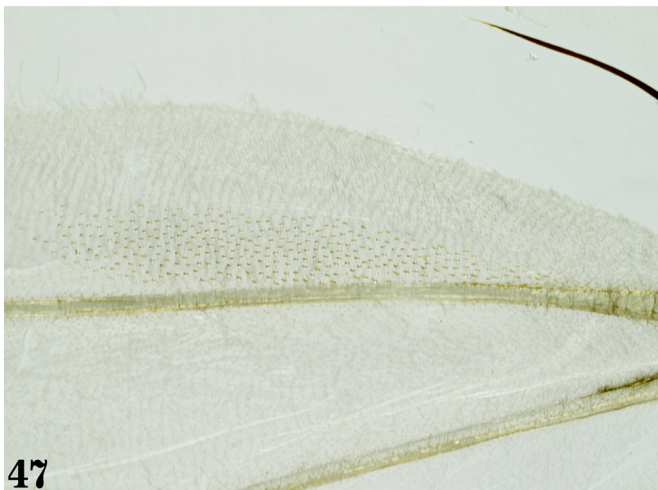
All the records of the species come from the foothills of the mountain forests of the Eastern Slope of the Andes, reaching 1850m. Like *E. lantingi*, it is most likely that there are unidentified samples of *P. ingenium* in some collections.



FIGURES 43–44. Wings of *Parascepsis ingenium* Grados & Mantilla new species. **43.** Forewing. **44** Hindwing.

Holotype male (Figs. 33–34): **PERU, Puno**, Lanlacuni, 13°28'18.7"S, 70°25'07.4"W, 676 m, 27-28.xii.2009, E. Huamani. 86 paratypes (49 males and 37 females). **PERU, Pasco**, 1 male, Comunidad 24 de junio, 10 km NO de Cajonari, 10°03'57"S, 75°07'02"W, 359 m, 03-06.xi.2015, L. Figueroa, (Genitalia # JGA 996 MUSM); 1 male, B.P. San Matías, San Carlos, Kametza, 12 km N de Izcosacín, 10°04'28"S, 75°08'33"W, 525 m, 27-28.iv.2015, L. Figueroa, (Voucher DNA-Artc # 00830-JGA MUSM); 1 male and 1 female, B.P. San Matías-San Carlos, Osheki, 7.3 km NNO de Izcoacín, 10°07'41"S, 75°07'15"W, 540 m, 19-20.iv.2015, L. Figueroa; 1 male, idem except, (Voucher DNA-Artc # 00831-JGA MUSM); 1 female, idem except (Voucher DNA-Artc # 00832-JGA MUSM); 1 female, P.N. Yanachaga Chemillén, Pampa Pescado, Laguna Luna Llena, 10°22'57.4"S, 75°15'19.8"W, 458 m, 18.ix.2007, J. Grados & S. Carbonel; 1 female, idem except, 19.ix.2007; 1 male, Qda. Atarraz, 4.5 km O de Bajo Bocaz, 10°38'17"S, 75°12'34"W, 1640 m, 06-10.viii.2012, E. Rázuri & P. Sánchez; 1 male, idem except, (Genitalia # JGA 995 MUSM). **Ucayali**, 1 male, 29.5 km NO de Nuevo Mundo, Campamento Kinteroni CX, Alto Río Sepa, 11°22'38"S, 73°24'47"W, 643 m, 20-24.i.2010, J. Grados. **Junin**, 1 male, 1 Km O de San Miguel de Autiki 10°48'17"S, 74°49'33"W, 1393 m, 04.vi.2014, E. Rázuri. **Cusco**, 1 male, San Martín C, 11°47'S, 72°41'W, 480 m, 03.iv.1997, J. Grados; 1 male and 1 female, Cashiriari, 11°52'S, 72°39'W, 690 m, 02.xii.1997, J. Grados, (LT/MV); 1 male, Cashiriari, 11°52'S, 72°39'W, 690 m, 04-05.xii.1997, J. Grados; 1 female, Las Malvinas, Río Urubamba, 11°52'S, 72°55'W, 480 m, 23.ix.1997, J. Grados, (LT-MV); 2 males and 1 female, Campamento Paratori, 12°03'S, 72°58' 690 m, 22.x.2002, J. Grados; 1 female, idem except, 24.x.2002; 1 male, idem except, 25.x.2002; 1 male, idem except, 26.x.2002; 1 female, 6 km OSO del Pongo de Mainique, 12°15'02"S, 72°52'28"W, 890 m, 30.ix.2010, C. Carranza & C. Cavero; 1 male, idem except, 01.x.2010; 1 female, 2 km SO del Pongo de Mainique, 12°15'24.42"S, 72°50'27.18"W, 598 m, 11.xi.09, C. Carranza & C. Rossi; 1 male, La Convención Echarate, CC. Pomareni, 12°15'28.38"S, 72°50'8.89"W, 477 m, 07.xi.2009, C. Carranza & C. Rossi, (LT); 1 female, La Convención, Echarate, CC. Pomareni, 12°15'24.42"S, 72°50'27.18"W, 598 m, 12.xi.2009, C. Carranza & C. Rossi; 1 female, Campamento Mangoriari, 12°21'S, 73°02'W, 1500 m, 07.xii.2002, J. Grados; 1 male, idem except, 08.xii.2002; 1 female, idem except, 09.xii.2002; 1 female, 3.5 km ONO de Monte Carmelo, Echarate, 12°26'21.0"S, 72°59'21.1"W, 1349 m, 23.ii.2011, M. Alvarado & E. Rázuri; 1 female, 4 km NO de Monte Carmelo (Río Urubamba), 12°26'06"S, 72°59'14"W, 1327 m, 29.ix.2010, M. Alvarado & J. Peralta; 1 male, Río Alto Madre de Dios, Albergue Pantiacolla, ca. Itahuanía, 12°39'21"S, 71°13'55"W, 450 m, 30.ix-03.x.1998, J. Grados; 1 male, La Convención, Echarate, CC. Ochigoteni, 12°39'31.36"S, 73°08'57.71"W, 1449 m, 17.x.2009, C. Carranza & C. Rossi (LT); 3 males, idem except, 18.x.2009; 1 male, Campamento Segakiato, 12°43'S, 73°18'W, 1850 m, 02.xi.2002, J. Grados; 1 male, idem except, 08.xi.2002; 1 male, idem except, 02.xi.2002, (Genitalia # JGA 771 MUSM); 2 males and 1 female, Cam-

