

New and Little-Known Crickets of the Subfamily Phalangopsinae (Orthoptera, Gryllidae): 4. Neotropical Genus *Uvaroviella*

A. V. Gorochoy

Zoological Institute, Russian Academy of Sciences, St. Petersburg, 199034 Russia

e-mail: orthopt@zin.ru

Received April 12, 2006

Abstract—The former genera *Acla* Heb., *Aclodes* Heb., and *Paraclodes* Des.-Grand., are considered subgenera of the genus *Uvaroviella* Chop. Five new subgenera and nine new species of this genus from Ecuador and Guyana are described. Two new species names are proposed due to the secondary homonymy, and one old species name was resurrected from synonymy as a replacement name. Lectotype for *U. cavicola* Chop. is designated. New data on the geographical and biotopical distribution of some species are given. The paper is based on the material from the collections of the Zoological Institute, Russian Academy of Sciences, St. Petersburg (ZIN), and the Natural History Museum, London (NHM).

DOI: 10.1134/S0013873806090053

TRIBE PHALANGOPSINI

The tribe comprises most genera of the spider-like crickets from various parts of the World, which are characterized by a primitive type of the male genitalia and by the abortion of hind wings (Gorochoy, 2003a, 2003b, 2006). In the Neotropical Region, only several genera of Phalangopsinae, *Phalangopsis* A.-Serv., *Heterogryllus* Sauss., and *Philippopsis* Des.-Grand., and a group of genera of Aclodae (Desutter, 1987; Desutter-Grandcolas, 1992a, 1992b) probably belong to this tribe. Among these genera, *Phalangopsis* and *Philippopsis* may be closely related (the male genitalia in both genera have no membranous areas on the lateral parts of the epiphallus, but the median lobes of its distal part are membranous), and the genus *Heterogryllus* is insufficiently studied, as its only species is known from a single female.

The status of superspecies taxa constituting the group of Aclodae needs to be clarified. Desutter-Grandcolas (1992a) included the following “genera” in this group: *Uvaroviella* Chop. described for a single species with the reduced stridulatory apparatus; *Aclodes* Heb. comprising a great number of species with rather varying male genitalia, including those similar to the genitalia of *Uvaroviella*; *Paraclodes* Des.-Grand. including a number of species with the structure of the male genitalia varying to nearly the same extent as those in the *Uvaroviella*, and, possibly,

Acla Heb., since inclusion of the type species of *Acla* in the genus *Aclodes* presumes combining of these taxa, although this has not been done formally by the author.

Desutter-Grandcolas has overlooked the fact that in the structure of the ectoparameres the type species of *Aclodes*, *Acla*, and *Paraclodes* are more similar between themselves than to most of other species included in these “genera” (cf. Fig. 1, 1–37 and Fig. 2, 18–34 to Fig. 2, 1–17), and may constitute a monophyletic group. The confusion was aggravated, when a new species, closely related to the type species of *Aclodes* in the structure of the male genitalia, was described in *Paraclodes*, and when three other new species were referred to *Aclodes*, although their male genitalia essentially differ from those of the type species of this genus (Nischk and Otte, 2000).

To overcome this confusion, I propose to regard the entire group of Aclodae as the genus *Uvaroviella* subdivided into at least nine subgenera. Such an arrangement, on the one hand, retains the habitual generic names as subgeneric ones and, on the other, does not lead to placement of obviously closely related species in different genera.

Each of the subgenera is rather clearly characterized by details of the structure of the male genitalia, but the structure of the elytra can rather widely vary between

