Holotype Female. Body elongate-oval; length 10.3 mm. Head, pronotum, underside and elytra chocolate brown; antenna yellowish brown (Fig. 1). Legs dark reddish brown. Head with clypeus coarsely, rugosely punctate, punctures separated by distance less than their diameters, surface between punctures smooth. Frons coarsely punctate, punctures separated by distance approximately equal to their diameters; surface between punctures weakly alutaceous, shining; vertex with a faint median impressed line. Eyes moderately and broadly emarginate at antennal insertion; ocular sulci weakly developed. Mouthparts piceous; labrum reddish brown. Prothorax distinctly wider than long, L/W = 0.63; pronotum with diagonal submedian depressions well developed; lateral margin narrow, undulate, forming two weak teeth at the mid-point, with widest part of pronotum anterior to middle; disc moderately and evenly punctate, with punctures separated by a distance greater than their diameters, punctures coarser laterally; surface between punctures smooth, shining. Undersurface of thorax smooth. Prosternum with long setae, rugosely punctate, longitudinally weakly inclined behind coxae, transversely flat between coxae; posterior margin of intercoxal process distinctly concave, lateral angles of intercoxal process swollen, width of intercoxal process 0.72 x diameter of procoxa. Lateral arms of prosternum with surface glabrous, wrinkled. Proepimeron with strong punctures along lateral margin, with surface smooth, shiny. Mesosternum convex between coxae, surface finely punctate, with sparse short yellow setae. Metasternum finely wrinkled, with two pairs of long yellow setae. Protibiae abruptly widened in apical third. Elytra geminate punctate-striate, with punctures in striae separated by distance less than their diameters; intervals distinctly costate throughout; costae uniting and becoming more prominent above apical declivity. Surface between punctures smooth with scattered small punctulae, apical declivity densely, rugosely punctate; humeri prominent, rounded, width across humeri 1.37 x width across pronotum; basal calli obsolete; postbasal depression lacking, basal margin costate to scutellum. Abdomen with one or two pairs of long setae on each side of midline of sternites III–VI. Surface of segments alutaceous. Abdominal segments VIII–XI forming short, non-extendible ovipositor (Fig. 86). Sternite VIII with short apically spatulate basal apodeme; apical margin of sternite fringed with long setae; tergite of segment VIII weakly sclerotized, with fringe of setae on apical margin. Segment IX with hemisternites broad, weakly sclerotized; paraprocts separated into pair of curved strongly sclerotized dorsal rods, apically forming hood-like projection above gential orifice (Fig. 87); baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, with long setae laterally and at apex; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 88; spermathecal duct thin, weakly sclerotized, with numerous coils forming a tangled mass.

Male. Unknown.

Etymology. *Arimanes* (noun in apposition), a Persian deity of the underworld, sometimes portrayed as appearing in mountain areas (Byron 1816).

Specimens examined. Female HOLOTYPE (NHMB) labeled "Bolivia (Beni), Rurrenabaque, 27/31 - VIII-1989, L.E. Peña, coll." PARATYPES (3 ♀♀): 1♀ (ISA) same locality and collector, IX-1962; 2 ♀♀ (NHMB) same locality and collector.

Remarks. This species is distinguished by its strongly concave prosternal process, chocolate brown color, and strongly costate elytral striae.

***Prionodera bicolor* (Olivier)**
(Figs 3, 19–21, 63, 64, 98, 100))

Colaspis bicolor Olivier 1808:879

Male. Body elongate-oval, dorsally convex; length 8.2–9.0 mm. Head, pronotum and scutellum reddish orange, elytra dark metallic blue or bluish green; antenna with segments 1–6 yellowish brown, 7–11 black (Fig. 3). Underside and legs shining reddish orange. Head with clypeus sparsely punctate, punctures separated by distance greater than their diameters, surface between punctures smooth, apex of clypeus emarginate. Frons finely punctate with a few deep punctures above antennal calli, punctures separated by distance greater than the diameter of a puncture; surface between punctures smooth, shining; antennal calli smooth. Mouthparts yellowish brown, mandibles piceous; with apex of labrum emarginate, with 4 dorsal setae and short row of lateral setae along outer margin. Mandibles with lateral surface coarsely punctate. Prothorax distinctly wider than long, L/W = 0.72; pronotum with diagonal submedian depressions well developed; lateral margin narrow, undulate, forming two weak teeth at the mid-point, with widest part of pronotum anterior to middle; disc sparsely, moderately punctate, with punctures separated by a distance greater than their own diameters; surface between punctures smooth, shining. Prosternum longitudinally strongly inclined behind coxae, transversely flat, posterior margin of intercoxal process truncate, lateral angles of intercoxal process swollen, width of intercoxal process 0.50 x diameter of procoxa. Lateral arms of prosternum with surface glabrous, wrinkled. Proepimeron with a few punctures scattered in posterior half, with surface smooth, shiny. Mesosternum with median longitudinal depression, surface finely punctate, with sparse short yellow setae. Metasternum with two pairs of long yellow setae posterior to mesocoxa. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide. Elytra irregularly geminate punctate-striate, punctures in single rows in apical fourth and along suture. Surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.2 x width across pronotum; basal calli weakly developed; postbasal depression shallow, sides subparallel, convergent; apices strongly declivous. Basal margin costate above humeri. Abdomen with surface of segments alutaceous. Male sternite VII with lateral margins smooth, a

weak depression in center. Median lobe in lateral view smoothly curved (Fig. 19); apex bifid (Fig. 21); basal hood long, lightly sclerotized, with apodemes indistinct at lateral margins of hood. Apical sclerite, straight, slightly twisted, with basal protuberance (Fig. 20).

Female. Body oval; length 9.2–10.7 mm; color of head, pronotum, scutellum and elytra as in male, underside and legs as in male. Head with labrum, frons, clypeus, eyes and antennae similar to male; mouthparts similar to male. Prothorax distinctly wider than long, L/W = 0.71; pronotum as in male with two teeth on lateral margin; scattered punctures on disc, punctures separated by distance equal to their diameters. Lateral arms of prosternum and proepimeron as in male; prosternum similar to male, but with width of intercoxal process 0.57 x diameter of procoxa, broadened behind coxae, posterior angles slightly swollen, posterior margin straight and weakly crenulate. Mesosternum flat between coxae, otherwise similar to male. Legs with basal tarsomere of fore- and middle legs not expanded. Elytra loosely geminate-punctate-striate; punctation, apical declivity, humeri, and basal calli as in male. Abdomen with all segments subequal in length; surface of segments weakly alutaceous. Sternites with sparse short setae, setae longer laterally; sternites III to VI with one or two long setae on each side of midline. Sternite VII with apical margin weakly emarginate, and with numerous long lateral and apical setae. Abdominal segments VIII–XI forming elongate ovipositor (Fig. 63). Sternite VIII with long strap-like basal apodeme; only several setae remain of the apicolateral arms; tergite of segment VIII weakly sclerotized laterally. Segment IX covered with minute setae in basal half; hemisternites with short broad basal rods, poorly sclerotized apically; paraprocts separated into pair of slender dorsal rods, apically forming hood-like projection above gential orifice; baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, with long setae in apical half; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 64; spermathecal duct thin, sclerotized, not coiled.

Specimens examined. Type not seen. (8♂♂, 9♀) BRAZIL: 1♂, Ben. Constant, Rio Javary, alto Amazonas, XII-1960, Dirings (MPEG); 5 ♀♀, Amazonas, Itacostiara, Amazonas, Col. Dirings (MPEG); 1♀, Amazonas, Manaus, 1 km. W Taurma Falls, 11-I-1981, 100m., G. Ekis, primary forest beating, day (MPEG); 1♀, same locality, INPA, luz: 1-XII-1976, Col. I.S. Gorayeb (MPEG); 1♀, same locality and collector, BR 174, km. 30: 27-V-1977(MPEG); 5♂♂, 3 ♀♀, Rondônia, 62 km. SW. Ariquemes, Fazenda Rancho Grande, 29-IX–10-X-1992, D.G. Marqua, Coll (EGR); 2 ♂♂, same locality, 3-XI-1989, second growth, R.W. Flowers (FAMU); 1♀, same locality and collector, 4-XI-1989, on *Cecropia* (FAMU); 1♀, same locality, 8–20-X-1994, J.E. Eger, Black Light Trap (FSCA); 1♂, 1♀ same locality and collector, 5–17-X-1993, mv & black lights (FSCA); 1♂, same locality and date, J.E. Eger & LB & CW O'Brien (FSCA). FRENCH GUIANA: 1♂, Hwy N2 to Regina, 67 km. s. of Cayenne, 1-VI-1986, E.G. Riley & D.A. Rider (EGR); 1♂ Matoury 20-XI-1980, PL UV, Silvain ORSTOM Rec (EGR). ECUADOR: 2 ♂♂, 1♀, Napo Prov. Estación Cientifica Yasuní, 8–10-IX1999. 215m. Coll. E.G. Riley (EGR).

Remarks. The author collected one specimen from the terminal buds of a *Cecropia* tree in Brazil. Others have been taken at lights. These records constitute most of the pitifully spare knowledge we have on the biology of *Prionodera*.

***Prionodera costata* (Baly) new combination**
(Figs 11, 14, 22–24, 65–67, 98, 100)

Stenolampra costata Baly 1859:127

Male. Body elongate-oval, dorsally convex; length 7.9–8.8 mm. Head, pronotum and elytra metallic purple-red; antenna with segments 1–4 piceous, 5–11 yellowish tan. Underside and legs piceous with purplish-brown or dark blue reflex. Head with clypeus coarsely punctate punctures separated by distance greater than their diameters, surface between punctures smooth, apex of clypeus emarginate. Frons coarsely punctate, punctures separated by distance greater than their diameters; surface between punctures smooth. Mouthparts piceous. Mandibles with lateral surface rugose and setose. Prothorax distinctly wider than long, L/W = 0.72; pronotum moderately convex, diagonal submedian depressions weak; lateral margin narrow, undulate, forming three weak teeth, with widest part of pronotum anterior to middle; disc distinctly, regularly punctate, with punctures separated by a distance equal to or slightly greater than their diameters (Fig. 14) surface between punctures smooth, shining. Prosternum longitudinally slightly inclined behind coxae, transversely flat; posterior margin of intercoxal process shallowly concave, lateral angles of intercoxal process swollen, width of intercoxal process 0.58 x diameter of procoxa. Proepimeron sparsely punctate, with punctures separated by distance greater than their diameters, with surface smooth, shiny, somewhat wrinkled at lateral margin. Mesosternum with sparse short yellow setae. Metasternum convex, swollen anterior to hind coxae, smooth, with sparse short yellow setae. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide. Elytra geminate punctate-striate, with punctures in striae separated by distance much less than the diameter of a puncture; strial punctures in single rows only in sutural stria and in apical fourth, geminate elsewhere; intervals convex, intervals forming low costae laterally; interval III swollen and protruding beyond apical declivity (Fig. 11), intervals IV and VIII swollen and united at top of apical declivity; intervals V and VII broadly united in angle of intervals IV and VIII. Surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.3 x width across pronotum; basal calli obsolete; postbasal depression lacking, sides subparallel, convergent; apices strongly declivous. Basal margin costate at humeri. Abdomen with sparse prostrate setae, also with a pair of long submedian setae on sternites IV–VI. Male sternite VII with lateral margins smooth, a weak depression in center. Median lobe in lateral view smoothly curved (Fig. 22); apex bifid (Fig. 24); basal hood with apodemes indistinct at lateral margins of hood; subbasal fenestra present;

basal spurs prominent; tegmen triangular. Apical sclerite, straight, hook-like, slightly twisted (Fig. 23).

Female. Body oval; length 9.0–11 mm; head, pronotum, elytra, and underside piceous with metallic green reflex; antennae reddish brown; legs piceous with bluish reflex. Head with labrum, frons, clypeus, eyes and antennae similar to male. Prothorax distinctly wider than long, L/W = 0.67; pronotum with three weak teeth on lateral margin; evenly punctate on disc; with punctures separated by distance equal to or slightly greater than their diameters, punctures more crowded near anterior angles. Prosternum similar to male, but with width of intercoxal process 0.75.x diameter of procoxa, broadened behind coxae, posterior angles slightly swollen, posterior margin straight and weakly crenulate. Legs with basal tarsomere of fore- and middle legs not expanded Elytra with punctation and apical intervals as in male. Abdomen with surface of segments weakly alutaceous. Sternites sparsely covered with short setae, setae longer laterally; sternites III to VI with four pairs of long setae on each side of midline. Sternite VII with apical margin weakly emarginate, and with numerous long lateral and apical setae. Abdominal segments VIII–XI forming elongate ovipositor (Fig. 65). Sternite VIII with long strap-like basal apodeme; only several setae remain of the apicolateral arms; tergite of segment VIII weakly sclerotized laterally. Segment IX with hemisternites large with short broad basal rods; paraprocts separated into pair of slender dorsal rods, apically forming hood-like projection above genital orifice (Fig. 66); baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, with long setae in apical half; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 67; spermathecal duct thin, sclerotized, not coiled.