pamento Comerciato, 12°47'S, 73°22'W, 1350 m, 20.xi.2002, J. Grados; 1 female, San Pedro, 13°03'S, 71°33'W, 1400 m, 05.xi.2001, J. Grados. **Madre de Dios**, 1 female, Río Alto Madre de Dios, ca. Atalaya, 12°53'S, 71°22'W, 587 m, 22.iv.2006, P. Centeno, (Genitalia # JGA 772 MUSM) (MV, LT, 9:00 pm-10:00 pm); 1 male, idem except, 2.v.2006, (MV, LT, 7:00 pm-8:00 pm); 1 male, idem except, (MV, LT, 8:00 pm-9:00 pm); 1 female, idem except, 20.vi.2006, (MV, LT, 8:00 pm-9:00 pm); 1 male, idem except, (Genitalia # JGA 884 MUSM) (MV, LT, 11:00 pm-0:00 am); 1 male, idem except, 20.viii.2006, (MV, Light Trap 7:00-8:00 pm); 1 female, idem except, 21.viii.2006, (MV, LT, 2:00 pm-3:00 am); 1 male, idem except, (MV LT -6:00 pm-7:00 pm); 1 male, idem except, 22.viii.2006, (MV, LT, 8:00 pm-9:00 pm); 1 male, idem except, (MV, LT, 9:00 pm-10:00 pm); 1 female, idem except, (MV, LT, 00:00 pm-1:00 am); 1 female, idem except, (MV, LT, 9:00 pm-10:00 pm); 1 female, idem except, 24.viii.2006, (MV, LT, 10:00 pm-11:00 pm); 1 male, idem except, 27.viii.2006, (MV, LT, 7:00 pm-8:00 pm); 1 female, idem except, 20.x.2006, (MV, LT, 7:00 pm-8:00 pm); 1 male, idem except, (MV, LT, 10:00 pm-11:00 pm); 1 female, idem except, 14.ii.2007, (Genitalia # JGA 993 MUSM)(MV, LT, 9:00 pm-10:00 pm); 1 female, idem except, 15.ii.2007, (MV, LT, 9:00 pm-10:00 pm); 1 male, idem except, 18.ii.2007, (MV,LT, 8:00 pm-9:00 pm); 1 male, idem except, (MV, LT, 2:00 pm-3:00 am); 1 female, idem except, (MV, LT, 10:00 pm-11:00 pm); 1 male, idem except, (Genitalia # JGA 883 MUSM) (MV, LT, 11:00 pm-0:00 am); 1 male, idem except, 20.ii.2007, (MV, LT, 10:00 pm-11:00 pm); 1 male, idem except, (MV, LT, 11:00 pm-00:00 am); 1 female, idem except, (MV, LT, 9:00 pm-10:00 pm); 1 female, idem except, (MV, LT, 00:00 pm-1:00 am); 1 female, idem except, (MV, LT, 8:00 pm-9:00 pm); 1 female, idem except, (MV, LT, 11:00 pm-00:00 am); 1 female, idem except, (MV, LT, 7:00 pm-8:00 pm); 1 male, idem except, 21.ii.2007, (MV, LT, 10:00 pm-11:00 pm); 1 male, idem except, (MV, LT, 7:00 pm-8:00 pm); 1 male, idem except, (MV, LT, 8:00 pm-9:00 pm); 1 male, idem except, (MV, LT, 9:00 pm-10:00 pm). **Puno**, 1 male and 3 females, Lanlacuni, Lanlacuni, 13°28'18.7"S, 70°25'07.4"W, 676 m, 27-28.xii.2009, E. Huamaní; 1 male, idem except, (Genitalia # JGA 769 MUSM); 1 male, San Gabán, Lanlacuni, 13°29'23.4"S, 70°25'20.1"W, 730 m, 26.x.2010, E. Huamaní; 1 female, Chacaneque, 13°40'00.6"S, 70°28'40.9"W, 1655 m, 22-23.xii.2009, E. Huamaní.



