

The South American genus *Protothereva* Malloch (Diptera: Therevidae: Therevinae) with description of two new species

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Abstract

The genus *Protothereva* Malloch, 1932, was described based on a single female from southwestern Argentina. The genus is revised with the description of two new species, *P. ecuadorensis* Webb from Ecuador and *P. peruensis* Webb from Peru, represented by both male and female specimens. A key to the identification of the species is included along with illustrations of the genitalia and a map of the species distributions. The genus *Protothereva* is redefined to include the male characteristics.

Key words: *Protothereva*, Diptera, Therevidae, new species, key, morphology, distribution

Introduction

The genus *Protothereva* was described by Malloch (1932) based on a single female specimen collected from southwestern Patagonia (Valle del Lago Blanco) that was “distinguished from any other from Patagonia known to [him] by the setulose upper surface of the apical half or more of the vein R₁.” The presence of setulae on the dorsal surface of R₁ is considered to be apomorphically lost in the subfamilies Agapophytinae and Therevinae, being present in the ancestral Phycinae (except *Schlingeria* Irwin) and Xestomyzini (except *Henicomysia* Coquillett). We have yet to observe the presence of these setae on any therevine taxa other than *Protothereva*, except for a newly discovered, undescribed species of *Stenopomyia* Lyneborg from Madagascar.

Since Malloch’s description of the genus, several specimens of two new species from Ecuador and Peru possessing R₁ setulae have been examined. Although the type species, *P. grisea* Malloch, is still only known from the holotype female, the males of the Ecuadorian and Peruvian species share the distinct characteristics of having an isolated cuticular pro-

jection basolateral to the ventral lobe of the gonocoxite. This morphological feature, unique among Therevinae, further corroborates Malloch's hypothesis for a new genus considering the placement of the new species in *Protothereva*. We present the description of the two new species and a redefinition of the genus based on the male specimens.

Methods

General morphology follows Webb and Irwin (1999) and McAlpine (1981) with additional terminology from Irwin and Lyneborg (1981a, b). Some structures of the male genitalia follow terminology from Winterton et al. (1999a). Terminology for structures of the female terminalia follows Irwin (1976) as modified by Winterton et al. (1999a, b) and Lyneborg (2001). Setae described as elongate have a length equal to or greater than the width of the scape; those described as short have a length less than the width of the scape. Macrosetae on the thorax (np=notopleural, sa=supraalar, pa=postalar, dc=dorsocentral, sc=scutellar) were counted from the left half of the specimen. Anteroventral (av) and posteroventral macrosetae on the fore-, mid-, and hindfemora are represented in the text as counts (0:0:0). Each specimen was given a unique specimen code on a yellow label in the format THEREVIDAE/M. E. Irwin/Specimen #/999999. These codes facilitate entry and manipulation of data into a systematic database within the architecture of MANDALA (Kampmeier et al. 1998) and are recorded as "MEI 999999" with their associated specimens throughout the text. All material examined is listed after the description and the depository site is given in () after the MEI specimen number. The following institutions were kind enough to loan material relevant to this study or are depositories for specimens: American Museum of Natural History, New York, NY, USA (AMNH); California Academy of Sciences, San Francisco, CA, USA (CAS); Canadian National Collection, Ottawa, Ontario, Canada (CNC); Cornell University Insect Collection, Ithaca, NY, USA (CUIC); Illinois Natural History Survey, Champaign, IL, USA (INHS); Michael E. Irwin personal collection, University of Illinois, Urbana, IL, USA (MEI); Museo de Entomologia, Estacion Experimental Agricola La Molina, Ministerio de Agricultura y Alimentacion (EELM); Museo de Historia Natural, Universidad Nacional, Mayor de San Marcos, Lima, Peru (MSML) Museo de Zoologia de Universidade de São Paulo, São Paulo, Brazil (MZSP); Pennsylvania State University, State College, PA, USA (PSUC); The Natural History Museum, London, England (BMNH), and the National Museum of Natural History, Washington, D. C., USA (USNM).

Abbreviations: gen. key= key to genus, orig. desc.= original description.

Protothereva Malloch

Protothereva Malloch (1932:239 gen. key, orig. desc.). Type species *Protothereva grisea* Malloch (1932:239) by original designation.

Redefinition of genus. Moderate sized flies, males 4.7-7.2 mm, females 6.4-7.5 mm.