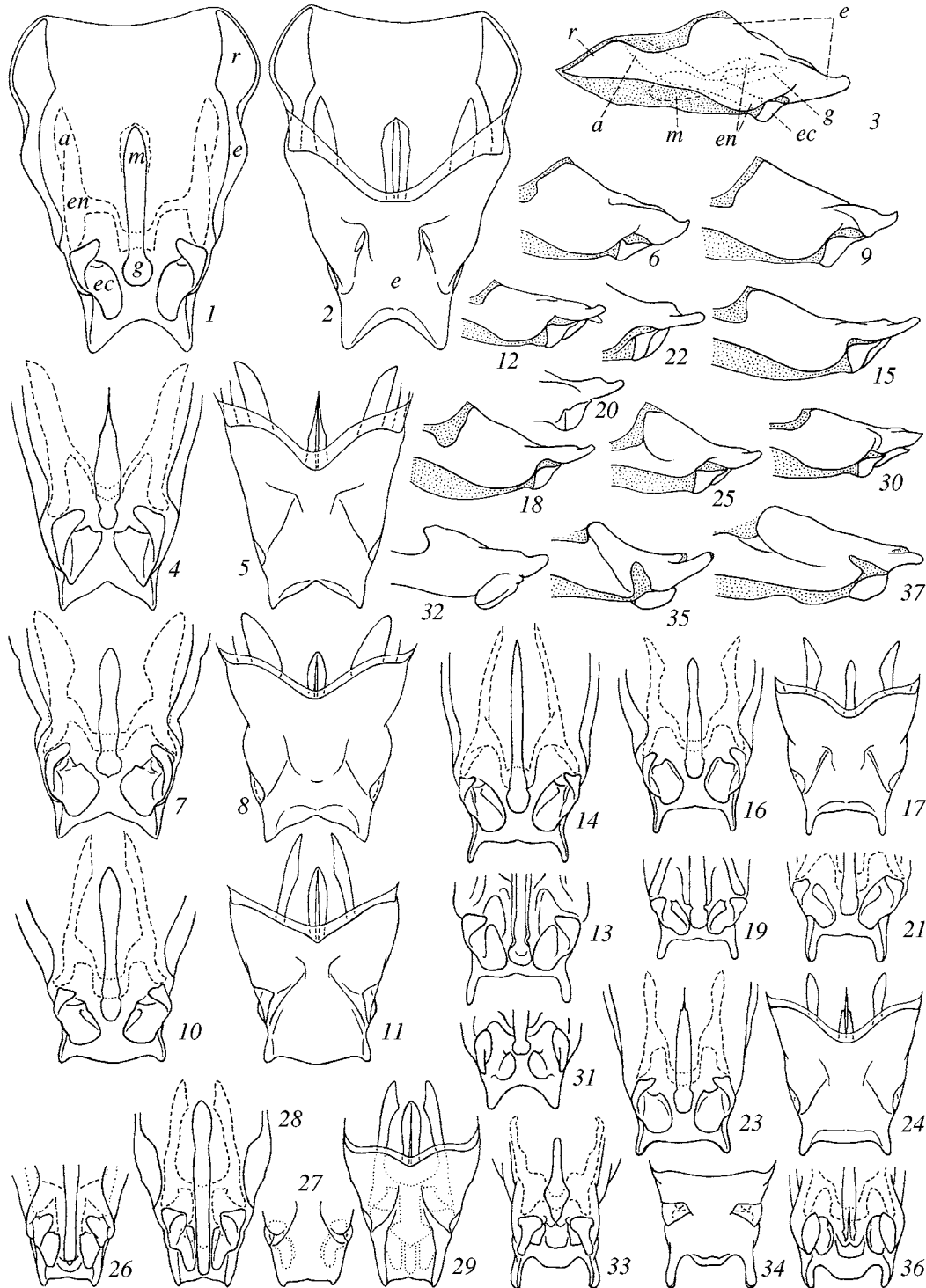


Fig. 1. *Uvaroviella*, male: (1–3) *U. (Euacla) antennalis* sp. n., holotype; (4–6) *U. (E.) parantennalis* sp. n., holotype; (7–9) *U. (E.) finiti-ma* sp. n., holotype; (10–12) *U. (E.) andensis* sp. n., holotype; (13) *U. (E.) chamocoru* (Nischk et Otte); (14, 15) *U. (E.)? chamocoru*; (16–18) *U. (E.) demissa* sp. n.; (19, 20) *U. (E.) mococharu* (Nischk et Otte); (21, 22) *U. (E.) rumococha* (Des.-Grand.); (23–25) *U. (E.) feredemissa* sp. n.; (26, 27) *U. (E.) pequegnita* (Des.-Grand.); (28–30) *U. (E.) ?pequegnita*; (31, 32) *U. (E.?) hypxyros* (Nischk et Otte); (33–35) *U. (Uvaroviella) cavicola* Chop., lectotype; (36, 37) *U. (U.?) pequegna* (Des.-Grand.). Genitalia (1–3) and their posterior part (4–37) in ventral (1, 4, 7, 10, 13, 14, 16, 19, 21, 23, 26, 28, 33, 36), dorsal (2, 5, 8, 11, 17, 24, 27, 29, 34), and lateral (3, 6, 9, 12, 15, 18, 20, 22, 25, 30, 32, 35, 37) view (in some figures, membranous parts are covered with punctures). After: (Nischk and Otte, 2000 (13, 19, 20, 31, 32), Desutter-Grandcolas, 1992a (21, 22, 26, 27, 33–37), and orig.; a, endoparameral apodeme; e, epiphallus; ec, ectoparamere; en, endoparamere; g, guiding rod; m, mold of spermatophore attachment plate, r, ramus.

species of one subgenus, which is caused by independent shortening of the elytra and by reduction of the stridulatory apparatus in different lineages of the genus.

Genus *Uvaroviella* Chopard, 1923.

Type species *U. cavicola* Chopard, 1923 (Jamaica).

Diagnosis. Body medium-sized or large, legs long, rostrum 0.33–0.67 times as wide as scape, small oval tympanum present only on inner side of fore tibia (absent in *U. surda* sp. n.). Elytra of male weakly shortened (with only partly reduced apical area) to almost absent (in form of small lobes); stridulatory apparatus well developed to absent. When stridulatory apparatus developed, stridulatory vein nearly arcuate; oblique veins numerous, more or less straight; diagonal vein rather long; areolet rather large, crossed by 1–4 dividing veins; and chords of usual structure (Fig. 