FIGURES 45–48. Details of the wings of *Parascepsis ingenium* Grados & Mantilla new species. **45.** White “androconial” patch in the anal cell on the ventral side of the forewing. **46.** Elongated area with light brown spicules on the costal cell at the dorsal side of the hindwing. **47.** Area with spicules of the costal cell; scales removed. **48.** Spicules at 80x.



49



50

FIGURES 49–50. Two first tergites modified into androconial organs. **49.** *Parascepsis ingenium* Grados & Mantilla new species. **50.** *Parascepsis ignobilis* Grados & Mantilla new species.

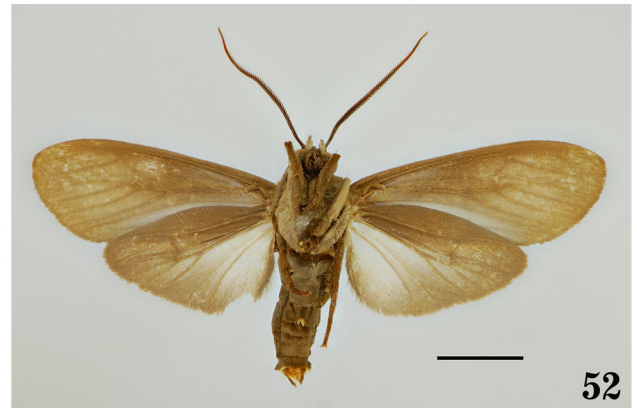
***Parascepsis ignobilis* Grados & Mantilla, sp. nov.**

(Figs. 51–58)

Diagnosis: Together with *P. ingenium* these are the two species with the first two tergites forming an androconial organ. It is possible to differentiate them because *P. ignobilis* does not have the postdiscal spot on the forewings, and the white area near the posterior margin is wider in *P. ingenium*. In the genital capsule, *P. ignobilis* presents the following: wide valvae, somewhat more in its medial part; dorsal process membranous, narrowing towards the distal end; the beginning of the dorsal process narrower than the valvae; in *P. ingenium* valvae elongated and narrow; beginning of the dorsal process the same width as the valvae and the same width throughout its length. In *P. ingenium* the patch of cornuti on the dorsal and right part of the vesica is developed, while in *P. ignobilis* it is small.