Head. Ocellar tubercle dark reddish brown, pruinescence gray; slightly raised above vertex; setae black, elongate. Eyes reddish brown, separate by distance less than 0.5 times width of median ocellus; male ommatidia becoming smaller ventrally and laterally. Male frons reduced, triangular; setae elongate, absent lateral to antennal base. Face only slightly projecting anteriorly beyond eyes. Antenna shorter than length of head; scape cylindrical, longer than wide, narrower than width of flagellum; pedicel spherical, short; first flagellomere oval to spherical, posterior third narrow, attenuated apically, second flagellomere cylindrical, third flagellomere tapered to point apically, flagellum longer than wide, longer than length of scape. Parafacial broad; setae absent. Maxillary palpus cylindrical, apex rounded. Genal setae white, elongate. Postocular macrosetae black, in single row.

Thorax. Mesonotum with 3-4 np, 2 sa, 1 pa, 0 dc, 2 sc macrosetae; vittae dull brown but indistinct. Postpronotal lobe dull brownish gray. Setae on prosternum white, elongate; absent from proepimeron, notopleural shelf, anepimeron, meron, and posterior basalare. *Wing.* Setulae on apical three-fourths of R_1 ; subcosta ending in C slightly basal to r-m; R_1 ending in C distal to r-m. R_{2+3} ending in C distal to fork of R_{4+5} ; r-m at middle of dc; R_4 sinuate, ending in C anterior to apex; R_5 straight, ending in C posterior to apex; r_4 enclosing apex of wing; M_1 , M_2 , and M_3 originate separately from apex of dc; cup closed, petiolate. *Legs.* Metakatepisternum lacking setae. Coxae dark reddish brown, pruinescence gray, dense; setae on posterior half of midcoxa; hindcoxa with dark reddish brown papillate projection; apical macrosetae dark brown. Femora dark reddish brown, pruinescence gray, macrosetae dark reddish brown. Tibiae dark yellow, apex dark reddish brown. Tarsomeres 1-2 dark yellow, apex dark reddish brown, tarsomeres 3-5 dark reddish brown.

Abdomen. *Male terminalia.* Tergite 8 (Figs. 1, 10) with anterior margin broadly concave; posterior margin deeply emarginate; median length short (0.02 mm). Sternite 8 (Figs. 2, 11) with posterior margin emarginate. Epandrium (Figs. 1, 10) quadrate, broad basally, shorter medially than wide; anterior margin emarginate; posterolateral corner short, broadly pointed; in lateral view quadrate, dorsal surface convex, posterior margin tapered to broad point. Cercus (Figs. 1, 10) ending distal to posterolateral margin of epandrium, basal to apex of hypoproct. Hypoproct (Figs. 1, 10) ending distal to apex of cercus and epandrium; apicoventral area flat. Gonocoxite (Figs. 2-4, 11-13) separated medially; inner gonocoxal process absent; gonocoxal apodeme (Figs. 3, 12) not extending beyond anterior margin of gonocoxite; gonocoxal bridge and posteromedial lobe absent; ventral lobe (Figs. 2-3, 11-12) large, broadly rounded, not wrapping around base of gonostylus, with short spines on ventral surface, in ventral view with narrow cuticular projection basolateral to ventral lobe bearing fine short setae (Fig. 2, VP). Aedeagus with anterior sclerotized margin of dorsal apodeme (Figs. 6, 15) deeply emarginate; ventral apodeme (Figs. 7, 16) not extending beyond anterior margin of dorsal apodeme, in cross-section flattened dorsoventrally; ejaculatory apodeme (Figs. 6, 15) in cross-section flattened dorsoventrally. *Female*

terminalia. Sternite 8 longer than wide, tapering to broad point posteriorly, with short median emargination. Median lobe of tergite 9 lacking setae. Furca (Figs. 9, 18) rectangular, closed, with posteromedial and anteromedial projections absent. Common duct (Figs. 9, 18) shorter than furca. Spermathecal ducts (Figs. 9, 18) diverging from common duct in anterior direction. Spermathecal sac large, expanded anteriorly. Spermatheca (Figs. 9, 18) spherical.

Immature Stages. Unknown.

Distribution (Fig. 19). *Protothereva* has been collected in Argentina, Ecuador, and Peru.

No keys are available to separate the South American genera of therevids. The presence of setulae on the dorsal surface of wing vein R_1 is unique within the Therevinae and will easily separate out this genus.