Specimens examined. Male SYNTYPE labeled “[white circular tag - "Ega"]/[white cardboard square - undecipherable]/Baly Coll./SYNTYPE, *Stenolampra costata* Baly, S.L. Shute, 1989” (NHM). Female SYNTYPE labeled “[green paper tag - blank]/Amaz./Type (?)/Baly Coll./SYNTYPE, *Stenolampra costata* Baly, S.L. Shute, 1989” (NHM). Male labeled “Amazones (Ega)/Type de Baly/ Ex Museo Lefèvre 1894/Muséum París ex. Coll. R. Oberthür 1952/TYPE (MNHNP). OTHER SPECIMENS (1♂, 1♀): 1♂, BRAZIL: Teffé (Ega), Amazonas, M. de Mathan, 3rd Trimestre 1878, F. Monrós Collection 1959 (NMNH); 1♀, same locality, date and collector, (det. J.L. Gressitt) (BPBM).

Remarks. This species is very close to *P. adiastola* in external appearance. Both species have identical prolongations of the third elytral interval, and both have similar metallic colors. The shape and punctation of the pronotum will separate the two species (as noted in the remarks for *P. adiastola* above, Fig. 13); internally the differences in the female genitalia are substantial.

***Prionodera cyanea* (Lefèvre)**
(Figs 8, 51–53, 99, 100)

Aporus cyanea Lefèvre 1884:206

Aporistus cyaneus Lefèvre 1885:156

Male. Body ovate (Fig. 8), dorsally convex; length 6.30 mm. Head, pronotum and elytra piceous with blue reflection; antenna blue-black. Underside and legs shining piceous with dark blue reflection. Head with clypeus coarsely punctate, punctures separated by distance greater than their diameters, surface between punctures smooth. Frons and vertex deeply retracted into head and not visible from above. Mouthparts piceous. Mandibles with lateral surface rugose and setose. Prothorax distinctly wider than long, L/W = 0.70; pronotum strongly convex, diagonal submedian depressions weak; lateral margin narrow, weakly undulate, at middle, with widest part of pronotum anterior to middle; disc sparsely punctate, with punctures moderately deep and separated by a distance greater than their diameters; surface between punctures smooth, shining. Prosternum with long setae, longitudinally weakly inclined behind coxae, transversely flat; posterior margin of intercoxal process truncate, width of intercoxal process equal to diameter of procoxa. Proepimeron weakly concave, sparsely punctate, with a few punctures scattered in posterior half, with surface smooth, shiny. Mesosternum with sparse short yellow setae. Metasternum convex, swollen anterior to hind coxae, finely wrinkled. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide. Elytra punctate-striate, striae irregularly geminate in basal third and laterally; with punctures in striae separated by distance greater than the diameter of a puncture; intervals flat. Surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.8 x width across pronotum; basal calli weak; postbasal depression very shallow, sides broadly oval, convergent in apical fourth; apices strongly declivous, conjointly rounded. Basal margin not costate. Epipleuron narrow, acutely raised, slanted, tapering evenly from base to apex. Scutellum U-shaped with sides curved, with base subequal to length. Abdomen with sparse prostrate setae, also with one or two pairs of long setae on each side of midline of sternites III–VI. Surface of segments smooth. Sternite VII with lateral margins smooth, a broad shallow depression in center. Median lobe in lateral view smoothly curved (Fig. 51); apex curved laterally with tip upturned (Fig. 53).

Holotype Female. Length 8.0mm. Head with labrum, frons, clypeus, eyes and antennae similar to male, but head not so strongly retracted into pronotum. Prothorax distinctly wider than long, L/W = 0.62, with widest part of pronotum anterior to middle; pronotum weakly undulate on lateral margin. Prosternum similar to male, broadened behind coxae, posterior angles slightly swollen, posterior margin straight and weakly crenulate. Legs with basal tarsomere of fore- and middle legs not expanded Elytra with punctation and apical intervals as in male, but with width across humeri 1.3 x width across pronotum. Meso and metasterna, and surface of abdomen as in male.

Specimens examined. Female TYPE (MNHNP) labeled: Cayenne; (1♂) Cayenne; F. C. Bowditch Coll. (MCZ)

Remarks. The small size and ovate rather than elongate body shape distinguish this species. No spermatheca was found when the holotype was dissected (old museum speci-

mens sometimes are found to be missing genitalia, which have been removed by previous researchers who neglected to leave any note or other indication as to the fate of the parts). Unfortunately, the type was examined and returned early in this project, before the importance of the length of the ovipositor and the condition of the spermatheca had dawned on the author.

***Prionodera dichroma* Flowers, new species**
(Figs 25–28, 68, 69, 98, 100)

Holotype Male. Body elongate-oval, dorsally convex; length 7.55 mm. Head, pronotum and elytra bright metallic green to bluish green; antenna yellowish brown, segments 10–11 darker. Underside yellowish brown with strong metallic blue-green reflection, coxae and apical abdominal sternites yellowish brown; legs shining yellowish brown. Head with clypeus coarsely punctate, punctures separated by distance greater than their diameters, surface between punctures smooth. Frons sparsely, finely punctate, punctures separated by distance greater than the diameter of a puncture; surface between punctures smooth, shining; antennal calli smooth. Ocular sulci weakly developed. Mouthparts yellowish brown, mandibles piceous with lateral surface rugose and setose. Prothorax distinctly wider than long, L/W = 0.72; pronotum moderately convex, with diagonal submedian depressions present; lateral margin narrow, undulate, forming three small teeth in middle, with widest part of pronotum at middle; disc evenly punctate, with punctures separated by a distance greater than their own diameters; surface between punctures smooth, shining. Prosternum with long setae, coarsely punctate, longitudinally inclined behind coxae, transversely flat; with anterior margin excavated for reception of gular area of head; posterior margin of intercoxal process truncate, lateral angles of intercoxal process slightly swollen, width of intercoxal process 0.78 x diameter of procoxa. Proepimeron sparsely punctate, with a few punctures scattered across surface. Mesosternum with short yellow setae. Metasternum finely wrinkled, with three pairs of long yellow setae. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide. Elytra punctate-striate, punctures in loosely geminate striae in basal third and laterally, in single rows along suture and at apex, punctures in striae separated by distance equal to diameter of a puncture, intervals flat on disc, weakly swollen on apical declivity. Surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.2 x width across pronotum; basal calli weak; postbasal depression very shallow, sides subparallel, convergent; apices strongly declivous, conjointly rounded. Basal margin weakly costate to scutellum. Scutellum U-shaped, with base subequal to length; surface smooth, with few small punctulae. Abdomen with sparse prostrate setae, also with one pair of long setae on each side of midline of sternites III–VI. Surface of segments smooth. Sternite VII with lateral margins smooth, a pronounced transversely oval depression in center. Median lobe strongly curved basally, weakly curved apically (Fig. 25), apex bifid

(Fig. 27). Endophallus (partly everted) unsclerotized with membranous lobes. Apical sclerite elongate (Fig. 26), variously curved and twisted (examples from different specimens shown in Fig. 28).

Allotype Female. Body oval; length 9.10 mm; head, pronotum, and elytra piceous with strong metallic green reflex on disc; underside dark reddish brown; antennae with segments 1–7 reddish brown, 8–11 darker; legs yellowish brown, tibiae and tarsi darker. Prothorax distinctly wider than long, L/W = 0.65; pronotum with three weak undulations on lateral margin; disc more finely punctate than in male, with punctures separated by distance greater than their diameters. Lateral arms of prosternum and proepimeron as in male; prosternum similar to male, but with width of intercoxal process 1.05 x diameter of procoxa, broadened behind coxa, posterior margin truncate. Mesosternum transversely wrinkled between coxae, otherwise similar to male. Basal tarsomere of fore- and middle legs not expanded. Elytra with punctation and apical declivity as in male. Abdomen with surface of segments weakly alutaceous. Sternites sparsely covered with short setae, setae longer laterally; sternites III to VI with one to three pairs of long setae on each side of midline. Sternite VII with apical margin weakly emarginate, and with numerous long lateral and apical setae. Abdominal segments VIII–XI forming elongate ovipositor (Fig. 68). Sternite VIII with long strap-like basal apodeme; only several setae remain of the apicolateral arms; tergite of segment VIII weakly sclerotized laterally; hemisternites broad with short broad basal rods; paraprocts separated into pair of slender dorsal rods, baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, with long setae in apical half; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 69; spermathecal duct thin, sclerotized, loosely coiled.

Etymology. *Di*, from Greek, meaning two; *chroma*, from Greek, meaning color.

Specimens examined. Male HOLOTYPE labeled PANAMA: Panamá Prov., Cerro Campana May 11–15, 1980, E.G. Riley & D. LeDoux (EGR). Female ALLOTYPE labeled same locality, date and collectors as holotype (EGR). PARATYPES (12♂♂ 12♀♀): PANAMA 1♂ Pan., 2700', Cerro Campana, 13-V-1978, CW & LB O'Brien & Marshall (FAMU); 1♀ same locality, 2600', 10–20-V-1981, J.E. Weppes (EGR); 1♂, El Llano - Carti Rd., Km.-9, El. 360m, 7–8-V-1991, Windsor-Stockwell (STRI); 1♀, 8–10 km. N. El Llano, 26-IV–4-V-1992, E. Giesbert, coll. (FSCA); Panamá, Canal Zone: 1♀, Pipeline Road, 12-V-1978 CW & LB O'Brien & Marshall (FAMU); 1♀, Barro Colorado Is. 16-VI-1967, at U.V. light, Robert G. Beard (CU); 1♀, same locality and collector, 30-VI-1967 (CU); 1♀, same locality, 23-V-1926, CT Greene Collector (NMNH); 1♀, same locality, Lights I, 28-VI-1977, H. Wolda (STRI); 1♀, same locality and collector, 6-VI-1978 (STRI); 1♀, same locality and collector, 10-VI-1979 (STRI); 1♂ same locality and collector, Lights: SM I, 23-IV-1977 (STRI); 1♂, same locality and collector, 22-VI-1977 (STRI); 1♂, same locality and collector, 31-VII-1977 (STRI); 1♂, same locality and collector, 13-IV-1978 (STRI); 1♂, same locality and collector, 5-VI-1978 (STRI); 1♂ same locality and collector, Lights, SM III, 4–6-V-1977 (STRI); 1♂ same locality and collector,

5-VI-1977 (STRI); 1♂, same locality and collector, 8-VI-1977 (STRI); 1♂, same locality and collector, 22-VI-1977 (STRI); 1♀, same locality and collector, 12-VII-1977 (STRI); 1♀, same locality and collector, 10-VIII-1977 (STRI); 1♀, same locality and collector, 11-V-1978 (STRI); 1♂, same locality and collector, 5-VI-1978 (STRI). Paratypes deposited in STRI, FSCA, CU, and NMNH.

Remarks. This is the only species of the genus that shows consistent color differences between male and female. Males also showed an unusual variability in the development of the apical sclerites (Fig. 28)

***Prionodera esmeralda* Flowers, new species**
(Figs 2, 29–31, 70–72, 98, 100)

Holotype Male. Body elongate-oval, dorsally convex; length 9.5 mm. Head, pronotum and elytra bright metallic green; antenna with segments 1–4 yellowish, 5–11 shining blue-black (Fig. 2). Underside and legs metallic blue-green. Head with clypeus coarsely punctate, punctures separated by distance greater than their diameters, surface between punctures smooth. Frons finely punctate, punctures separated by distance greater than their diameters; surface between punctures smooth, shining; vertex with a faint median impressed line; antennal calli smooth, shining, and swollen. Eyes shallowly and broadly emarginate at antennal insertion; ocular sulci weakly developed. Mouthparts piceous; mandibles with lateral surface rugose. Prothorax distinctly wider than long, L/W = 0.72; pronotum moderately convex, with diagonal submedian depressions shallow; lateral margin narrow, undulate, forming three small teeth at the mid-point, with widest part of pronotum anterior to middle; disc finely, irregularly punctate, with punctures separated by a distance greater than their own diameters; surface between punctures smooth, shining. Prosternum with long setae, rugosely punctate, posterior margin of intercoxal process truncate, width of intercoxal process 0.56 x diameter of procoxa. Proepimeron with a few scattered punctures, with surface smooth, shiny. Mesosternum with surface finely punctate, with short yellow setae. Metasternum finely wrinkled, with three pairs of long yellow setae. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide. Elytra punctate-striate, with punctures single rows on basal callosities and in apical fourth, irregularly geminate-striate in middle with punctures separated by distance greater than their diameters; interval VIII forming a low lateral costa behind humerus, this costa becoming more prominent in apical third; interval III swollen and weakly protuberant posteriorly at top of apical declivity; surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.3 x width across pronotum; basal calli weak; postbasal depression very shallow, sides subparallel, convergent; apices strongly declivous. Basal margin costate to scutellum. Abdomen with sparse prostrate setae, also with one pair of long setae on each side of midline of sternites III–VI. Surface of segments smooth. Male sternite VII with lateral margins smooth, a weak depression in

center. Median lobe in lateral view smoothly curved (Fig. 29); apex bifid (Fig. 31); basal hood lightly sclerotized, with apodemes indistinct at lateral margins of hood. Endophallus not extruded, but apparently lacking sclerotized external structures; apical sclerite long, slightly twisted (Fig. 30).