51



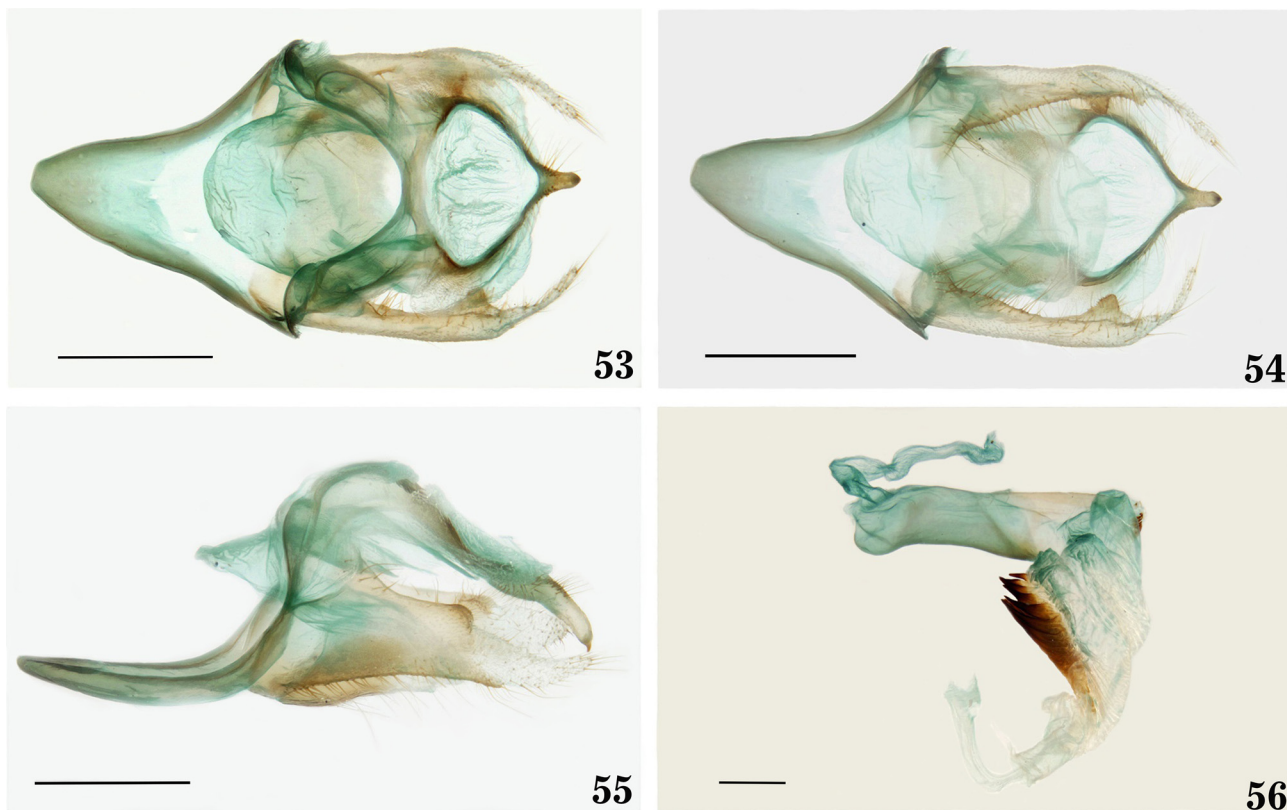
52

FIGURES 51–52. *Parascepsis ignobilis* Grados & Mantilla new species. **51.** Holotype male, dorsal view. **52.** Ventral view. Scale= 5 mm.