Key to species of *Protothereva*

1. Parafacial pruinescence entirely white; katepisternum with white setae; wing veins with dark maculation across apex of br, at fork of R_{2+3}/R_{4+5} , at fork of R_{4+5} , and across apex of dc; cuticle of maxillary palpus yellow *grisea* Malloch
- Parafacial pruinescence dark brown or dark brown with ventral half gray; katepisternum lacking setae; wing veins without brown maculation; cuticle of maxillary palpus dark brown 2
2. Parafacial pruinescence entirely dark brown; halter knob dark yellow; male hypoproct (Fig. 10) with posterior margin deeply emarginate; furca (Fig. 18) with anterolateral projection short, narrow *peruensis* Webb spec. nov.
- Parafacial pruinescence gray on at least ventral half; halter knob dark brown; male hypoproct (Fig. 1) with posterior margin slightly emarginate; furca (Fig. 9) lacking anterolateral projection..... *ecuadorensis* Webb spec. nov.

Protothereva grisea Malloch

grisea Malloch (1932:239 orig. desc.) (*Protothereva*). Type locality Argentina, Patagonia, Chubut [Provincia], Valle del Lago Blanco. HT female in BMNH [BMNH(E) 242005].

This species is only known from the holotype female which is easily separated from *Protothereva ecuadorensis* and *P. peruensis* by the presence of brown maculations on the wing veins, the parafacial pruinescence being entirely white, and the cuticle of maxillary palpus dark yellow. Malloch (1932) provided an extensive description of this species. The following notes are additions to his description of the holotype female.

Head. Length 0.73 mm. Ocellar tubercle dark reddish brown, pruinescence whitish gray; slightly elevated above vertex; setae dark reddish brown, elongate. Eyes reddish brown, dichoptic, separated by distance 2.1 times width of ocellar tubercle; ommatidia of equal size. Frons with setae on dorsal half. Antenna dark brown, scape with dense white pruinescence, 0.86 times length of head; scape length 0.20 mm, width 0.18 mm, 1.1 times longer than wide, 2.2 times length of pedicel, 1.1 times width of flagellum, setae dark reddish brown, grading in thickness into macrosetae; pedicel length 0.09 mm, width 0.16 mm, setae dark reddish brown, short; first flagellomere with basal two-thirds spherical, apical third narrow, attenuated apically, length 0.26 mm, 0.16 mm wide, setae dark brown, short, second flagellomere length 0.04 mm, 0.04 mm wide, third flagellomere length 0.04 mm, width 0.04 mm; flagellum length 0.34 mm, 2.1 times longer than wide, 1.7 times length of scape. Parafacial broad, subequal to width of clypeus, pruinescence whitish gray. Cuticle of maxillary palpus dark yellow, length 0.40 mm, width 0.06 mm, 6.7 times longer than wide; setae white, elongate. Occiput with pruinescence whitish gray; setae white, elongate, becoming sparse on dorsal half.