Allotype Female. Body oval; length 11.1 mm; head, and pronotum, elytra and underside colored as in male. Prothorax distinctly wider than long, L/W = 0.67; pronotum with two weak teeth and trace of a third on lateral margin; sparsely and irregularly punctate on disc, impunctate in apical fourth at middle; with punctures separated by distance equal to or slightly greater than their diameters . Prosternum similar to male, but with width of intercoxal process 0.75x diameter of procoxa, broadened behind coxa, posterior margin truncate. Mesosternum flat, transversely wrinkled between coxae, otherwise similar to male. Legs with basal tarsomere of fore- and middle legs not expanded. Elytra with punctation and apical declivity as in male. Abdomen with surface of segments weakly alutaceous. Sternites sparsely covered with short setae, setae longer laterally; sternites III to VI with one or two pairs of long setae on each side of midline. Sternite VII with apical margin weakly emarginate, and with numerous long lateral and apical setae. Segments VIII–XI forming short ovipositor (Fig. 70). Sternite VIII with short strap-like basal apodeme; two transverse rows of setae remain of the apicolateral arms; tergite of segment VIII (Fig. 71) membranous with apical row of setae. Segment IX with hemisternites broad, with short broad basal rods; paraprocts separated into pair of slender curved dorsal rods, apically forming hood-like projection above gential orifice; baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, with long setae in apical half; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 72; spermathecal duct thin, sclerotized, not coiled.

Etymology. *Esmeralda*, from Spanish, meaning emerald.

Specimens examined. Male HOLOTYPE labeled Est. San Ramon Oeste, Prov. Alaju, COSTA RICA. 620m. 3–19 Abr 1994. C. Cano, L N 318100_381900 # 2818" (INBIOCRI001769942). Female ALLOTYPE labeled "COSTA RICA. Prov. Alajuela, Upala, Bijagua, P.N. Volcán Tenorio, Albergue Heliconias, Sendero Heliconias. 700m. 17 ABR 2001. A. López. Intersección. L_N_422600_299100 #62027" (INB0003173027). PARATYPES (14♂♂, 29♀♀). COSTA RICA: Alajuela Province: 1♀, (INB0003173085), Upala, Albergue Heliconias, Sendero Heliconias. 1000m. 17-IV-2001. A. López. Luz ambiente. L_N_423400_298575 #62030; 1♀, (INB0003328195), P.N. Volcán Tenorio, Upala, Bijagua, Alb. Heliconias, Send. Laguna Dantas 1355m, 22-V-2001, A. López, Libre, L_N_298100_423760 #63097; 2♂♂, (INB0003578258, INB0003578260), 5♀♀ (INB0003578261, INB0003578259, INB0003578257, INB0003578256, INB0003578255), Fca. San Gabriel, 2km SW de Dos Rios, 600m, V-1989 GNP Biodiv. Survey L N 318800_383500; 1♀ (INB0003578262), Upala, Dos Ríos, Finca San Gabriel. 600m. VI-1989. GNP Biodiv. Inv. Manual. L_N_383500_318800 #20; 4♀♀ (INB0003578263, INB0003578264, INB0003578265, INB0003578266), Fca. San Gab-

riel, 2Km SW Dos Rios, 600 m, May 1988. Janzen & Hallwachs W85 23`50" ,N10 53`19"; 1♀, (INB0003578267), San Ramon, Rio S. Lorencito, 800M 4-V-1987 Col: A. Solis Blanco; 1♂, 1♀ (INBIOCRI001769943 , INBIOCRI001769954), Est. San Ramon Oeste, 620m. 3–19-IV-1994. C. Cano, L N 318100_381900 # 2818; 1♀, (INBIOCRI001778127), same locality, 3–19-IV1994, F. Quesada, # 2817; 1♂, (INBIOCRI001820496), Sector San Ramon, 800m. 11–15–IV-1994, M. Zumbado, L N 318100_381900 # 2857; 1♂ (INBIOCRI002146077), Sect. San Ramon de Dos Rios, 620m. 27-IV–11–V-1995. C. Cano, L_N_318100_381900 #5276; 1♀, (INBIOCRI002204873), same locality and collector, 25 MAR-12 ABR 1995. C. Cano, #5275; 1♀, (INBIOCRI002456748), Sect. San Ramon de Dos Rios, 1.5 Km NO. Hda. Nueva Zelandia. 620m. 12–21-VII-1996. F. A. Quesada. L_N_318100_381900 #8342. Guanacaste Province: 1♂, (INB0003578268), Estac. Maritza, 600m, W side Volcán Orosi, VII-1989, GNP Biodiv. Survey, L N 326900_373000; 1♀, (INB0003578270) Est. Pitilla, 9 km S. Sta. Cecilia, P. N. Guanacaste, 700 m. 1–20-V-1991. Manual. L_N_330200_380200 #73195; 1♂, (INBIOCRI000293052), same locality, II curso Parataxon., V-1990; 1♂, 1♀, (INBIOCRI000615301, INBIOCRI000615339), same locality, P. Rios, IV-1990; 2 F (INBIOCRI001355282, INBIOCRI001355283), same locality and collector, 19-V–3-VI-1993; 2♀♀, (INBIOCRI001397197, INBIOCRI001397198), same locality and collector, 18-IV–19-V-1993; 2♂♂, (INBIOCRI001835569, INBIOCRI001837011), same locality and collector, 19–23–VI-1993, P. Rios, L N 330200_380200 # 2175, # 2199; 1♂, 1♀, (INBIOCRI001877628, INBIOCRI001877629), same locality and collector, V-1994, P. Rios, de Luz, # 2895; 1♀, (INBIOCRI001884789), same locality and collector, VI-1994, # 2996; 1♀, (INBIOCRI001308265), same locality, 18-IV–9-V-1993. C. Moraga; 1♀, (INBIOCRI002047519), same locality and collector, VI-1994, # 3002; 1♀, (INBIOCRI002172707), same locality and collector, MAY 1995. C. Moraga, L N 329950 380450 #4829; 1♀, (INBIOCRI002142302), same locality, 23–IV-1995. M. Moraga, #4721; 2M, (INBIOCRI002488234, INBIOCRI002488235), Hacienda El Oro, 450–500m. VII-1996. A. Masis, M. M. Chavarría, C. Moraga, P. Rios. de Luz L_N_332600_377400 #45263. San José Province: 1♂, (INB0003578269), P.N. Braulio Carrillo. Estación Carrillo. 730m. 19–VI-1985. A. Chacon, M. Chavarría. Manual. L_N_236700_541800 #73194. All specimens deposited at INBio

Remarks. This species very closely resembles *Prionodera nila* **n. sp.** (described below), differing only in color and distribution. *P. esmeralda* is known only from Costa Rica north of the Valle Central, while *P. nila* is known from Panamá east of Fortuna (Fig. 98). No *Prionodera* specimens have been found in the Amistad area of Costa Rica between the Panamanian border and the Valle Central, despite over a decade of collecting by INBio parataxonomists in this region. Therefore, these two species are assumed to be allopatric sister species.

***Prionodera furcada* Flowers, new species**
(Figs 9, 32–34, 98, 100)

Holotype Male. Body elongate-oval, dorsally convex; length 8.10 mm. Head and pronotum yellowish brown, elytra straw yellow; antenna yellowish brown. Underside yellowish brown; legs yellowish brown, apices of femora and tibiae and basal half of tarsi dark reddish brown to piceous. Head with clypeus coarsely punctate, punctures separated by distance greater than their diameters, surface between punctures smooth. Frons moderately, distantly punctate, punctures separated by distance much greater than their diameters; surface between punctures smooth, shining; vertex with a shallow depression in median area above eyes. Eyes emarginate at antennal insertion; ocular sulci present. Mandibles piceous, other mouthparts tan. Mandibles with outer margin lateral surface rugose and setose. Prothorax distinctly wider than long, L/W = 0.66; pronotum moderately convex, with diagonal submedian depressions weak; lateral margin narrow undulate, forming three weak teeth, with widest part of pronotum anterior to middle; disc distinctly and sparsely punctate, with punctures separated by a distance greater than their diameters; surface between punctures smooth, shining. Prosternum with long setae, strongly punctate, longitudinally inclined behind coxae, transversely flat; posterior margin of intercoxal process truncate, lateral angles of intercoxal process slightly raised, width of intercoxal process 0.75 x diameter of procoxa. Proepimeron with a few punctures scattered in posterior half, with surface weakly wrinkled. Mesosternum surface finely, sparsely punctate, with sparse short yellow setae. Metasternum finely wrinkled, with three pairs of long yellow setae. Protibiae abruptly widened in apical third. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide (Fig. 9). Elytra punctate, punctures confused in basal third, becoming striate at apex and along elytral suture, area between intervals III and VIII raised on apical declivity. Surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.78 x width across pronotum; basal calli weakly developed; postbasal depression lacking, sides subparallel, convergent; apices strongly declivous. Basal margin costate at humeri. Scutellum U-shaped, with base subequal to length; surface smooth, with few punctulae. Abdomen with sparse prostrate setae, also with a pair of long setae on each side of midline of sternites III–VI. Surface of segments alutaceous. Male sternite VII with lateral margins smooth, a weak depression in center. Median lobe in lateral view smoothly curved (Fig 32); apex bifid with apical projections elongate (Fig. 34); Apical sclerite, straight, twisted (Fig. 33).

Female. Unknown.

Etymology. *Furcada*, from Spanish, meaning forked.

Specimens examined. Male HOLOTYPE labeled "Panamá 3 km. W Ipeti V-19-1985, B.L. & M.V. light, A.J. Gilbert, coll." (AS Gilbert). PARATYPE: 1♂, Colombie (no further data) (NHMB). Holotype deposited in NMNH, paratype deposited in NHMB.

Holotype Male. Body elongate-oval, dorsally convex; length 7.8 mm. Head, pronotum and elytra reddish brown; antenna with segments 1–4 reddish brown, 5–11 yellowish brown. Underside dark reddish brown, legs yellowish brown. Head with clypeus coarsely punctate punctures separated by distance equal to the diameter of a puncture, surface between punctures strongly microreticulate. Frons coarsely punctate, punctures separated by distance greater than the diameter of a puncture; surface between punctures microreticulate; vertex with a faint median impressed line. Mouthparts reddish brown, mandibles piceous; with lateral surface setose. Prothorax distinctly wider than long, L/W = 0.64; pronotum moderately convex, diagonal submedian depressions present; lateral margin narrow undulate, forming three weak teeth at middle, with widest part of pronotum anterior to middle; disc coarsely punctate, punctures denser laterally, with punctures separated by a distance equal to or slightly greater than their diameters on disc to less than their diameters at lateral margin; surface between punctures smooth, shining. Prosternum with long setae, coarsely punctate, longitudinally inclined behind coxae, transversely flat; posterior margin of intercoxal process truncate, width of intercoxal process 0.55 x diameter of procoxa. Proepimeron with a few punctures scattered over surface, with surface smooth, shiny. Mesosternum moderately punctate, with sparse short yellow setae. Metasternum with four pairs of long yellow setae. Basal tarsomere of fore- and middle legs expanded, distinctly longer than wide. Elytra geminate punctate-striate, striae irregularly geminate in basal fourth; with punctures in striae separated by distance less than the diameter of a puncture; intervals weakly convex on disc, becoming costate apically and laterally; intervals swollen on apical declivity. Surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.2 x width across pronotum; basal calli obsolete; postbasal depression lacking, sides subparallel, convergent; apices strongly declivous. Basal margin weakly costate to scutellum. Abdomen with all segments subequal in length, with sparse prostrate setae, also with one to three pairs of long submedian setae on each side of midline of sternites III–VI. Surface of segments alutaceous. Male sternite VII with lateral margins smooth, with long setae in apical third, a weak depression in center. Median lobe in lateral view strongly curved basally, rather straight apically (Fig. 35); apex bifid with apical projections elongate and bent upward. Endophallus (extruded) not sclerotized, with membranous lobes, a pair of very small weak sclerites laterally beyond lobed area; apical sclerite spindle-shaped, twisted (Fig. 36).