3, 1–24). Elytra of female strongly shortened or absent; when developed, elytra more or less oval or scale-shaped. Anal plate of male simple, with rounded or truncate apex; genital plate rather short, with rounded apex, usually with angular median prominence at posterior margin hooked forward and strongly varying in size. Epiphallus very weakly or moderately bent transversely, fused with well-developed rami, bearing membranous lateral areas varying from very large (Fig. 1, 34, 35; 2, 7–14, 20, 21, 26, 27, 33) to obsolete (Fig. 1, 2–30; 2, 2, 3, 16, 17, 23, 24, 34). These areas possibly allow epiphallus to slightly deform during copulation. Ectoparameres small, compact, usually subdivided into at least two lobes; endoparameres connected by transverse crosspiece and provided with long apodemes; cup of attachment plate and sclerite of guiding rod fused to form elongate structure bearing low keel-shaped dorsal apodeme along proximal half (Fig. 1, 1–3). Ovipositor long, with smooth, narrow, slightly flattened apex.

Composition. Nine subgenera, which include, or may include 27 species. The diagnostic characters of these subgenera and the species included are listed in the below key to subgenera of the genus *Uvaroviella*. In addition, this genus may include *Endacustes dispar* Redtenbacher, 1892 (Lesser Antilles), *Aclodes vittatum* Chopard, 1937 (Costa Rica), *A. grandis* Desutter-Grandcolas, 1992 (Peru), *A. infuscata* Desutter-Grandcolas, 1992 (Peru) and *U. surda* sp. n.; all are known only from females and, therefore, their taxonomic position cannot be defined with more confidence.

A Key to Subgenera of the Genus Uvaroviella (Males)

1. Epiphallus with middle part of proximal margin abruptly deflexed upward, i.e., with distinct transverse fold on upper side (Fig. 2, 33, 34). Elytra of male strongly shortened, with developed stridulatory apparatus (Fig. 3, 9) or scale-shaped *Subacla* Gorochov, subgen. n.

[**Composition.** Type species *U. (S.) subaptera* nom. n. (Fig. 2, 31–33) and *Paraclodes nouragui* Desutter-Grandcolas, 1992 (Fig. 2, 34; 3, 9), French Guiana].