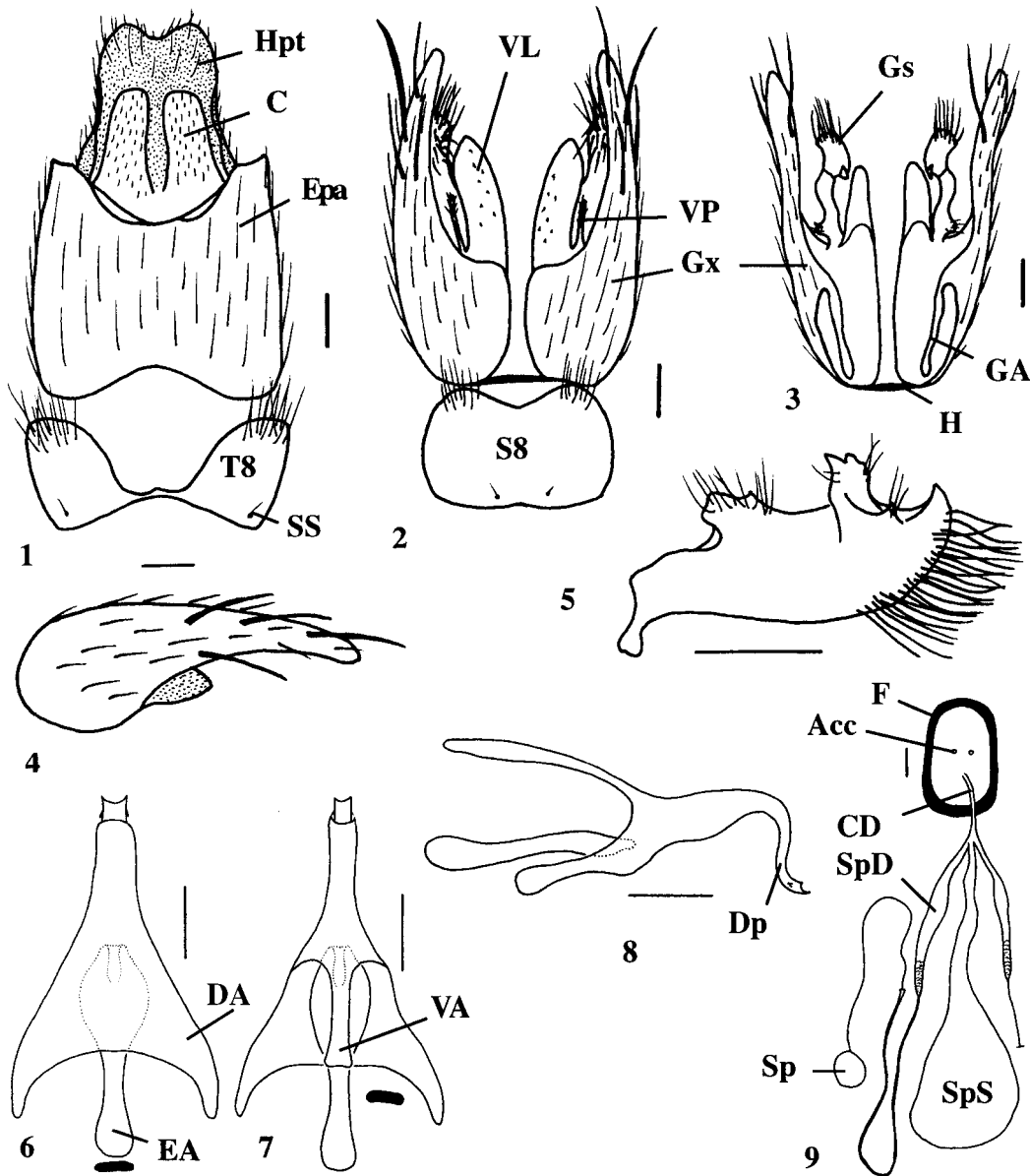
Thorax. Mesonotum dark reddish brown, pruinescence whitish gray; setae black, elongate, intermixed with whitish yellow appressed setae. Pleuron with setae white, elongate on propleuron and anepisternum, whitish yellow on katapisternum, laterotergite, metanepisternum, and scutellum. *Wing.* Length 5.0 mm, width 1.5 mm, 3.3 times longer than wide. Membrane opaque, veins brown with brown maculation across apex of br, at fork of R_{2+3}/R_{4+5} , at fork of R_{4+5} , and across apex of dc; pterostigma dark brown; cell m_3 open widely. *Legs.* Femora dark brown, pruinescence gray; setae white, elongate, filiform ventrally, becoming appressed lanceolate dorsally; av macrosetae 0:0:5, pv macrosetae 0:0:1.

Abdomen. Cuticle dark reddish brown, pruinescence gray over entire abdomen; dorsal setae dark reddish brown, erect with whitish yellow appressed setae on tergites 1-3; lateral setae dark reddish brown. *Terminalia.* Because this is a unique specimen, the female terminalia was not cleared for dissection.

***Protothereva ecuadorensis* Webb spec. nov.**

Etymology. *-ensis* (Latin)= a suffix denoting place, locality or country. This species is named after the country of Ecuador from where all of the specimens have been collected. This name is treated as a noun in apposition.

Diagnosis: *Protothereva ecuadorensis* is separated from *P. grisea* in lacking the brown maculations on the wing veins, in having the parafacial pruinescence dark brown with the ventral half gray and in having the cuticle of maxillary palpus dark brown. It is separated from *P. peruensis* in having the parafacial pruinescence dark brown dorsally and gray ventrally; female halter knob dark brown; male hypoproct (Fig. 1) with posterior margin slightly emarginate; male hypandrium present (Fig. 2); and female furca (Fig. 9) lacking anterolateral projection.