Allotype Female. Body oval; length 10.2 mm; head, pronotum, elytra, and underside piceous; antennae with segments 1–6 reddish brown, 7–11 dark brown; legs piceous. Head with labrum, frons, clypeus similar to male but with microreticulations between punctures less evident. Prothorax distinctly wider than long, L/W = 0.63; pronotum as in male with three weak teeth on lateral margin; more densely punctate on disc; with punctures separated by distance equal to or slightly greater than their diameters. punctures more

dense near lateral margins. Prosternum similar to male, but with width of intercoxal process 0.82x diameter of procoxa, broadened behind coxae, posterior angles slightly swollen, posterior margin truncate. Basal tarsomere of fore- and middle legs not expanded. Elytra geminate punctate-striate, lateral intervals forming sharp costae, apical intervals more strongly raised than in male. Abdomen with surface of segments weakly alutaceous. Sternites sparsely covered with short setae, setae longer laterally; sternites III to VI with three or four pairs of long setae on each side of midline. Sternite VII with apical margin weakly emarginate, and with numerous long lateral and apical setae. Segments VIII–XI forming elongate ovipositor (Fig. 73). Sternite VIII with long strap-like basal apodeme; only several setae remain of the apicolateral arms; tergite of segment VIII weakly sclerotized laterally. Segment IX with hemisternites broad with elongate basal rods; paraprocts separated into pair of slender dorsal rods, apically forming hood-like projection above gential orifice; baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, with long setae at base and in apical half; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 74; spermathecal duct thin, sclerotized, loosely coiled.

Etymology. *Gaia*, from Greek, meaning earth; *phanes*, from Greek, meaning colored.

Specimens examined. Male HOLOTYPE labeled "ECUADOR: Limacocha 0°23'S 76°38'W, 31 Mar. '74, EL 300m, H.P. Stockwell" (HPS). Female ALLOTYPE labeled "ECUADOR: Limacocha 0°23'S 76°38'W, 31 Mar. '74, EL 300m, H.P. Stockwell" (HPS). PARATYPES (2♂♂, 3♀♀): 2♂♂, same locality, date and collector as holotype (HPS); 1♀, (EPN) Orellana, Tiputini B.S., Send. Guacamayo, 13-IV-2001, T. Erwin, M. Marquez, S. Enriquez, light trap. 2♀♀, same locality and collectors, 9-IV-2001, light trap. Paratypes in STRI and EPN.

Remarks. The female of species most closely resembles *P. arimanes* in external characters, but can be distinguished by its truncate posterior margin of the prosternal process, and by details of the genitalia. The dark brown color of male *P. gaiophanes* distinguishes it from the lighter colored *P. furcada*, and *P. lutea*.

Prionodera geniculata (Baly), new combination

(Figs 39–41, 75–77, 97, 100)

Stenolampra geniculata Baly 1859:127

Syntype Male. Body elongate-oval, dorsally convex; length 9.2 mm. Head, pronotum and elytra dark chestnut brown, elytra with a faint bluish sheen, antenna yellowish tan. Underside chestnut brown; legs chestnut brown, apices of femora piceous, with tarsi yellow-brown. Head with clypeus coarsely punctate punctures separated by distance equal to their diameters, surface between punctures smooth. Frons coarsely punctate, punctures separated by distance greater than their diameters; surface between punctures smooth.

Eyes broadly emarginate at antennal insertion; ocular sulci absent. Mouthparts yellowish brown to piceous. Mandibles with lateral surface rugose. Prothorax distinctly wider than long, L/W = 0.69; pronotum moderately convex, diagonal submedian depressions absent; lateral margin narrow undulate, forming three weak teeth, with widest part of pronotum anterior to middle; disc coarsely, irregularly punctate, with punctures separated by a distance greater than their diameters; more densely punctate laterally, surface between punctures smooth, shining. Prosternum with long setae, coarsely punctate, longitudinally flat, transversely concave behind coxae; posterior margin of intercoxal process shallowly concave, lateral angles of intercoxal process swollen, a deep depression between lateral angles, width of intercoxal process 0.8 x diameter of procoxa. Proepimeron finely punctate, with punctures separated by distance greater than their diameters, with surface smooth, shiny. Mesosternum surface smooth, with sparse short yellow setae. Metasternum smooth, with sparse short yellow setae. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide. Elytra moderately punctate, with punctures confused basally and striate in apical fourth, with punctures separated by distance equal to slightly less than their diameters; strial punctures in single rows; interval VIII forming a low lateral costa behind humerus, this costa becoming more prominent in apical third; intervals III and VIII swollen and united at top of apical declivity; surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.34 x width across pronotum; basal calli obsolete; postbasal depression very weak, deeper laterally. Sides subparallel, convergent; apices strongly declivous. Abdomen with sparse prostrate setae, also with one or two pairs of long erect submedian setae on sternites III–VI. Surface of segments smooth. Male sternite VII with lateral margins smooth. Median lobe in lateral view bent into a broad right angle (Fig. 39); apex bifid (Fig. 41); basal hood long, lightly sclerotized, with apodemes indistinct at lateral margins of hood; subbasal fenestra present; basal spurs prominent; tegmen triangular. Endophallus not everted but apparently membranous, apical sclerite spindle shaped, slightly twisted (Fig. 40)

Female. Body oval; length 8.4 mm; head, pronotum, elytra, and underside yellow-brown; antennae yellowish tan; legs yellow-brown, apices of femora piceous. Prothorax distinctly wider than long, L/W = 0.79; pronotum with two weak teeth on lateral margin, irregularly, sparsely punctate on disc; with punctures separated by distance greater than their own diameters, punctures more dense near anterior angles. Prosternum similar to male, but with width of intercoxal process 0.67 x diameter of procoxa, broadened behind coxae, posterior angles slightly swollen, posterior margin weakly concave and crenulate.

Mesosternum convex between coxae; otherwise similar to male. Legs with basal tarsomere of fore- and middle legs not expanded. Elytra with punctation and apical intervals as in male. Abdomen with all segments subequal in length; surface of segments weakly alutaceous. Sternites sparsely covered with short setae, setae longer laterally; sternites III to VI with two or three pairs of long setae on each side of midline. Sternite VII with apical

margin weakly sinuate, and with numerous long setae. Abdominal segments VIII–XI forming elongate ovipositor (Fig. 75). Sternite VIII with long strap-like basal apodeme and several apicolateral setae; dorsal sclerites very weakly sclerotized. Segment IX hemisternites with long basal rods, poorly sclerotized apically; paraprocts separated into pair of slender dorsal rods, apically forming hood-like projection above gential orifice (Fig. 76); baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, slightly incurved, with long setae; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 77 ; spermathecal duct thin, well sclerotized, with tight loops.

Specimens examined. Male SYNTYPE labeled "Amaz. (?)/Baly Coll./ SYNTYPE *Stenolampra geniculata* Baly; S.L. Shute 1989". Female SYNTYPE labeled "[undecipherable]/ Baly Coll../ SYNTYPE *Stenolampra geniculata* Baly; S.L. Shute 1989" (NHM). BRAZIL: 1♂, Amazons./1st. Jacoby Coll./compared with Type (MCZ). ECUADOR: 1♀, Orellana, P.N. Yasuní, Tiputini Biodiversity Station, Danta trail, 1-X-2000, P. Arajo, night (EPN).

Remarks. This species shows several characters intermediate between species with strongly concave prosterna, short ovipositors, and long tangled spermathecal ducts (*P. arimanes P. merana, P. peruviana*), and the "Bicolor" species (*P. bicolor, P. costata, P. adiastola, P. esmeralda, P. gaiophanes, P. marshalli, P. nila*) with truncate prosternal processes, elongate ovipositors and thick, relatively short spermathecal ducts. In *P. geniculata* the prosteral process is shallowly concave and the spermathecal duct is tightly coiled for part of its length. However, the ovipositor is elongate and the apex of the median lobe is bifid, as in the other "Bicolor" species.

Prionodera kirschi (Lefèvre), new combination

(Figs 54–56, 89–91, 99, 100)

Stenolampra kirschi Lefèvre 1877:152

Male. Body elongate-oval, dorsally convex; length 6.0–7.0 mm. Head, pronotum and elytra dark chestnut brown with bright metallic green reflex; antenna reddish brown. Underside and legs piceous with weak to strong metallic green reflex. Head with clypeus coarsely punctate punctures separated by distance greater than their diameters, surface between punctures smooth. Frons coarsely punctate, punctures separated by distance greater than their diameters; surface between punctures smooth; vertex with a faint median impressed line. Eyes shallowly and broadly emarginate at antennal insertion; ocular sulci present. Mouthparts reddish brown to piceous; with apex of labrum weakly emarginate, with 2 dorsal setae. Mandibles with lateral surface rugose and setose. Prothorax distinctly wider than long, L/W = 0.7; pronotum moderately convex, with diagonal submedian depressions shallow to moderately deep; lateral margin narrow, undulate, forming three weak teeth, with widest part of pronotum anterior to middle; disc evenly, sparsely punc-

tate, with punctures separated by a distance equal to or slightly greater than their diameters; surface between punctures smooth, shining. Prosternum with long setae, coarsely punctate, longitudinally slightly inclined behind coxae, transversely flat; posterior margin of intercoxal process shallowly concave, lateral angles of intercoxal process swollen, width of intercoxal process 0.76 x diameter of procoxa. Proepimeron impunctate in center, sparsely punctate at edges, with punctures separated by distance much greater than diameter of a puncture. Mesosternum with sparse short yellow setae. Metasternum smooth, with sparse short yellow setae. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide. Elytra punctate-striate, with punctures in striae separated by distance much less than the diameter of a puncture; strial punctures in single rows; intervals weakly convex on base and disc, more strongly convex apically. Surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.3 x width across pronotum; basal calli obsolete; postbasal depression lacking, sides subparallel, convergent; apices strongly declivous. Basal margin costate at humeri. Abdomen with a sparse prostrate setae, also with a pair of long submedian setae on sternites IV–VI. Surface of segments smooth. Male sternite VII with lateral margins smooth, a weak depression in center. Median lobe in lateral view bent downward, shallowly curved (Fig. 54); apex spatulate (Fig. 56); basal hood lightly sclerotized, with apodemes distinct at lateral margins of hood. Endophallus not extruded, but apparently lacking sclerotized external structures; apical sclerite spatulate basally, twisted at apex (Fig. 55).

Female. Body elongate oval; length 7.2–8.1 mm. Prothorax distinctly wider than long, L/W = 0.66; pronotum with three undulations on lateral margin; evenly punctate on disc; diagonal depressions more strongly defined than in male. Prosternum similar to male, but with width of intercoxal process subequal to diameter of procoxa, broadened behind coxae, posterior angles slightly swollen, posterior margin straight and weakly crenulate. Basal tarsomere of fore- and middle legs not expanded. Elytra with punctation and intervals as in male. Abdomen with surface of segments weakly alutaceous. Sternites sparsely covered with short setae, setae longer laterally; sternites III to VI with four pairs of long setae on each side of midline. Sternite VII with apical margin evenly rounded, lateral margins smooth, and with long lateral and apical setae. Abdominal segments VIII–XI forming short ovipositor (Fig. 89). Sternite VIII with short basal apodeme that is broad and weakly sclerotized apically; a row of setae on apical margin; tergite of segment VIII weakly sclerotized, a row of setae on apical margin (Fig. 90). Segment IX short; hemisternites broad, sclerotized laterally; paraprocts separated into pair of slender, curved, dorsal rods, apically forming hood-like projection above gential orifice; baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, curved outwardly, with long setae in apical half; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 91; spermathecal duct very long, thin, coiled into a tangled mass just beyond the spermatheca.

Specimens examined. Type (MNHNP, abdomen missing) labeled: Peru/Type. OTHER SPECIMENS: (3M, 8M): BRAZIL: 1♂: [green paper tab]/Amaz./Baly Coll. (NHM); 1♂, 1♀, Amaz./Baly coll. (NHM); 3F, Rondônia, 62km SW Ariquemes, nr. Fzda. Rancho Grande, 5–17-X-1993, J.E. Eger & L. & C.W. O'Brien (FSCA); 3♀♀, same locality, 2-XI-1989, LT, R.W. Flowers (FSCA); 1♂, "Amaz", 2nd Jacoby Coll., det. Bow., F.C. Bowditch Collection (MCZ). ECUADOR: 1♀, Limacocha, 0° 23' S, 76° 38'W, 31-III-1974 EL. 300m., H.P. Stockwell (EGR).

Remarks. While this species externally resembles a miniature *P. costata*, the genitalia are very different from that species. The tip of the median lobe is spatulate and slightly asymmetrical; the ovipositor is short and scarcely extendible; and the spermathecal duct is thin, long and highly convoluted.