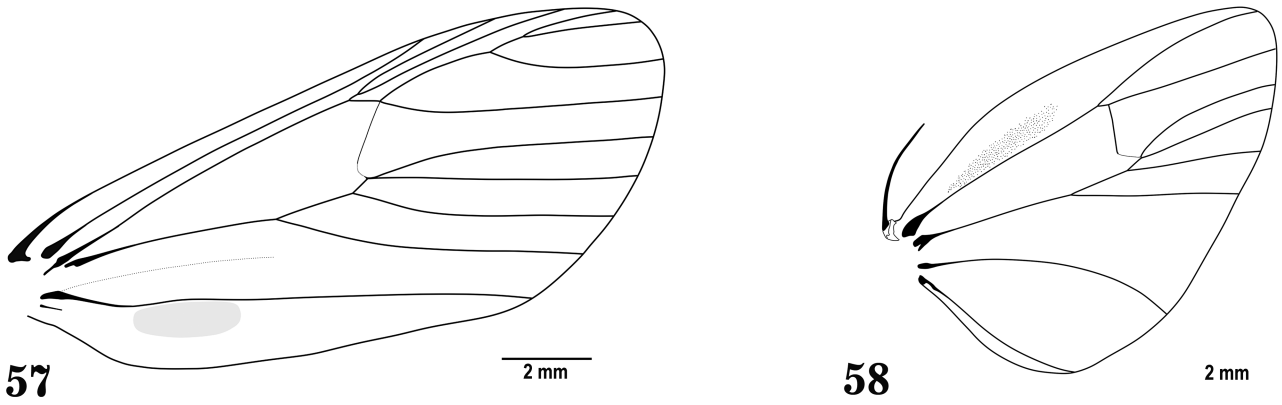
Description. Male (Figs. 51–52). **Head.** Proboscis dark brown. Labial palpi curved upwards, exceeding the vertex. Palpi grayish brown; the second segment 1.5 times the length of the first; the third one, a third of the second; second and third both with scales somewhat lighter on the frontal part. Frontoclypeus brown; upper part with pili-form scales whitish gray. Vertex brown. Occiput whitish gray, with three brown lines: a straight central one and two lateral ones directing towards the antennae. Postgena grayish brown. Eye margin gray. Ocelli light brown. Antennal alveolus whitish. Antennae brown, with a soft metallic hue. Scape and pedicel grayish brown. Proximal rami small increasing in length towards the middle part. Middle rami twice the width of the flagellum. Distal rami decrease in length towards their end. **Thorax.** Patagia and tegulae grayish. Mesoscutum and mesoscutellum grayish brown, with a brown line along the central part. Mesoscutellum grayish. Pleura gray. Tymbal organ at the katepisternum

with gray scales. **First pair of legs.** Grayish brown with a slight iridescent purple hue; coxae with a whitish area at the anterior and the ectal part. Epiphysis brown. **Second and third pairs of legs.** Grayish brown.