FIGURES 1-9. *Protothereva ecuadorensis* spec. nov. 1. Tergite 8, epandrium, cerci, and hypoproct, dorsal view. 2. Sternite 8, hypandrium, and gonocoxite ventral view. 3. Gonocoxite and hypandrium dorsal view. 4. Gonocoxite left lateral view. 5. Gonostylus left lateral view. 6. Aedeagus dorsal view (inset ejaculatory apodeme cross-section). 7. Aedeagus ventral view (inset ventral apodeme cross-section). 8. Aedeagus lateral view. 9. Female internal reproductive organs. Scale = 0.1 mm. Abbreviations: Acc=accessory gland duct, C=cercus, CD=common duct, DA=dorsal apodeme, Dp=distiphallus, EA=ejaculatory apodeme, Epa=epandrium, F=furca, GA=gonocoxal apodeme, Gs=gonostylus, Gx=gonocoxite, H=hypandrium, Hpt=hypoproct, Sp=spermatheca, SpD=spermathecal duct, SpS=spermathecal sac, SS=sensory seta, S8=sternite 8, T8=tergite 8, VA=ventral apodeme, VL=ventral lobe, VP=projection basolateral to ventral lobe.

Description of holotype male (MEI 039726)

Body length 6.2 mm.

Head. Length 0.78 mm. Frons with pruinescence dull brownish gray, with a diffuse dark brown area dorsolaterally along margin of eye; setae black, elongate, scattered over dorsal three-fourths. Antenna dark reddish brown, scape with gray pruinescence, 0.87 times length of head; scape length 0.26 mm, width 0.12 mm, 2.2 times longer than wide, 3.3 times length of pedicel, width 0.75 times width of flagellum, setae dark reddish brown, elongate; pedicel length 0.08 mm, width 0.12 mm; first flagellomere oval, posterior fourth narrow, attenuated apically, length 0.28 mm, 0.16 mm wide, second flagellomere length 0.02 mm, width 0.03 mm, third flagellomere length 0.04 mm, width 0.03 mm, flagellum length 0.34 mm, 2.1 times longer than wide, 1.3 times length of scape. Parafacial pruinescence dark brown dorsally, gray ventrally. Maxillary palpus dark brown, pruinescence gray, length 0.40 mm, width 0.06 mm, 6.7 times longer than wide; setae white, elongate. Occiput black, pruinescence gray; setae white, elongate, becoming pale yellow, lanceolate along margin of eye.

Thorax. Mesonotum with pruinescence dull brownish gray; setae black elongate, intermixed with pale gold setae. Pleuron dark brown, pruinescence gray; scutellum dark reddish brown; setae white, elongate on propleuron, anepisternum, laterotergite, and metanepisternum, pale gold on scutellum; absent from katepisternum. *Wing.* Membrane opaque, veins pale, yellow brown; length 4.8 mm width 1.8 mm; 2.7 times longer than wide; pterostigma faint yellowish brown; cell m_3 open widely. Halter pale brown. *Legs.* Femoral setae pale whitish yellow ventrally, elongate; av macrosetae 0:0:4, pv macrosetae 0:0:0 (0:0:1 on right hind femur). Left midleg missing on holotype.

Abdomen. Cuticle dark reddish brown, pruinescence white, dense; dorsal setae white, elongate, appressed; lateral setae white, elongate, erect. *Terminalia* (paratype MEI 039725) dark yellow. Sternite 8 (Fig. 2) rectangular, sides rounded. Hypoproct (Fig. 1) quadrate, posterior margin slightly emarginate. Hypandrium (Figs, 2, 3) brown, evident as a thin lightly sclerotized band in intersegmental membrane. Gonocoxite in ventral view (Fig. 2) broad basally, posterior half concave, tapering posteriorly to point; setae dark yellow with several moderately thick dark reddish brown setae. Gonostylus (Fig. 5) with basodorsal lobe short, setae dark yellow; apical half curved dorsally to single point, with subapical tubercle bearing several short setae. Aedeagus with dorsal apodeme (Fig. 6) broad, triangular, tapering gradually into basiphallus; ventral apodeme (Fig. 7) narrow, apex truncate, extending to anterior margin of dorsal apodeme; distiphallus in dorsal view (Fig. 6) short, tapered posteriorly, in lateral view (Fig. 8) with apical half bent ventrally at 90° angle, sinuate; ejaculatory apodeme in dorsal view (Fig. 6) with posterior half broad, oval, anterior half slightly bulbous, extending beyond anterior margin of dorsal apodeme.

Variation: Body length 4.7-6.5, 5.2 mm (N=7).

Female

Similar to male except for following. Body length 6.4-6.5 mm (N=2).