—Epiphallus with middle part of proximal margin gently deflexed upward, i.e., without deep transverse fold on upper side (Fig. 1, 3, 6, 9, 12, 15, 18, 25, 30, 32, 35, 37; 2, 3, 6, 14, 17, 21, 24, 27). Elytra of male weakly to strongly shortened, usually with developed stridulatory apparatus (Fig. 3, 1–10, 12–24), but occasionally without any (Fig. 3, 11) 2.

2. Epiphallus without median prominence between distal lateral processes (Fig. 2, 2, 5, 7, 10, 12, 16). Ectoparameres consisting of relatively large lower, and small upper lobes; lower lobe square or subsquare in ventral view (Fig. 2, 1, 4, 8, 11, 13, 15), with angular prominence directed downward and slightly forward (Fig. 2, 3, 6, 9, 14, 17); upper lobe partly covered by lower lobe ventrally (posterior and/or median areas of upper lobe usually visible in ventral view—Fig. 2, 1, 4, 8, 11, 13, 15) 3.

—Epiphallus varying in shape, shape of ectoparameres different (Fig. 1, 1–37; 2, 18–30) 5.

3. Epiphallus with deep emargination at apex and without large membranous fenestrae at sides (Fig. 2, 2, 3, 5, 6, 16, 17). Elytra of male weakly to strongly shortened, stridulatory apparatus with areolet crossed by arcuate dividing veins (Fig. 3, 1–3) 4.

—Epiphallus with fine emargination at apex and very large membranous fenestrae at sides (Fig. 2, 7, 9, 10, 12, 14). Elytra of male weakly shortened; stridulatory apparatus developed, with nearly straight dividing veins in areolet (Fig. 3, 4, 5) *Aclodes* Hebard, 1928, stat. n.

[**Composition.** Type species *A. nicuesa* Hebard, 1928 (Fig. 2, 7–9), Costa Rica; *Paraclodes cryptos* Nischk et Otte, 2000 (Fig. 2, 10–14; 3, 4, 5), Ecuador.].