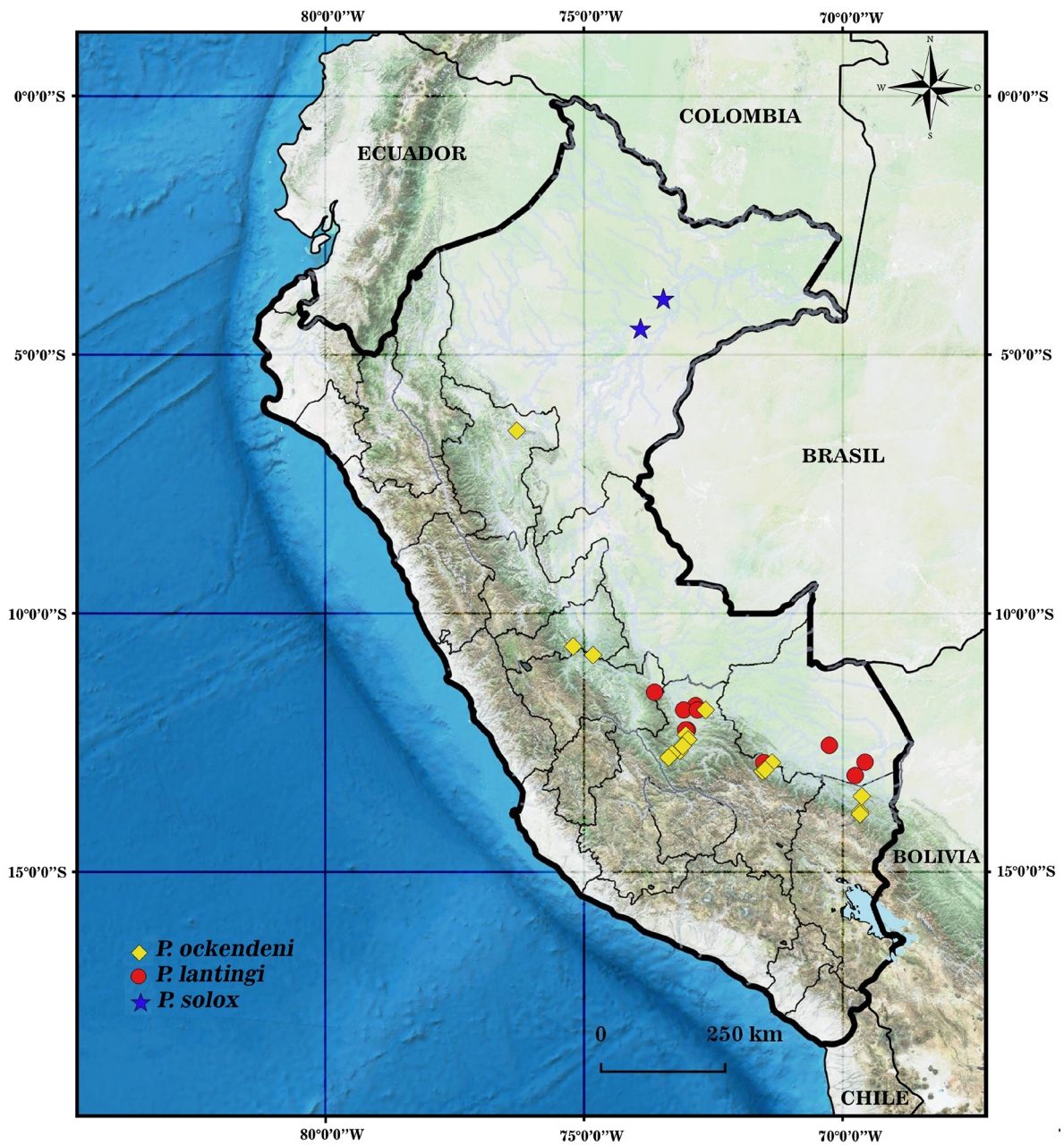
Forewing. Forewing span (15–17 mm) (n = 16). **Dorsal:** Brown with purple hue, the veins barely noticeable. **Ventral:** Brown with veins dark. Frenulum brown and retinaculum grayish brown. In CuP-1A+2A white scales from the base to a little more than half the length. At the anal cell, a creamy white androconial patch on the subproximal area. Below the patch, piliiform yellow scales. **Hindwing. Dorsal:** Brown. Costal margin to R₅-M₁, includes the discal cell and near the subproximal area of M₁-M₂ with scales whitish, slightly iridescent. Costal cell with an area elongated and somewhat ovoid with small light brown spicules. An area slightly whitish gray comprising the proximal half of Cu₂-1A+2A. Anal cell whitish in the two proximal thirds. **Ventral:** Same as the dorsal side except for the area with spicules. **Abdomen.** Brown with bluish hue. The dorsal part of the first two tergites modified into an androconial organ of hexagonal shape; part of the first tergite margin with whitish scales; internal part of the androconial organ with modified dark brown scales (Fig. 50). Sternites brown. **Male Genitalia** (Figs. 53–56) (Genitalia # JGA 719 MUSM). Tegumen “H”-shaped; anterior part wider than the posterior one, with wide branches; anterior part rounded; a translucent subtriangular area present; at the lateral part of the translucent area, from the base to a little more than half its length with a projection weakly sclerotized. Joining of the tegumen and uncus membranous. Saccus elongated, digitiform with rounded apex. Uncus with the anterior margin somewhat rounded in dorsal view, with the two anterior processes elongated, sclerotized, with few setae; the branches converge towards the center, forming an elongated structure, wide at its base with elongated setae, slightly constricted in its central part and expanding towards the distal part: lateral view, wide at its base with numerous setae, somewhat rounded at its distal part, ending in a sclerotized hook in ventral direction. Valvae short, straight, sclerotized, almost as wide as long; presence of few setae at the dorsal and ventral side; ventral process not developed; dorsal process elongated, membranous, with short setae and sharp towards the dorsal part; an evagination in dorso-distal position, directed towards the internal part, somewhat triangular, sclerotized, with setae; ventral view, elongated and narrow, slightly wider at its base, and curved inward. Juxta slightly sclerotized, subquadrangular, three times wider than the base of the valvae, with tiny ornaments resembling spicules. Aedeagus elongated. Coecum penis slightly developed. Vesica slightly longer than aedeagus, in ventral direction the end is narrow and elongated; patch of cornuti present at the ventral left part; patch of small cornuti at the proximal and dorsal part, and large ones at the proximal ventral part.