Head. Frons dark reddish brown, pruinescence brownish gray, ventral fourth with silver pruinescence extended laterally to antennal socket and with poorly defined dark brown area dorsolaterally.

Thorax. na 3-4 (N=2) macrosetae. *Wing.* Membrane opaque, faint smoky brown, veins brown; pterostigma pale brown. Halter dark brown. *Legs.* Hind femur occasionally with 1 short pv macroseta.

Abdomen. Cuticle dark reddish brown, pruinescence whitish gray, denser along posterior margins of tergites 2-3; dorsal and lateral setae dark reddish brown, short. *Terminalia* (paratype MEI 090032) cuticle dark reddish brown. Anterior margin of sternite 8 convex, emarginate medially; penial guide short. Furca (Fig. 9) length 0.44 mm, width 0.20 mm, 2.2 times longer than wide; posterior margin rounded, sides parallel, anterior margin truncate; anterolateral projection absent.

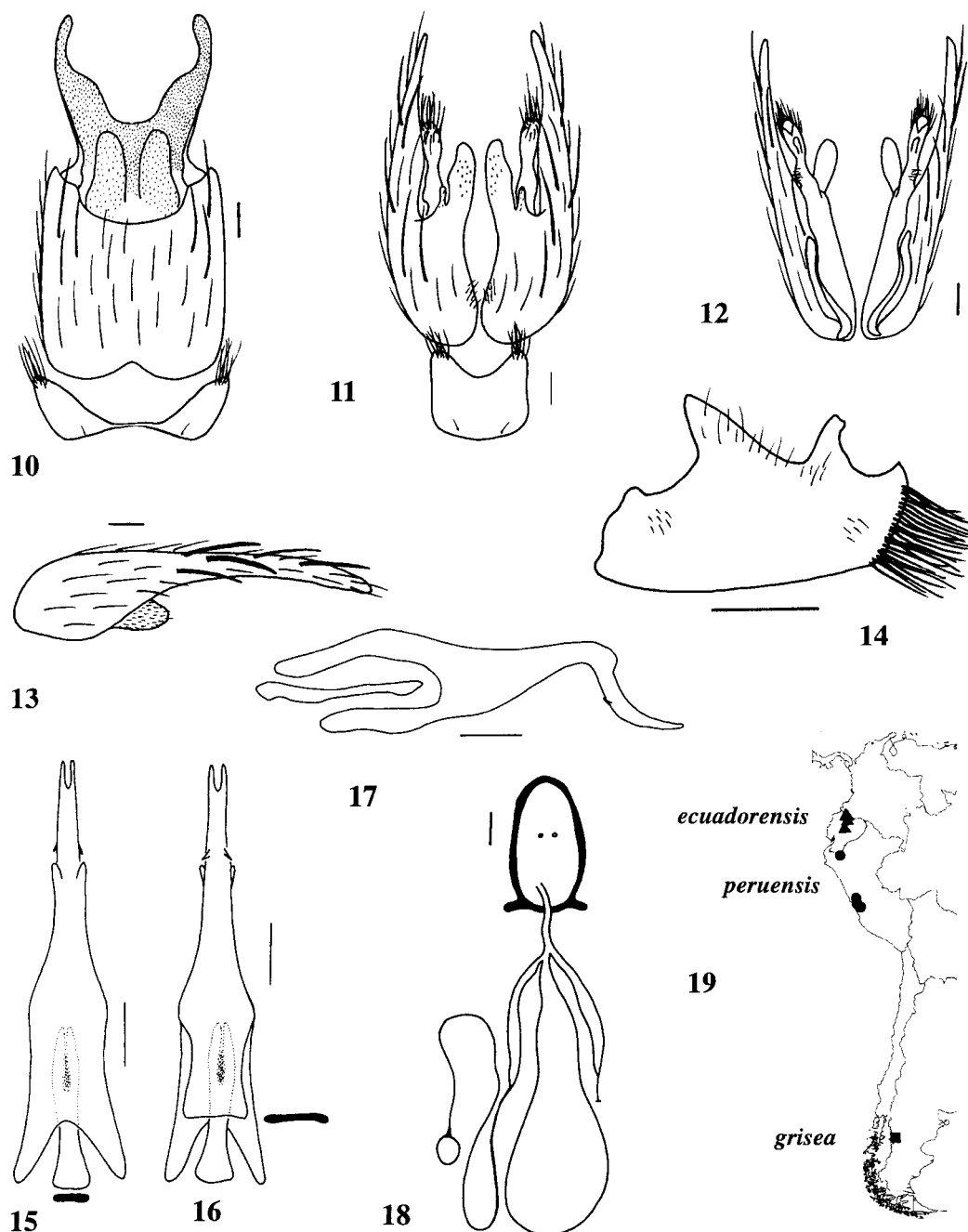
Distribution (Fig. 19). Known only from Ecuador.