***Prionodera lutea* Erichson**
(Figs 5, 42–44, 78–80, 97, 100)

Prionodera lutea Erichson 1847:161

Male. Body elongate-oval, dorsally convex; length 9.6–10.7 mm. Head, pronotum and elytra yellowish tan; antenna with segments 1–4 reddish brown, 5–11 piceous black. Underside and legs yellowish brown. Head with clypeus coarsely punctate, punctures separated by distance equal to their diameters, surface between punctures smooth. Frons finely, sparsely punctate, punctures separated by distance greater than their diameters; surface between punctures smooth. Eyes emarginate at antennal insertion; ocular sulci present. Mouthparts reddish brown. Mandibles with lateral surface punctate and setose. Prothorax distinctly wider than long, L/W = 0.67; pronotum moderately convex, with diagonal submedian depressions weak; lateral margin narrow undulate, forming three weak teeth, with widest part of pronotum anterior to middle; disc sparsely, irregularly punctate, with punctures separated by a distance greater than diameters; more densely punctate laterally, surface between punctures smooth, shining. Prosternum with long setae, coarsely punctate, longitudinally depressed behind coxae, transversely concave behind coxae; posterior margin of intercoxal process markedly concave, lateral angles of intercoxal process swollen, a deep depression between lateral angles, width of intercoxal process 0.73 x diameter of procoxa. Proepimeron finely punctate, with punctures separated by distance greater than their diameters, with surface smooth, shiny. Mesosternum convex between coxae, surface weakly wrinkled. Metasternum flattened, smooth. Basal tarsomere slightly enlarged, elongate-triangular. Elytra closely punctate, with punctures separated by distance much less than the diameter of a puncture; striae obsolete; interval VIII forming a sharp lateral costa behind humerus, this costa becoming more prominent in apical third; intervals III and VIII swollen and united at top of apical declivity; surface

between punctures smooth; humeri prominent, rounded, width across humeri 1.38 x width across pronotum; basal calli low; postbasal depression shallow. Sides subparallel, convergent; apices strongly declivous. Abdomen with sparse prostrate setae, also with one or two pairs of long erect submedian setae on sternites III–VII. Surface of segments smooth. Sternite VII with lateral margins smooth, apically emarginate with numerous long lateral and apical setae, a weak median depression present. Median lobe in lateral view strongly curved basally (Fig. 42); apex deformed in the only specimen examined, but probably bifid (Fig. 44); basal hood lightly sclerotized, with apodemes indistinct at lateral margins of hood. Endophallus not everted but appears to lack sclerotized structures. Apical sclerite (Fig. 42) spindle-shaped apically, with a strongly curved basal part.

Female. Body elongate-oval, length 9.6–10.7 mm. Color as in male. Head, clypeus, mouthparts, and frons as in male. Eyes with ocular sulci present. Prothorax distinctly wider than long, L/W = 0.67; pronotum with diagonal submedian depressions obsolete, otherwise as in male. Prosternum with width of intercoxal process 0.73 x diameter of procoxa. Mesosternum with surface weakly wrinkled. Metasternum weakly convex, with two submedian pairs of yellow setae. Basal tarsomere not enlarged. Elytra as in male. Abdomen with sternite VII lacking median depression. Segments VIII–XI forming elongate ovipositor (Fig. 78). Sternite VIII with long strap-like basal apodeme; only several setae remain of the apicolateral arms; tergite of segment VIII weakly sclerotized laterally and with a pair of fans of setae apically (Fig. 79). Segment IX with hemisternites narrow with elongate basal rods; paraprocts separated into pair of slender dorsal rods, apically forming hood-like projection above gential orifice; baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, with long setae at base and in apical half; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 80; spermathecal duct thin, sclerotized, relatively straight.

Specimens examined. Female HOLOTYPE (ZMHU) labeled: "50752/ Zool. Mus. Berlin/ Prionodera lutea Er. Peru v. Tschudi". OTHER SPECIMENS (3♀♀)**:** BOLIVIA: 1♀, Cochabamba, 1 km. E. Villa Tunari, 8–12-X-1992, E. Giesbert, coll. (FSCA); 1♀, Sta. Cruz, 20 km. S. Buena Vista, 18–25-X-1992, E. Giesbert, coll. (FSCA); 1♂, 3♀♀, 3.7km SSE Buena Vista, Hotel Flora and Fauna, 405m, 5–15-XI-2001, 17º 29.949S; 63º 33.152W, M.C. Thomas and B.K. Dozier, tropical transition forest; 1♀, same locality, 2–13-II-2000, M.C. Thomas; 1♀, same locality and collector, 14–19-X-2000; 1♀, (Beni) Rurrenabaque, 27–31-VIII-1989, L.E. Peña, coll. (ISA)

Remarks. This species was designated the type species of *Prionodera* by Bechyné (1953), but Monrós and Bechyné (1956) changed the type designation to *Prionodera bicolor*. *P. lutea* is another "transitional species", having the same type of prosternum as the species Bechyné described under "*Jodasia*" but with male and female genitalia very similar to *P. bicolor* and other members of that species group. The apex of the median lobe depicted in Fig. 44 is probably a deformity; unfortunately it belongs to the only known male of this species.

***Prionodera marshalli* Lefèvre**
(Figs 45–47, 81, 82, 97, 100)

Prionodera marshalli Lefèvre 1884:1906

Male. Body elongate-oval, dorsally convex; length 9.8 mm. Head, and pronotum orange-brown, elytra dark blue; antenna missing. Underside and legs orange-brown, apices of tibiae and tarsi piceous. Head with clypeus smooth with few scattered punctures, punctures separated by distance greater than their diameters. Frons with scattered punctures, punctures separated by distance much greater than the diameter of a puncture; surface between punctures smooth, shining; vertex with a median impressed line; antennal calli smooth, shining. Eyes oval, ocular sulci present. Mouthparts brown, mandibles piceous. Mandibles with lateral surface coarsely punctate and setose. Prothorax distinctly wider than long, L/W = 0.69; pronotum moderately convex, with diagonal submedian depressions well developed; lateral margin narrowly undulate, forming three weak undulations in basal two-thirds, with widest part of pronotum anterior to middle; disc impunctate in center with sparse, moderately deep punctures laterally, punctures separated by a distance greater than their own diameters; surface between punctures smooth, shining. Prosternum with long setae, punctate, longitudinally strongly inclined behind coxae, transversely flat; posterior margin of intercoxal process truncate, lateral angles of intercoxal process swollen, width of intercoxal process 0.35 x diameter of procoxa. Proepimeron sparsely punctate, with surface smooth. Mesosternum subequal in width to prosternum, canalicluate along lateral margins, surface punctate, with sparse short yellow setae. Metasternum smooth, with two pairs of long yellow setae posterior to mesocoxa. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide. Elytra densely and evenly punctate, surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.3 x width across pronotum; basal calli weakly developed; postbasal depression shallow, sides subparallel, convergent; apices strongly declivous. Basal margin costate above humeri. Abdomen with sparse prostrate setae, also with one to three pairs of long setae on each side of midline of sternites III–VI. Surface of segments finely wrinkled. Sternite VII with lateral margins smooth, a weak depression in center. Median lobe in lateral view strongly curved basally (Fig. 45); apex bifid (Fig. 47); basal hood lightly sclerotized, with apodemes indistinct at lateral margins of hood. Endophallus not extruded, but apparently lacking sclerotized external structures; apical sclerite, spindle-shaped, slightly twisted (Fig. 46).

Female. Body elongate-oval; length 10.8 mm; body color as in male. Antenna with segments 1–4 orange brown, 5–11 black. Prothorax distinctly wider than long, L/W = 0.73; pronotum with two weak undulations on lateral margin; scattered punctures on disc, punctures separated by distance much greater than their own diameters. Pronotal depressions deep. Prosternum similar to male, but with width of intercoxal process 0.67 x diameter of procoxa, broadened behind coxae, posterior angles swollen, posterior margin

straight and weakly crenulate. Legs with basal tarsomere of fore- and middle legs not expanded. Elytra densely punctate, punctation, apical declivity, humeri, and basal calli as in male. Abdomen with surface of segments weakly alutaceous. Sternites with sparse short setae, setae longer laterally; sternites III to VI with one or two long setae on each side of midline. Sternite VII with apical margin weakly emarginate, and with numerous long lateral and apical setae. Abdominal segments VIII–XI forming elongate ovipositor (Fig. 81). Sternite VIII with long strap-like basal apodeme; only several setae remain of the apicolateral arms; tergite of segment VIII weakly sclerotized laterally. Segment IX hemisternites with long narrow basal rods, paraprocts separated into pair of slender dorsal rods, apically forming hood-like projection above gential orifice; baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, outwardly curved, with long setae in apical half; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 82; spermathecal duct thin, sclerotized, not coiled.

Specimens examined. Female TYPE (MNHNP) labeled: Brésil /Type/ ex museo Lefèvre 1894/ Oberthür Col. 1952. OTHER SPECIMENS: (1♂, 1♀): BRAZIL: 1♂, Rio de Janeiro, VIII-1946, Col. Halboth, F. Monrós Collection 1959 (NMNH); 1♀, Espirito Santo, Col. Fruhstorfer, F. Monrós Collection 1959 (det. F. Monrós) (NMNH).

Remarks. This is the only *Prionodera* species found in the Atlantic rainforest region of Brazil.

Prionodera merana **Bechyné**
(Figs 6, 92, 93, 99, 100)

Prionodera merana Bechyné 1950:525
Jodasia roseometallica Bechyné 1953:81, **new synonymy**

Female. Body elongate-oval, dorsally convex; length 8 mm. Head, pronotum, elytra, underside and legs reddish brown with faint to strong metallic green or copper reflection; antenna piceous, scape and pedicle brown, flagellomeres 3,4 dark brown, joints paler. Underside reddish brown, legs reddish brown with tibiae and tarsi darker. Head with clypeus moderately punctate, punctures separated by distance greater than their diameters, surface between punctures smooth. Frons sparsely punctate, punctures separated by distance approximately equal to the diameter of a puncture; surface between punctures weakly alutaceous, shining; vertex with a distinct median impressed line. Eyes moderately and broadly emarginate at antennal insertion; ocular sulci weakly developed. Mouthparts yellowish brown, mandibles piceous. Mandibles with lateral surface finely punctate and setose. Prothorax distinctly wider than long, L/W = 0.65; pronotum moderately convex, with diagonal submedian depressions well developed; lateral margin narrow undulate, with widest part of pronotum anterior to middle; disc sparsely, finely punctate, with punctures separated by a distance greater than their diameters; surface between punctures

smooth, shining. Prosternum with long setae, strongly punctate, medially depressed behind coxae, transversely flat between coxae; posterior margin of intercoxal process strongly concave, lateral angles of intercoxal process swollen (Fig. 10), width of intercoxal process 0.75 x diameter of procoxa. Proepimeron with a few punctures near lateral margin, with surface smooth, shiny. Mesosternum convex between coxae, surface finely punctate, smooth. Metasternum smooth with two pairs of long yellow setae. Elytra with punctures in somewhat irregular single striae, with punctures in striae separated by distance equal to the diameter of a puncture; intervals flat on disc, forming low costae laterally. Surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, width across humeri 1.3 x width across pronotum; basal calli weak; postbasal depression obsolete, sides subparallel, convergent; apices strongly declivous. Abdomen with sparse prostrate setae, also with one pair of long setae on each side of midline of sternites III–VI. Surface of segments smooth. Sternite VII with lateral margins smooth, apical margin weakly emarginate, with numerous long lateral and apical setae. Abdominal segments VIII–XI forming short, non-extendible ovipositor (Fig. 92). Sternite VIII with short apically spatulate basal apodeme; posterior margin of sternite fringed with long setae; tergite of segment VIII weakly sclerotized, with fringe of setae on posterior margin. Segment IX with hemisternites broad, weakly sclerotized; paraprocts separated into pair of curved strongly sclerotized dorsal rods, apically forming hood-like projection above gential orifice; baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, weakly curved, with long setae laterally and at apex; coxostyli very small, with several long apical setae. Spermatheca with a prominent lateral swelling as in Fig. 93; spermathecal duct thin, weakly sclerotized, with numerous coils forming a tangled mass.

Male. Unknown,

Specimens examined. Female HOLOTYPE (NHMB) labeled: Mera Ecuador/ Type/ Holotype Prionodera merana M/n. 81 det. J. Bechyné 1949. 1 Female (NHMB) labeled "Amaz./ TYPE, *Jodasia roseometallica*, J. Bechyné det., 1952". OTHER SPECIMENS: 1♀, Peru: Madre de Dios: Río Tambopata Res. 30 air km. SW Pto. Maldonado, 290 km. 2–5-XI-1979, J.B. Heppner, subtropical moist forest (FSCA); 1♀, Peru-Brazil Frontier, F. Monros Collection 1959 (NMNH).

Remarks. Although the holotype of *P. merana* is labeled as male, it is a female. *P. merana* clearly has a concave prosternal intercoxal process; however, Bechyné did not include this species in his genus *Jodasia*. The holotype (and only known specimen) of *J. roseometallica* is identical to *P. merana* in every detail except that the metallic color is very weak; it appears to be a late teneral specimen of *P. merana*.