FIGURES 53–56. Male genitalia of *Parasepsis ignobilis* Grados & Mantilla new species. (Genitalia # JGA 719 MUSM). **53.** Dorsal view. **54.** Ventral view. **55.** Lateral view. **56.** Aedeagus. Scale= 1 mm.



FIGURES 57–58. Wings of *Parascepsis ingenium* Grados & Mantilla new species. 57. Forewing. 58. Hindwing.

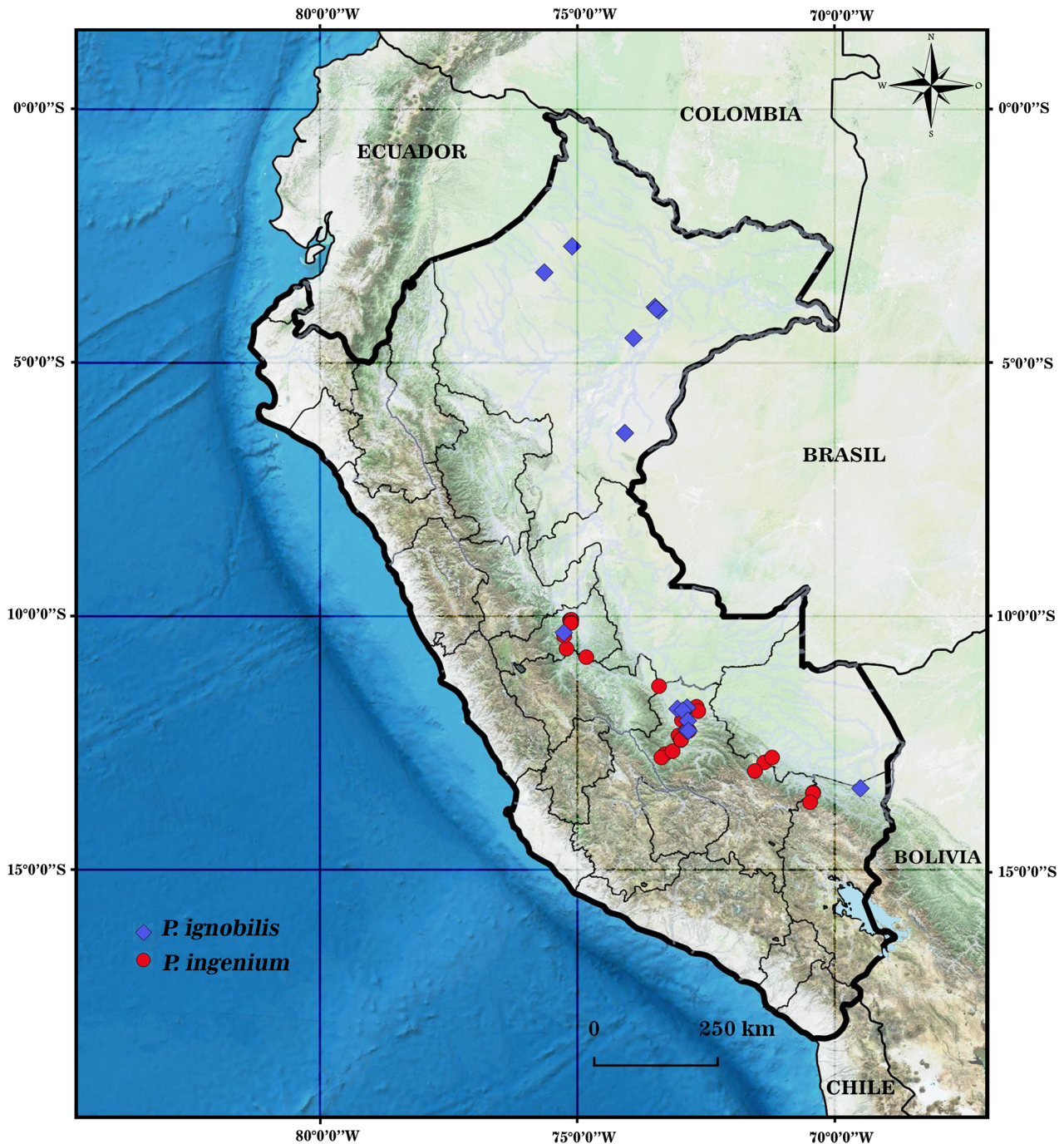


FIGURES 59. Geographical distribution of *Parascepsis ockendeni* Rothschild, *P. lantingi* Grados new species, and *P. solox* (Dognin).

Female: Unknown.

Etymology: *ignobilis* is a neutral adjective in nominative that means “unknown.”

Distribution (Fig. 60): In the Amazonian area of the departments of Loreto, Ucayali, Pasco, Cusco and Puno, reaching the lower part of the mountain forests of the Eastern Slope of the Andes (890 m).



FIGURES 60. Geographical distribution of *Parascepsis ignobilis* Grados & Mantilla new species, and *P. ingenium* Grados & Mantilla new species.

Holotype male (Figs. 51–52): **PERU, Loreto**, Coconilla, 02°42'S, 75°06'W, 160 m, 19.vii.2003, J.J.Ramírez, (LT /MV/ 8:30-9:00 pm). Paratypes (15 males). **Loreto**, 3 males, Trompeteros, 03°12'56.1"S, 75°38'26.9"W, 140 m, 21-22.xi.2008, C. Carranza; 1 male, idem except, (Genitalia # JGA 770 MUSM); 1 male, 2.1 km S de Mishana, Río Nanay, 03°53'50"S, 73°29'32"W, 103 m, 09.iii.2018, C. Espinoza & C. Ampudia, (Voucher DNA-Artc # 00844-JGA MUSM); 1 male, C.I. Allpahuayo-Mishana, 03°58'01"S, 73°25'08"W, 118 m, 04.ii.2011, J. Grados, (Genitalia # JGA 980 MUSM). **Ucayali**, 1 male, 37 km NE Monte Alegre (Río Tapiche) 06°23'01"S, 74°04'35"W,