Specimens Examined (N=9). The holotype male was collected from San Isidro, Carchi, Ecuador, elevation 2500 m, 23.VI.1965, by L. Pena (MEI 039726) and deposited in the Canadian National Collection of Insects (CNC). **PARATYPES: ECUADOR: Provincia Carchi:** San Isidro, 2500 m, 23-VI-1965, L. Pena, 1 male MEI 039725 (INHS); Bolivar, Chota R., 2000 m, 10-VI-1965, L. Pena, 1 male MEI 039727 (CNC). **Provincia Pichincha:** 2 km W Cayambe, 2300 m, 7-VI-1965, L. Pena, 1 male MEI 039728 (MEI). **Provincia Tungurahua:** Baños, 13-XI-1937, S. W. Frost, 1 male MEI 146037 (PSUC); 10-IV-1939, 1900 m, W. C. Macintyre, 1 female MEI 090046 (AMNH); 2-V-1939, 1800 m, 1 male MEI 090038 (AMNH), 1 female MEI 090032 (INHS); 1820 m 11-II-1955, E. I. Schlinger, E. S. Ross, 1 male MEI 090041 (CAS).

Protothereva peruensis Webb spec. nov.

Etymology. *-ensis* (Latin)= a suffix denoting place, locality or country. This species is named after the country of Peru from where all of the known specimens were collected. This name is treated as a noun in apposition.

Diagnosis: *Protothereva peruensis* is separated from *P. grisea* in lacking the brown maculations on the wing veins and in having the parafacial pruinescence and the cuticle of maxillary palpus dark brown. It is separated from *P. ecuadorensis* in having the parafacial pruinescence entirely dark brown; female halter knob dark yellow; male sternite 8 (Fig. 11) quadrate, sides parallel; hypoproct (Fig. 10) with posterior margin deeply emarginate; hypandrium absent; gonostylus (Fig. 14) with basodorsal lobe large; aedeagus (Figs. 15-16) with dorsal apodeme narrow, posterolateral corners rounded; ventral apodeme broad; distiphallus elongate, tapered posteriorly with short dorsolateral projection; posterior half of ejaculatory apodeme slightly bulbous; furca (Fig. 18) with anterolateral projection short, narrow.



FIGURES 10-19. *Protothereva peruensis* spec. nov. 10. Tergite 8, epanthrium, cerci, and hypoproct, dorsal view. 11. Sternite 8, gonocoxite ventral view. 12. Gonocoxite and hypandrium dorsal view. 13. Gonocoxite left lateral view. 14. Gonostylus left lateral view. 15. Aedeagus dorsal view (inset ejaculatory apodeme cross-section). 16. Aedeagus ventral view (inset ventral apodeme cross-section). 17. Aedeagus lateral view. 18. Female internal reproductive organs. Scale = 0.1 mm. 19. Distribution of *Protothereva*: triangle= *P. ecuadorensis*, circle= *P. peruensis*, square= *P. grisea*.

Description of holotype male (MEI 090036)

Body length 7.2 mm.

Head. Length 0.88 mm. Frons with pruinescence brownish silver, with dark brown, curved band dorsally; setae black, elongate. Antenna dark reddish brown, scape with pruinescence gray, 0.86 times length of head; scape length 0.30 mm, width 0.13 mm, 2.3 times longer than wide, 3.0 times length of pedicel, width 0.81 times width of flagellum, setae dark reddish brown, elongate, grading in thickness into macrosetae; pedicel length 0.10 mm, width 0.12 mm; first flagellomere oval, posterior fourth narrow, attenuated apically, length 0.28 mm, width 0.16 mm, second flagellomere length 0.02 mm, width 0.03 mm, third flagellomere length 0.06 mm, width 0.03 mm, flagellum length 0.36 mm, 2.3 times longer than wide, 1.2 times length of scape. Parafacial pruinescence dark brown. Maxillary palpus dark brown, pruinescence gray, length 0.36 mm, width 0.08 mm, 4.5 times longer than wide; setae whitish brown, elongate. Occiput black, pruinescence gray; setae white, elongate, becoming pale gold, lanceolate along margin of eye.