Holotype Male. Body elongate-oval, dorsally convex; length 9.0 mm. Head, pronotum and elytra dark brown to black with strong metallic dark blue reflex; antenna with segments 1–3 yellowish brown, washed with piceous, 4–7 blue-black, 8–11 brown. Underside and legs dark brown with strong dark blue metallic reflection (Fig. 4). Head with clypeus coarsely punctate, punctures separated by distance equal to or greater than their diameters, surface between punctures smooth. Frons finely punctate, punctures separated by distance greater than their diameters; surface between punctures smooth, shining; vertex with a faint median impressed line. Eyes shallowly and broadly emarginate at antennal insertion; ocular sulci present. Mouthparts piceous with dark metallic blue reflex; labrum chestnut brown. Mandibles with lateral surface weakly rugose and setose. Prothorax distinctly wider than long, L/W = 0.76; pronotum moderately convex with diagonal submedian depressions shallow; lateral margin narrow undulate, forming two small teeth at the mid-point, with widest part of pronotum slightly anterior to middle; disc finely irregularly punctate, with punctures separated by a distance greater than their own diameters; surface between punctures smooth, shining. Prosternum with long setae, rugosely punctate, longitudinally slightly convex, transversely flat; posterior margin of intercoxal process truncate, width of intercoxal process 0.58 x diameter of procoxa. Proepimeron with a few scattered punctures, with surface smooth, shiny with weak transverse wrinkles. Mesosternum flat between coxae, surface wrinkled, finely punctate, with short yellow setae. Metasternum finely wrinkled, with three pairs of long yellow setae. Basal tarsomere of fore- and middle legs weakly expanded, distinctly longer than wide. Elytra punctate-striate, with punctures single rows on basal callosities and in apical fourth, irregularly geminate-striate in middle with punctures separated by distance greater than the diameter of a puncture; interval VIII forming a low lateral costa behind humerus, this costa becoming more prominent in apical third; interval III swollen and weakly protuberant posteriorly at top of apical declivity; surface between punctures smooth with scattered small punctulae; humeri prominent, rounded; width across humeri 1.4 x width across pronotum; basal calli weak; postbasal depression very shallow, sides subparallel, convergent; apices strongly declivous; basal margin costate to scutellum. Scutellum U-shaped, with base subequal to length; surface smooth, with few small punctulae. Abdomen with sparse prostrate setae, also with one pair of long setae on each side of midline of sternites III–VI. Surface of segments finely granulate-alutaceous. Male sternite VII with lateral margins smooth, a weak depression in center. Median lobe in lateral view smoothly curved (Fig. 48); apex bifid (Fig. 50); basal hood long, lightly sclerotized, with apodemes distinct at lateral margins of hood; subbasal fenestra present; basal spurs prominent; tegmen triangular. Endophallus membranous, lacking sclerotized external structures; apical sclerite large, spindle-shaped, slightly twisted (Fig. 49).

Allotype Female. Body oval; length 11.1 mm; head, and pronotum, elytra, legs and underside shining dark blue with greenish metallic reflex. Antennae blue-black, apical 3 segments dark brown. Prothorax distinctly wider than long, L/W = 0.75; pronotum with two weak teeth and trace of a third on lateral margin; sparsely punctate on disc, impunctate in apical fourth at middle; with punctures separated by distance equal to or slightly greater than their diameters. Prosternum similar to male, but with width of intercoxal process 0.65 x diameter of procoxa, broadened behind coxa, posterior margin truncate. Mesosternum flat, transversely wrinkled between coxae; otherwise similar to male. Basal tarsomere of fore- and middle legs not expanded. Elytra with punctation and apical declivity as in male. Abdomen with surface of segments weakly alutaceous. Sternites sparsely covered with short setae, setae longer laterally; sternites III to VI with one or two pairs of long setae on each side of midline. Sternite VII with apical margin weakly emarginate, and with numerous long lateral and apical setae. Abdominal segments VIII–XI forming short broad ovipositor (Fig. 83). Sternite VIII with broad basal apodeme, weakly sclerotized apically; apical margin of sternite VIII with two submedian rows of setae; tergite of segment VIII weakly sclerotized laterally and with long seta on apical margin. Segment IX with hemisternites broad, weakly sclerotized, basal rods short; paraprocts separated into pair of slender dorsal rods, apically forming hood-like projection above gential orifice (Fig. 84); baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, with long setae in apical half; coxostyli very small, with several long apical setae. Spermatheca as in Fig. 85; spermathecal duct thin, sclerotized, not coiled.

Etymology. *Nila*, from Sanskrit, meaning blue-green.

Specimens examined. Male HOLOTYPE (NMNH) labeled Panamá Prov., Cerro Azul, 10-V-1985, A.J. Gilbert"; Female ALLOTYPE (NMNH) labeled "Panamá Prov., Cerro Azul, 10-V-1985, A.J. Gilbert" PARATYPES (34♂♂, 24♀♀): PANAMA: 22♂♂, 17♀♀, Panamá Prov., Cerro Azul, 10-V-1985, A.J. Gilbert (6 A.J. Gilbert 2 EGR); 2♀♀, same locality, 2200', 3-VI-1984, E. Giesbert; 4♂♂, 5♀♀, Cerro Campana, 11–15-V-1980, E.G. Riley, D. LeDoux (EGR); 1♀, Las Cumbres, TV Hill, 26-VI-1974, C.W.&L. O'Brien & Marshall (EGR); 2♂♂, Coclé Prov., El Valle, 2,400' 16–22-V-1981, J.E. Wappes (EGR); 1♂, same locality, 750m. 17-V-19'73, H.P. Stockwell (STRI); 1♀, Bocas del Toro Prov., 10 km. NE Fortuna Dam 1–2-VI-1985, E. Giesbert, Coll.; Canal Zone: 1♀, 7 km. SW Gatun Lock, May 22, 1978, CW&LB O'Brien & Marshall (FSCA); 1♂, Barro Colorado, 3-VI-1978, H. Wolda (STRI); 1♂ same locality and collector, 10-VI-1978 (STRI); 1♂, same locality and collector, 26-V-1979 (STRI); 1♀, same locality, V-1929, Darlington, F. Monrós Collection 1959 (NMNH); 1♂, La Chorrera, 17-V-1912, Aug. Busck, F. Monrós Collection 1959 (STRI); 1♂, Cabima, 28-V-1911, Aug. Busck (STRI). Paratypes deposited in NMNH, INBio, FAMU.

Remarks. This species most closely resembles *P. esmeralda* from Cost Rica. As noted above in the discussion of *P. esmeralda*, *P. nila* is restricted to Panamá, with the Talamanca mountains apparently separating the two species. The long series of specimens

from Cerro Azul was collected from flowers of an unidentified plant (A. Gilbert, per. comm.)

***Prionodera peruviana* (Bechyné) new combination**
(Figs 94–96, 99, 100)

Jodasia peruviana Bechyné 1951:320

Holotype Female. Body elongate-oval, dorsally convex; length 9.5 mm. Head and pronotum dark reddish brown, elytra yellowish brown with dark brown sutural and lateral margins. Underside and legs dark brown, mesocoxae with yellowish brown margins. Head with clypeus rugosely punctate, punctures separated by distance equal to the diameter of a puncture, surface between punctures granulate. Frons finely punctate, surface between punctures shining; vertex with a distinct median impressed line. Eyes oval, moderately and broadly emarginate at antennal insertion; ocular sulci weakly developed. Prothorax distinctly wider than long, L/W = 0.7; diagonal submedian depressions well developed; anterior angles acute, directed anteriorly; lateral margin narrow undulate, forming two weak teeth at the mid-point, with widest part of pronotum at middle; disc sparsely punctate, with punctures separated by a distance greater than their own diameters; surface between punctures smooth, shining. Prosternum with long setae, coarsely punctate, medially depressed behind coxae, transversely flat between coxae; posterior margin of intercoxal process very distinctly concave, lateral angles of intercoxal process swollen, width of intercoxal process 0.78 x diameter of procoxa. Surface of lateral arms of prosternum glabrous, wrinkled. Proepimeron with strong punctures along lateral margin, with surface smooth, shiny. Mesosternum with surface finely punctate. Metasternum, finely wrinkled, with three pairs of long yellow setae. Protibiae abruptly widened in apical third. Elytra punctate-striate, striae in even rows, with punctures in striae separated by distance greater than the diameter of a puncture; intervals flat, a lateral costa on eighth stria, becoming more prominent above apical declivity, surface between punctures smooth with scattered small punctulae, apical declivity densely, rugosely punctate; humeri prominent, rounded, width across humeri 1.4 x width across pronotum; basal calli weakly developed; postbasal depression obsolete. Sides subparallel, convergent; apices strongly declivous. Abdomen with sparse prostrate setae, also with one pair of long setae on each side of midline of sternites III–VI. Surface of segments smooth. Sternite VII with lateral margins smooth, apical margin weakly emarginate, with numerous long lateral and apical setae. Pygidial surface covered by fine appressed pile and with numerous erect setae. Abdominal segments VIII–XI forming short, non-extendible ovipositor (Fig. 94). Sternite VIII with short apically spatulate basal apodeme; posterior margin of sternite fringed with long setae; tergite of segment VIII weakly sclerotized, with fringe of setae on posterior margin (Fig. 95). Segment IX with hemisternites broad, weakly sclerotized; paraprocts separated

into pair of curved strongly sclerotized dorsal rods, apically forming hood-like projection above gential orifice; baculum indistinct, apical, shorter than gonocoxae. Gonocoxae short, robust, with long setae laterally and at apex; coxostyli very small, with several long apical setae. Spermatheca with a prominent lateral swelling at the spermathecal gland as in Fig. 96; spermathecal duct thin, weakly sclerotized, with numerous coils forming a tangled mass.

Male. Unknown.

Specimens examined. Female HOLOTYPE (NHMB) labeled "Canchamajo Peruvia, Type [red label], TYPE, *Jodasia peruviana* n. F, J. Bechyné det., 1950"

DISCUSSION**.** Three species in *Prionodera* not treated above belong to other genera. The following two species are transferred to *Metaxyonycha* Chevrolat:

***Metaxyonycha chloroptera* (Germar), new combination**

Prionodera chloroptera Germar 1824:573

***Metaxyonycha ocanana* (Lefèvre)**, **new combination**

Prionodera ocanana Lefèvre 1878:120

Both species differ from *Prionodera* by having pygidial grooves. *Metaxyonycha* is a large and diverse genus which, despite a review by Bechyné and Bechyné (1968), still lacks a rigorous taxonomic definition. Like *Prionodera*, the species are relatively elongate for eumolpines, but the presence of a pygidial groove and lack of both an excavated anterior margin of the prosternum and ventral projections on the fore femora distinguish *Metaxyonycha*. In some—but not all—*Metaxyonycha* species the males have tubercles on the mexocoxae. The two species transferred here lack the defining characters of *Prionodera* and agree with the characteristics given for *Metaxyonycha*. Both closely resemble the Central American species moved from *Prionodera* to *Metaxyonycha* (Flowers 1996); additionally, the male of *M. chloroptera* has mesocoxal tubercles (although these are lacking in the male of *M. ocanana*.).

The third species, *P. nixa* Bechyné, while also a member of the Endocephalites, displays differences from both *Prionodera* as here defined and other related genera, thus necessitating its removal to a new genus, described below.

***Prionoderita* Flowers, new genus**
(Figs 57–59, 100)

Type species. *Prionodera nixa* Bechyné 1953:80, here designated.

Body elongate-oval, dorsally convex. Head with clypeus coarsely punctate, punctures separated by distance greater than their diameters, surface between punctures smooth, apex of clypeus emarginate. Frons with scattered deep punctures near eyes; surface between punctures smooth, shining. Eyes oval, deeply emarginate at antennal insertion; ocular sulci narrow. Antenna with scape elongate oval, and pedicel elongate, shorter than scape, distinctly shorter than flagellomere 1; flagellum filiform, each slightly flagellomere wider at apex, elongate; antennomeres 3–6 with scattered appressed setae, remaining segments missing. Mouthparts with apex of labrum emarginate. Mandibles with outer margin with sharp bend, lateral surface coarsely punctate and setose, apical teeth broad, pointed. Prothorax distinctly wider than long; pronotum moderately convex, with posterior margin subequal to anterior margin; anterior angles acute, directed anteriorly, posterior angles acute; all angles with a seta-bearing puncture; basal marginal bead present; lateral margin narrow, undulate; disc coarsely punctate, punctures separated by a distance much greater than their diameters; surface between punctures smooth. Prosternum longitudinally flat, transversely flat between coxae, depressed in middle at posterior margin; with anterior margin excavated for reception of gular area of head; posterior margin of intercoxal process truncate. Lateral arms of prosternum excavated for reception of gular area of head with anterior margin weakly convex, junction with prosternum discontinuous; surface glabrous. Proepimeron flat. Mesosternum subequal in width to prosternum, flat between coxae. Metasternum evenly rounded, smooth; metepisternum gradually narrowed posteriorly, with surface aluteceous. Legs sparsely covered with short prostrate setae; all surfaces smooth. Femora strongly swollen in middle tibiae straight, gradually widened from middle, lacking apical emargination; protibiae gradually widened in apical third. Tarsi densely and uniformly pilose beneath; basal tarsomere triangular, distinctly longer than wide; second tarsomere broadly triangular, with acute apicolateral angles; third tarsomere longer than second, deeply bilobed; terminal tarsomere distinctly surpassing apex of third tarsomere; claws divergent, appendiculate. Elytra with punctures in single irregular striae, striae becoming more regular in apical third, strial punctures deeper laterally, surface between punctures smooth with scattered small punctulae; humeri prominent, rounded, basal calli weakly developed; postbasal depression shallow. Sides subparallel, convergent; apices moderately declivous, conjointly rounded. Basal margin costate at humeri. Epipleuron narrow, slanted downward, visible in lateral view, tapering evenly from base to apex. Scutellum V-shaped, with base subequal to length; surface smooth, with few punctulae. Abdomen with all segments subequal in length. Sternite VII with lateral margins smooth, a weak depression in center. Pygidium lacking longitudinal groove;

pygidial surface smooth, lateral margins smooth. Male Genitalia: Median lobe (Fig. 57) in lateral view smoothly curved; apex pointed and upturned; in dorsal view (Fig. 59) strongly asymmetrical. Basal hood long, lightly sclerotized, with apodemes indistinct at lateral margins of hood; subbasal fenestra present; basal spurs prominent; tegmen triangular.