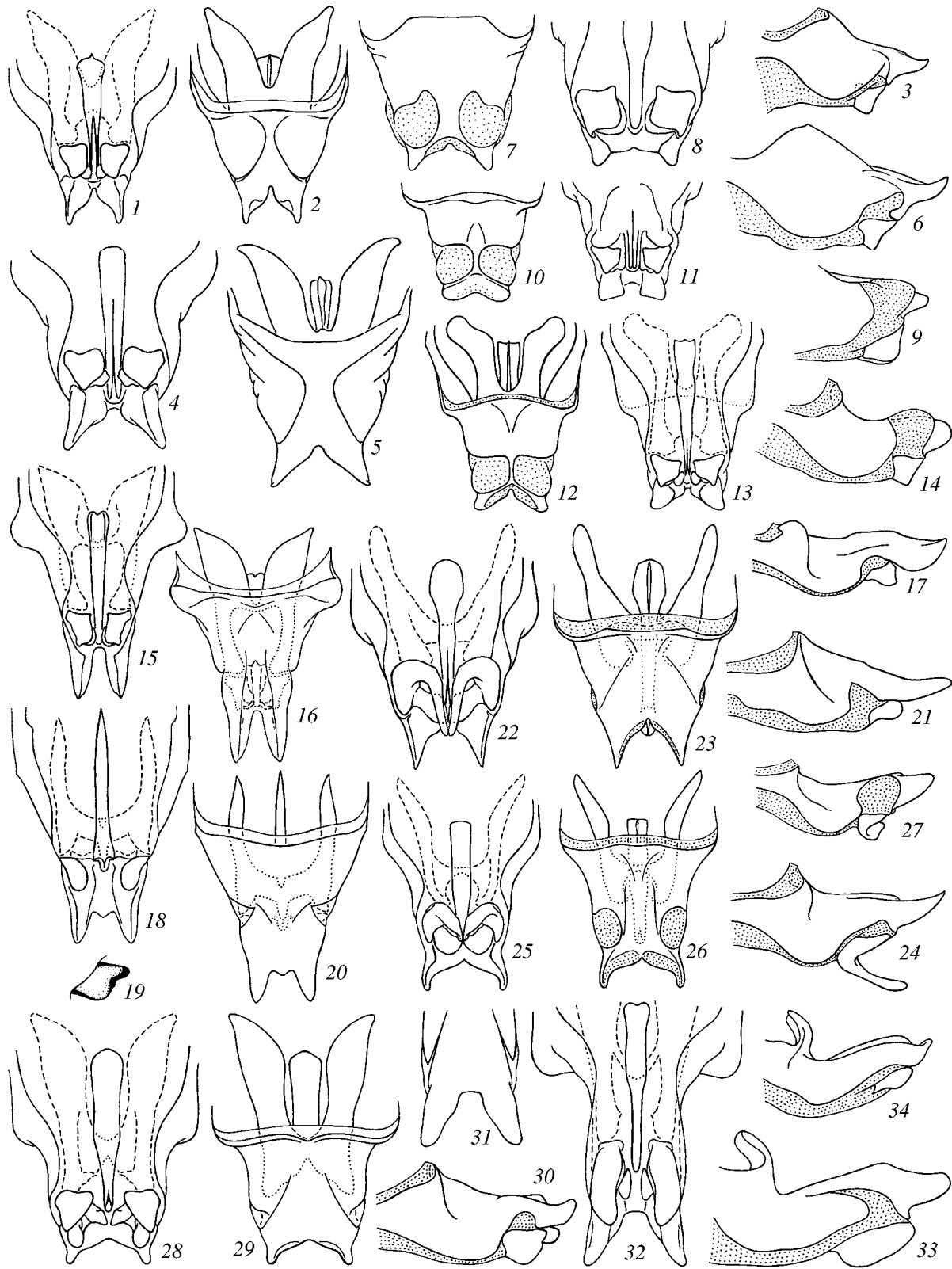


Fig. 2. *Uvaroviella*, male: (1–3) *U. (Acla) trinidadii* nom. n.; (4–6) *U. (A.) crassicornis* (Sauss.), holotype; (7–9) *U. (Aclodes) nicuesa* (Heb.), holotype; (10, 11) *U. (A.) cryptos* (Nischk et Otte); (12–14) *U. (A.) ?cryptos*; (15–17) *U. (Paraclodes) guyanensis* (Des.-Grand.), paratype; (18–21) *U. (Topacla) spelaea* (Des.-Grand.), paratype; (22–24) *U. (Reacla) meioptera* sp. n., holotype; (25–27) *U. (R.) bora* (Des.-Grand.); (28–30) *U. (HOLACLA) nebulosa* sp. n., holotype; (31–33) *U. (Subacla) subaptera* nom. n.; (34) *U. (S.) nouragui* (Des.-Grand.). Posterior part of genitalia (in some figures, membranous parts are covered with punctures), ventral (1, 4, 8, 11, 13, 15, 18, 22, 25, 28, 32), dorsal (2, 5, 7, 10, 12, 16, 20, 23, 26, 29, 31), and lateral (3, 6, 9, 14, 17, 21, 24, 27, 30, 33, 34) view; after: Desutter-Grandcolas, 1992a (4–9, 31–34), Nischk and Otte, 2000 (10, 11), and orig.

4. Nearly entire median part of distal half of epiphallus membranous dorsally (Fig. 2, 16). Elytra of male strongly shortened; areolet with strongly curved dividing veins (Fig. 3, 3) *Paraclodes* Desutter-Grandcolas, 1992, stat. n.

[Composition. Only type species *P. guyanensis* Desutter-Grandcolas, 1992, nom. rest. (Fig. 2, 15–17; 3, 3), French Guiana].

—Median part of epiphallus not membranous dorsally (Fig. 2, 2, 5). Elytra of male weakly to strongly shortened; areolet with moderately curved dividing veins (Fig. 3, 1, 2) *Acla* Hebard, 1928, stat. n.

[Composition. Type species *Heterogryllus crassicornis* Saussure, 1878 (Fig. 2, 4–6; 3, 1), Venezuela; *U. (A.) trinidadii* nom. n. (Fig. 2, 1–3; 3, 2), Trinidad].