175 m, 18-19.x.2008, A. Garcia, (Genitalia # JGA 719 MUSM). **Pasco**, 1 male, P.N. Yanachagua Chemillén, Est. Biol. Paujil, 10°19'25.0"S, 75°15'48.8"W, 375 m, 22.v.2008, J. Grados, S. Carbonel & C. Calderón. **Cusco**, 1 male, Segakiato, Río Camisea, 11°48'S, 72°52'W, 330 m, 29.ix.1997, J. Grados, (LT/MV); 1 male, 10 km SE de Puerto Huallaga (Río Picha), 11°49'25"S, 73°03'19"W, 504 m, 12-16.ix.2015, P. Sánchez; 1 male, 1.3 km SSO de Las Malvinas, 11°51'30"S, 72°57'00"W, 418 m, 14.ix.2017, C. Espinoza, (Voucher DNA-Arte # 00712-JGA MUSM); 1 male, 4 km NO de Timpia, 12°03'30"S, 72°51' 13"W, 535 m, 20.ix.2010, C. Espinoza & E. Rázuri; 1 male, 6 km OSO del Pongo de Mainique, 12°15'02"S, 72°52'28"W, 890 m, 01.x.2010, C. Carranza & C. Caveró; 1 male, 2 km SO del Pongo de Mainique, 12°15'24.42"S, 72°50'27.18"W, 598 m, 11.xi.09, C. Carranza & C. Rossi. **Puno**, 1 male, P.N. Bahuaja-Sonene, 4.5 km NO Qba. Aguajal, Río Tambopata, 13°23'31.8"S, 69°29'58.7"W, 335 m, 16.ix.2011, J. Grados, E. Rázuri & E. Guillermo; 1 male, idem except, (Genitalia # JGA 902 MUSM).

Comments: Similar to *P. solox* in the habitus. However, they are easy to differentiate, because *P. ignobilis* has the first two tergites modified forming an androconial organ.

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