Etymology. This genus is named for its resemblance to *Prionodera*. *-ita*, from Spanish, a diminutive suffix, refers to the small size of the only known species.

Remarks. This genus can be distinguished from all other Neotropical Eumolpinae by the following combination of characters: 1) pygidium lacking groove; 2) prosternum broadly excavated at anterior margin; 3) lateral arms of prosternum not distinctly convex; 4) anterior femur lacking ventral tooth or angulation; 5) posterior femur of male unmodified. *Prionoderita* is very similar in outward appearance to *Thysanomeros*, but in the male the narrow tubular median lobe is much closer to those of *Prionodera kirschi* and *Prionodera cyanea* than to the broad median lobes found in *Thysanomeros*. The hind femur of male *Prionoderita* lacks the ventral setae characteristic of male *Thysanomeros*.

***Prionoderita nixa* (Bechyné), new combination**
(Figs 57–59, 100)

Prionodera nixa Bechyné 1953:80

Holotype Male. Body elongate-oval, dorsally convex; length: 6.5 mm. Head, pronotum, underside, femora and tibiae reddish brown, elytra dark metallic blue, tarsi piceous; antennomeres 1–3 reddish brown, 4–6 piceous, the remainder missing. Frons with punctures separated by distance greater than the diameter of a puncture; antennal calli smooth, shining, and swollen, ocular sulci narrow. Mouthparts yellowish brown, mandibles piceous. Prothorax wider than long, L/W = 0.7. Prosternum with long setae, coarsely punctate, width of intercoxal process 0.5 x diameter of procoxa. Mesosternum with surface finely punctate, with sparse short yellow setae. Metasternum smooth with two isolated pairs of long setae. Elytra with humeri 1.3 x width across pronotum. Abdomen with surface of segments smooth, each segment with a submedian pair of long setae. Endophallus not extruded, but apparently lacking sclerotized external structures; apical sclerite, straight, slightly twisted (Fig. 58).

Female. Unknown.

Specimens examined. Male HOLOTYPE labeled: "BOLIVIA" (without further data) (NHMB); OTHER SPECIMENS: 1♂ BOLIVIA, Santa Cruz, 3.7km SSE Buena Vista, Hotel Flora and Fauna, 405m, 5–15-XI-2001, 17° 29.949S; 63° 33.152W, M.C. Thomas and B.K. Dozier, tropical transition forest (FSCA).

Prionodera is widely distributed in the Neotropical Region but is apparently nowhere very abundant. The author collected several individuals of *P. kirschi* at light during a one-week visit to southwestern Brazil, and most of the *P. esmeralda* from the extreme north-

west of Costa Rica were taken at light (D. Janzen, pers. comm.) At least one species (*P. nila*) opportunistically visits flowers, as do many other eumolpines.

Cladisitic analysis

A cladistic analysis was performed using the following characters (which are numbered from 0 by the WinClada program):

0. Body shape: (0) oval; (1) ovate; (2) elongate-ovate.
1. Color: (0) entirely yellow or brown; (1) entirely metallic green or blue or combination. (2) elytra green or blue, rest of body yellow to reddish brown.
2. Leg color; (0) yellow or brown (1) yellow or brown with darker markings; (2) entirely dark blue, green or blue-black.
3. Femur-tibia joint; (0) same color as rest of femur and upper tibia (1) dark, contrasting with rest of leg.
4. Antenna: (0) unicolored; (1) bicolored.
5. Pronotal disc: (0) regularly punctate; (1) irregularly punctate.
6. Pronotal depressions: (0) none; (1) weak; (2) marked.
7. Prosternal process: (0) truncate; (1) weakly concave; (2) strongly concave.
8. Forefemur: (0) unarmed; (1) armed.
9. Basitarsi of male: (0) not expanded; (1) slightly expanded; (2) moderately expanded.
10. Elytral disc; (0) non-striate; (1) striate; (2) costate.
11. Elytral apical declivity: (0) lacking swollen costae; (1) single pair of swollen costae; (2) two or more sets of swollen costae.
12. Median lobe: (0) broad; (1) elongate, tubular.
13. Apex of median lobe: (0) pointed - broad; (1) pointed - spatulate; (2) bifid.
14. Median lobe symmetry: (0) symmetrical; (1) slightly asymmetrical; (2) asymmetrical.
15. Apical sclerite: (0) linear; (1) symmetrical; (2) *kirschi* type; (3)spindle shaped.
16. Ovipositor: (0) non-extendible; (1) short; (2)elongate.
17. Sternite VIII: (0) plate-like; (1) broad; (2) strap-like; (3) aciculate.
18. Apex of sternite VIII: (0) expanded; (1) not expanded.
19. Tergite VIII: (0) plate-like; (1) largely membranous.
20. Spermathecal duct: (0) thick and sclerotized; (1) thin and membranous.
21. Duct configuration: (0) straight or loosely coiled; (1) tightly coiled; (2) convoluted.
22. Basisternite arms: (0) short; (1) elongate.

The data matrix constructed from these characters is shown in Table 1. This matrix was analyzed with NONA (Goloboff 1993) running in WinClada (Nixon 1999), with all characters unordered. *Hornius grandis*, generally regarded as one of the more primitive eumolpines (but now in the separate subfamily Spilopirinae, Reid 2000), *Colaspoides uni-*

color Jacoby, and *Thysanomeros jacobyi* (Lefèvre), representing two genera of the Endocephalites were used as outgroups. Five equally parsimonious trees were obtained with length 276, a consistency index of 48 and a retention index of 65. The matrix was rerun with characters having a consistency index of less than 33 omitted (characters 1, 5, 18). A single tree (Fig. 100) was obtained with a length of 244, a consistency index of 54, and a retention index of 70.

The clade *Prionodera* plus *Prionoderita* is supported by elongate-oval body shape (but which reverses in *P. cyanea* and *P. kirschi*), the degree of swelling in the male basitarsi (weak compared with *Colaspis* and related genera but more than in the outgroup genera in Endocephalites), the tubular median lobe, the shape of the apex of the median lobe and the form of the apical sclerite. The placement of *P. nixa* in a separate genus is supported by its asymmetrical median lobe. *Prionodera* is supported by the synapomorphies of armed fore femora and the presence of swollen costae on the apical declivity of the elytra.

The species of *Prionodera* display a surprising level of variability in the genitalia, and some variability in external morphology. However, these two sources of variability are not congruent. The analysis gave two weakly supported clades: eleven species form a well-defined group distributed from northern Costa Rica to southern Brazil. This group includes *Prionodera bicolor* as well as *P. adiastola, P. costata, P. dichroma, P. esmeralda, P. furcada, P. gaiophanes, P. geniculata, P. lutea, P. marshalli*, and *P. nila* and is characterized by the synapomorphies of a bifid apex of the median lobe, and a spindle-shaped apical sclerite With two exceptions, these species also have a truncate posterior margin of the prosternal intercoxal process. Although the cladistic analysis produced a fully resolved tree for this clade, it is based on homoplasious characters.

The remaining clade of five species is a much more heterogeneous group, sharing the synapomorphy of a convoluted spermathecal duct. This clade has a more limited distribution: all but one species is known only from the western edge of the Amazon basin from Bolivia to Ecuador, and the one exception (*P. cyanea*) is restricted (apparently) to French Guyana (Fig. 99). Males are known for only two species (*P. cyanea*, and *P. kirschi*) in this second group, both of which have a spatulate tip of the median lobe. Three species (*P. arimanes, P. merana, P peruviana*) have a strongly concave intercoxal process of the prosternum, a condition that has elsewhere been used to define genera and even major tribes in the Eumolpinae (e.g. the Chalcophanites, Chapuis 1874).

Although the cladogram suggests that *Prionodera* may include a second genus (for which *Aporistus* Lefèvre would be the available name), the conservative option of keeping these admittedly disparate species together seems best, at least until both sexes of all species are known. The single synapomorphy for the "Aporistus" clade, the convoluted spermathecal duct, is found in other eumolpine genera and may be quite widely distributed in the Eumolpini.