Thorax. Mesonotum with pruinescence dull brownish gray, setae black, elongate, intermixed with pale greenish gold, iridescent, appressed setae. Pleuron dark brown, pruinescence gray; scutellum dark reddish brown; setae white, elongate on propleuron, anepisternum, laterotergite, and metanepisternum, pale gold on scutellum; absent from katapisternum. *Wing.* Membrane opaque, pale brown, veins brown; length 5.5 mm, width 1.8 mm, 3.1 times longer than wide; pterostigma faint brown; cell m_3 open moderately. Halter brown. *Legs.* Femoral setae pale whitish yellow ventrally, elongate; av macrosetae 1:0:4, pv macrosetae 0:0:0.

Abdomen. Covered with dense white pruinescence; dorsal setae white, elongate, appressed; lateral setae white, elongate, erect. *Terminalia* (paratype MEI 090037) dark yellow. Sternite 8 (Fig. 11) quadrate, sides parallel. Hypoproct (Fig. 10) large, posterior margin deeply emarginate. Hypandrium not evident. Gonocoxite in ventral view (Fig. 11) broad basally, tapering posteriorly to point; setae dark yellow with several moderately thick dark reddish brown setae. Gonostylus (Fig. 14) with basodorsal lobe large, setae dark yellow; apical half curved dorsally to single point, with subapical tubercle bearing several short setae. Aedeagus with dorsal apodeme (Fig. 15) narrow, posterolateral corners rounded, anterior margin moderately emarginate; ventral apodeme (Fig. 16) broad, apex truncate, not extending to anterior margin of dorsal apodeme; distiphallus in dorsal view elongate, tapered posteriorly with short dorsolateral carina, in ventral view (Fig. 16) with short, pointed ventrolateral projection, in lateral view (Fig. 17) with apical half bent ventrally at 65° angle; ejaculatory apodeme (Fig. 15) with posterior half slightly bulbous, anterior half slightly expanded laterally, extending to anterior margin of dorsal apodeme.

Variation: Body length 6.0-7.2, 6.8 mm (N=7).

Female

Similar to male except for following. Body length 6.8-7.5, 7.2 mm (N=3).

Head. Frons dark reddish brown, pruinescence brownish gray with ventral fourth silver, extending lateral to antennal sockets with poorly defined dark brown area dorsolaterally.

Thorax. *Wing.* Membrane opaque, faint smoky brown, veins brown; pterostigma pale brown. Halter stalk brown, knob dark yellow. *Legs.* Femora with av macrosetae 0:0:2, pv macrosetae 0:0:2.

Abdomen. Cuticle dark reddish brown, pruinescence whitish gray on lateral corners of tergites 2-3 and across posterior margin of tergites 5-6; dorsal setae dark reddish brown, short with pale gold setae across posterior margins of tergites 1-4; lateral setae dark reddish brown. *Terminalia* (paratype MEI 009004) dark reddish brown. Sternite 8 with anterior margin truncate; penial guide absent. Furca (Fig. 18) length 0.48 mm, width 0.28 mm, 1.7 times longer than wide; posterior and lateral margins rounded, anterior margin truncate; anterolateral projections short, narrow.

Distribution. Figure 19.

Specimens Examined (N=10). The holotype male (MEI 090036) was collected from Q. [Quebrada] Huarochiri, 1500 msnm, 30-IV-1970 (Peru) by C. Korytkowski, MEUN-PRIG No. 548-70 and is deposited in the California Academy of Sciences (type number 17901). **PARATYPES: PERU.** Q. [Quebrada] Chinche, 30-IV-1970, C. Korytkowski, 1 male MEI 090035 (MEI), 1 male MEI 090045 (MEI); Churiti 17-VIII-1952, 1 female MEI 090039 (MZSP); La Beatita, 18-IV-1969, Korytkowski, 1 male MEI 090034 (MSML); 19-IV-1969, 1 male MEI 090033 (INHS). **Departamento Lima:** Chosica, 915 m, 20-II-1928, R. C. Shannon, 1 female MEI 090040 (USNM); Huarochiri, 1-VI-1970, D. Ojeda, 1 female MEI 090042 (CAS); Matucana, 27-IV-1974, 1 male MEI 090037 (USNM); 27-V-1929, 1 female MEI 090044 (CUIC).

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