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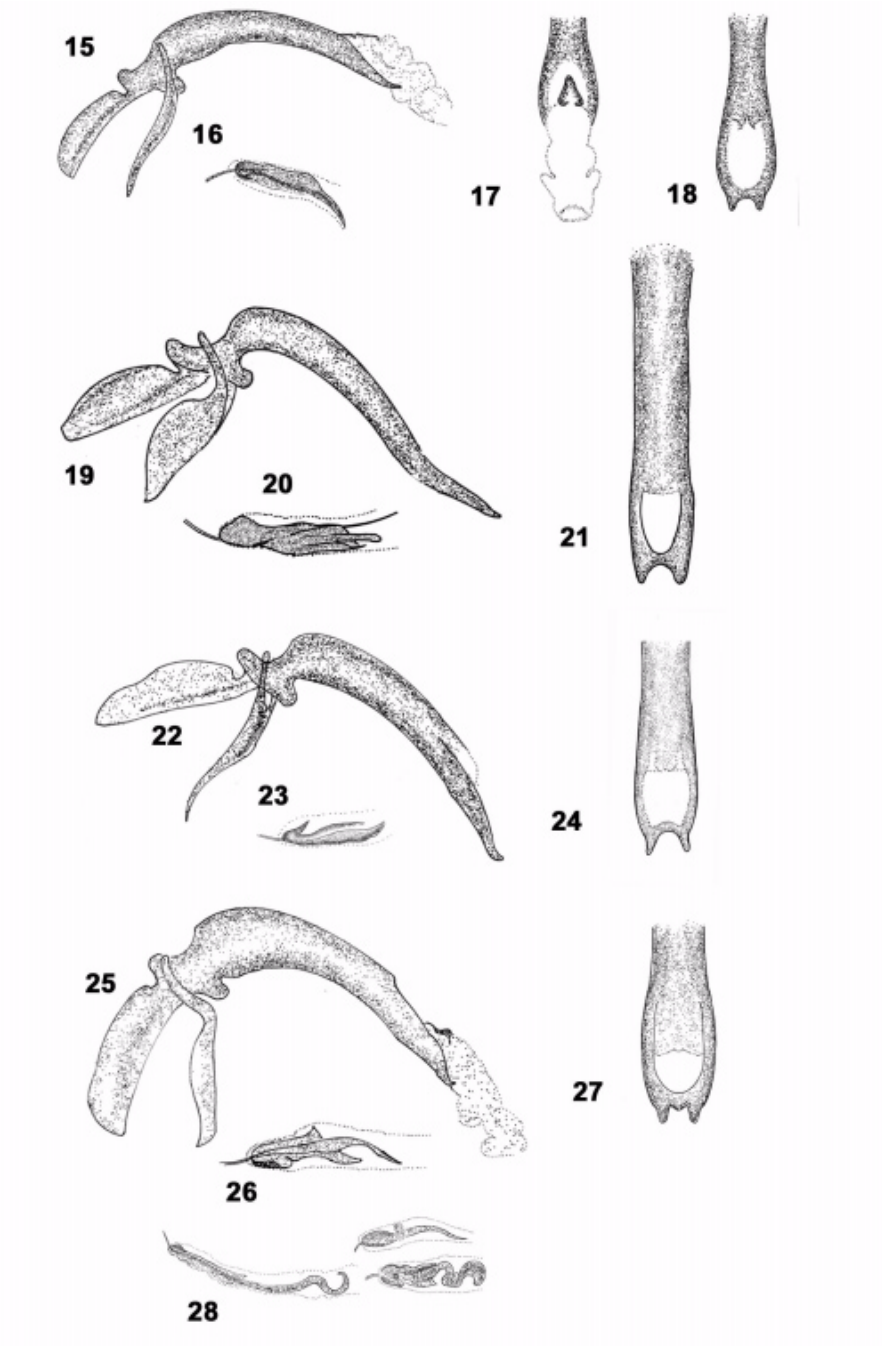
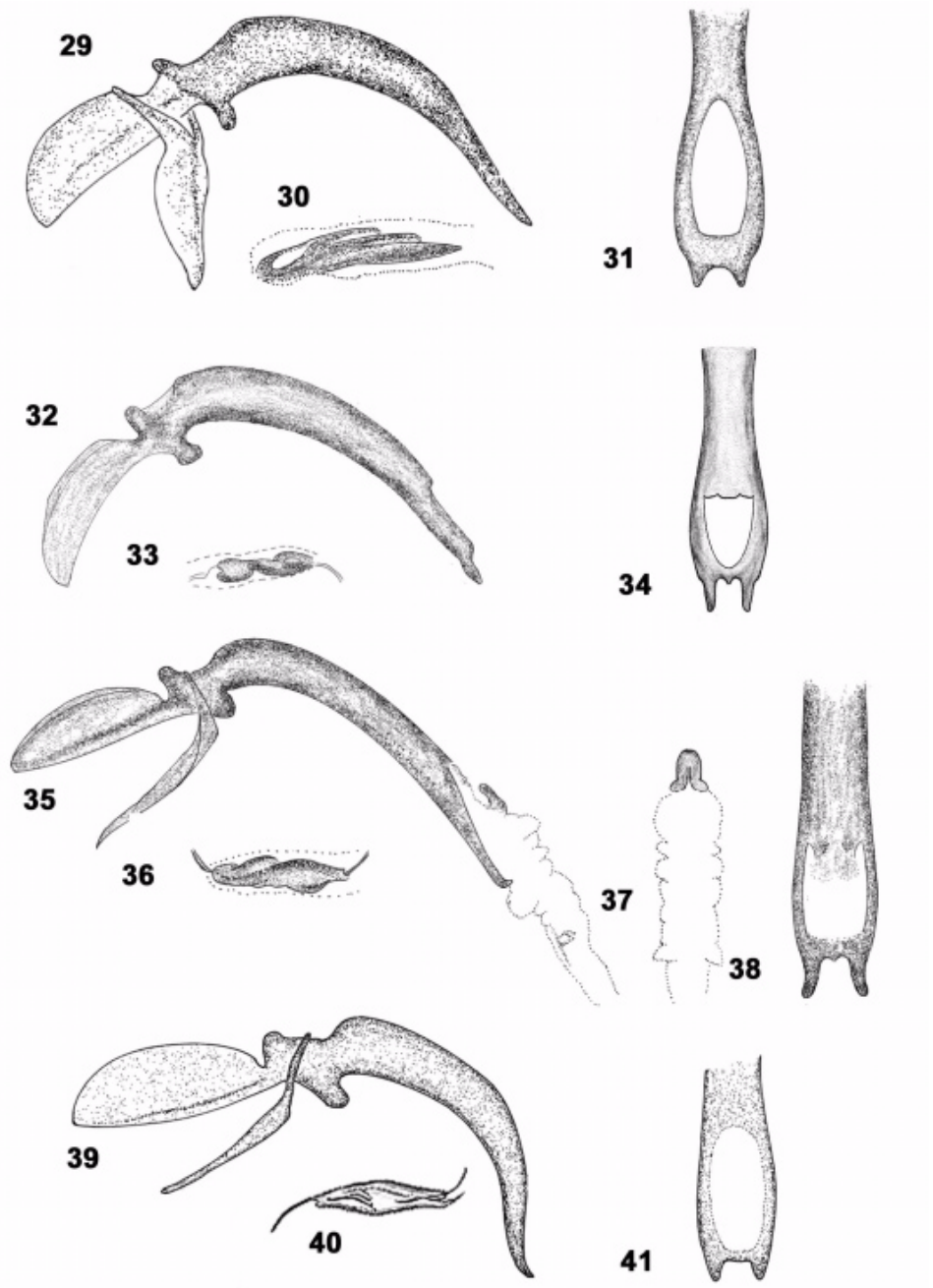
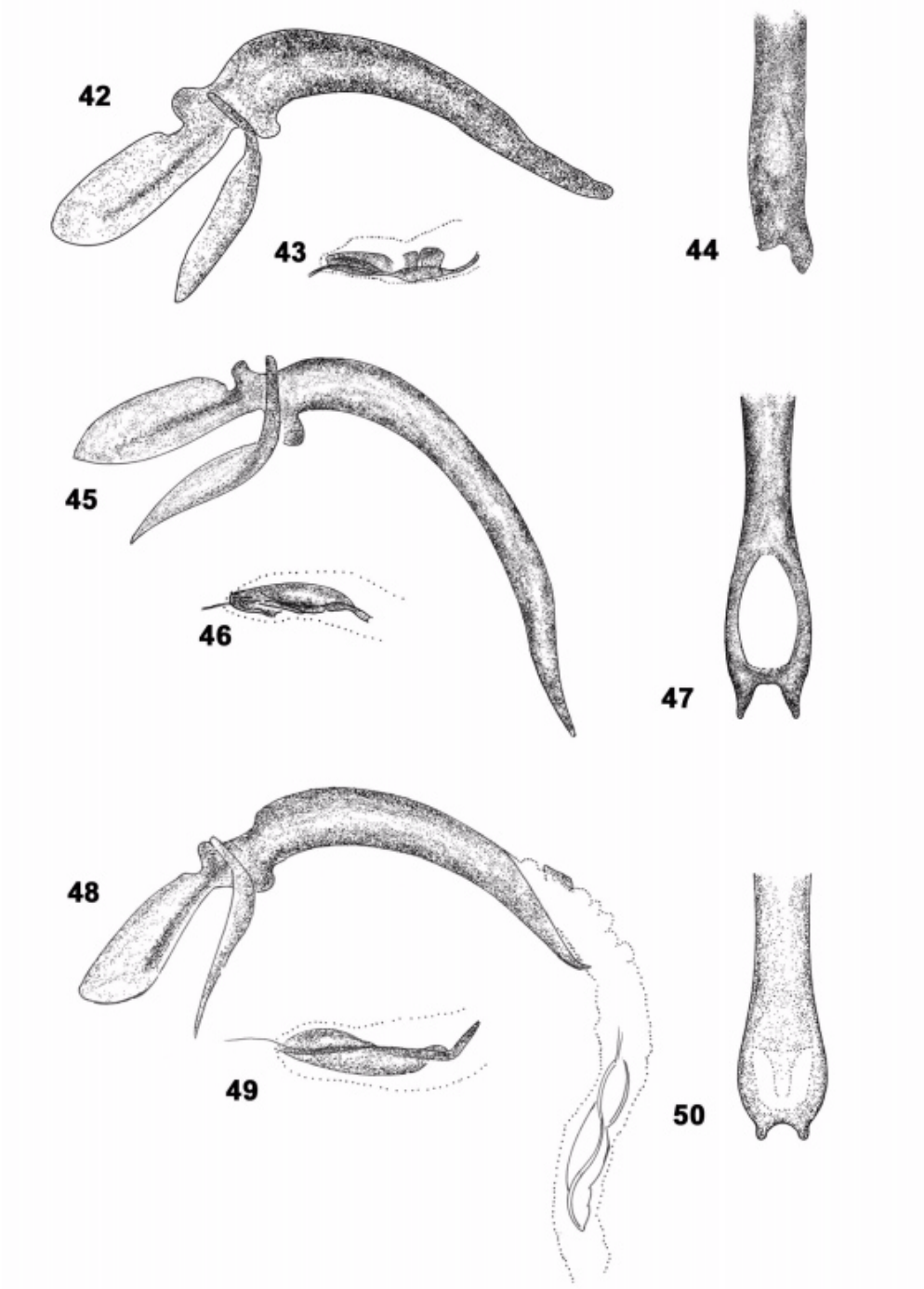


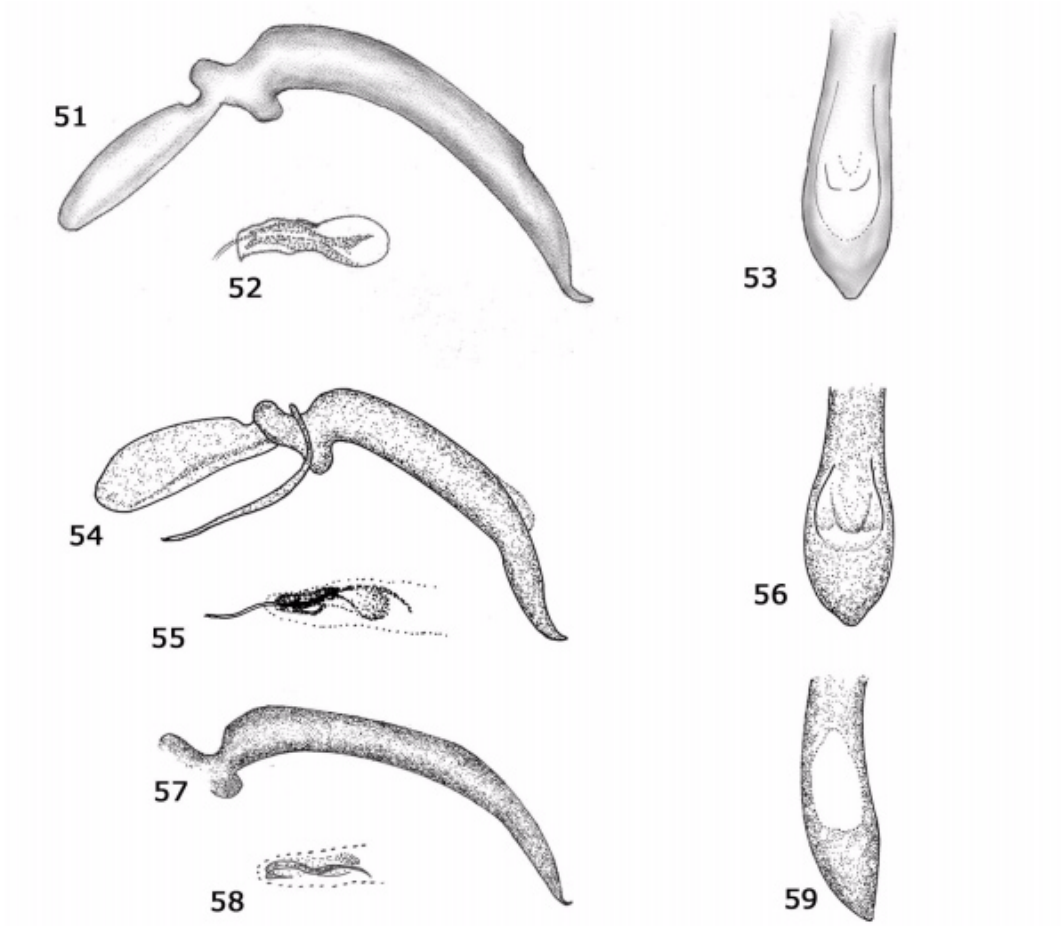
FIGURES 15–28. Male genitalia. Figs. 15–18, *P. adiastola* Flowers; 15. median lobe, lateral view; 16. apical sclerite; 17. base of endophallus, dorsal view; 18. median lobe, apex. Figs. 19–21. *P. bicolor* (Olivier); 19. median lobe, lateral view; 20. apical sclerite; 21. median lobe, apex. Figs. 22–24, *P. costata* (Baly); 22. median lobe, lateral view; 23. apical sclerite; 24. median lobe, apex. Figs. 25–28, *P. dichroma* Flowers; 25. median lobe, lateral view; 26. apical sclerite; 27. median lobe, apex; 28. apical sclerites from three other specimens.



FIGURES 29–41. Male genitalia. Figs. 29–31, *P. esmeralda* Flowers; 29. median lobe, lateral view; 30. apical sclerite; 31. median lobe, apex. Figs. 32–34, *P. furcada* Flowers; 32. median lobe, lateral view; 33. apical sclerite; 34. median lobe, apex. Figs. 35–38, *P. gaiophanes* Flowers; 35. median lobe, lateral view; 36. apical sclerite; 37. base of endophallus, dorsal view; 38. median lobe, apex. Figs. 39–41, *P. geniculata* (Baly); 39. median lobe, lateral view; 40. apical sclerite; 41. median lobe, apex.



FIGURES 42–50. Male genitalia. Figs. 42–44, *P lutea* Erichson; 42. median lobe, lateral view; 43. apical sclerite; 44. median lobe, apex. Figs. 45–47, *P. marshalli* Lefèvre; 45. median lobe, lateral view; 46. apical sclerite; 47. median lobe, apex. Figs. 48–50, *P. nila* Flowers; 48. median lobe, lateral view; 49. apical sclerite; 50. median lobe, apex.



FIGURES 51–59. Male genitalia. Figs. 51–53, *P. cyanea* (Lefèvre); 51. median lobe, lateral view; 52. apical sclerite; 53. median lobe, apex. Figs. 54–56, *P. kirschi* (Lefèvre); 54. median lobe, lateral view; 55. apical sclerite; 56. median lobe, apex. Figs. 57–59, *Prionoderita nixa* Flowers; 57. median lobe, lateral view; 58. apical sclerite; 59. median lobe, apex.