5. Ectoparameres consisting of relatively large distal (upper) lobe and with proximal (lower) lobe varying in size; distal lobe almost not covered ventrally by proximal lobe, and its apex directed more or less backward (Fig. 1, 1, 4, 7, 10, 13, 14, 16, 19, 21, 23, 26, 28; 2, 22, 25); proximal lobe situated at posterolateral margin of distal lobe, and apex of proximal lobe directed downward at least partly (Fig. 1, 1, 3, 4, 6, 7, 9, 10, 12–16, 18–23, 25, 26, 28, 30–32; 2, 22, 24, 25, 27) 6.

—Structure of ectoparameres different (Fig. 1, 33, 35–37; 2, 18, 21, 28, 30) 7.

6. Proximal lobe of ectoparameres not larger than distal lobe (usually clearly smaller), more or less triangular in ventral and/or lateral view, without hooked process; its apex directed downward and slightly forward (Fig. 1, 1, 3, 4, 6, 7, 9, 10, 12, 13–16, 18–23, 25, 26, 28, 30). Elytra of male weakly or moderately shortened; areolet crossed by 1 or 2 dividing veins, cell adjoining areolet at mediolateral margin strongly transverse and appearing as part of areolet (Fig. 3, 13–24) *Euacla* Gorochov, subgen. n.

[Composition. Type species *U. (E.) antennalis* sp. n. (Fig. 1, 1–3; 3, 15); *Aclodes rumococha* Desut-

ter-Grandcolas, 1992 (Fig. 1, 21, 22; 3, 21), Peru; *A. pequegnita* Desutter-Grandcolas, 1992 (Fig. 1, 26–30; 3, 13, 14), Peru; *A. chamocoru* Nischk et Otte, 2000 (Fig. 1, 13–15; 3, 19, 20), Ecuador; *A. mococharu* Nischk et Otte, 2000 (Fig. 1, 19, 20; 3, 22), Ecuador; *U. (E.) parantennalis* sp. n. (Fig. 1, 4–6; 3, 16); *U. (E.) finitima* sp. n. (Fig. 1, 7–9; 3, 18); *U. (E.) andensis* sp. n. (Fig. 1, 10–12; 3, 17); *U. (E.) demissa* sp. n. (Fig. 1, 16–18; 3, 24); *U. (E.) feredemissa* sp. n. (Fig. 1, 23–25; 3, 23); and also, probably, insufficiently described *A. leleupae* Chopard, 1970 and *A. hypxyros* Nischk et Otte, 2000 (Fig. 1, 31, 32), Ecuador.].

—Proximal lobe of ectoparameres slightly larger than distal lobe, hook-shaped (i.e., with large apical process deflexed mainly backward and toward center) (Fig. 2, 22, 24, 25, 27). Elytra of male weakly to strongly shortened (Fig. 3, 7, 8); areolet in weakly shortened elytra crossed by 3 or 4 dividing veins; cell adjoining areolet at mediolateral margin slightly transverse, readily distinguished from areolet (Fig. 3, 7)..... *Reacla* Gorochov, subgen. n.

[Composition. Type species *U. (R.) meioptera* sp. n. (Fig. 2, 22–24; 3, 8); *Aclodes bora* Desutter-Grandcolas, 1992 (Fig. 2, 25–27; 3, 7), Peru].

7. Epiphallus without median prominence between distal lateral processes (Fig. 2, 29). Ectoparameres in the type species of the new subgenus described in this couplet consist of three lobes: lower proximal (resembling those of *Euacla*, but rather large), upper distal (directed backward), and upper median (directed backward and toward center); both latter lobes partly covered ventrally by lower lobe (Fig. 2, 28, 30). Elytra of male with developed stridulatory apparatus and without clearly angular apex of dorsal part (Fig. 3, 10) *HOLACLA* Gorochov, subgen. n.

[Composition. Type species *U. (H.) nebulosa* sp. n. (Fig. 2, 28–30; 3, 10); and, possibly, *Endacusta maculata* Caudell, 1918 (Peru) and *Heterogryllus bordoni* Chopard, 1970 (Venezuela), the ectoparameres of both are insufficiently studied].

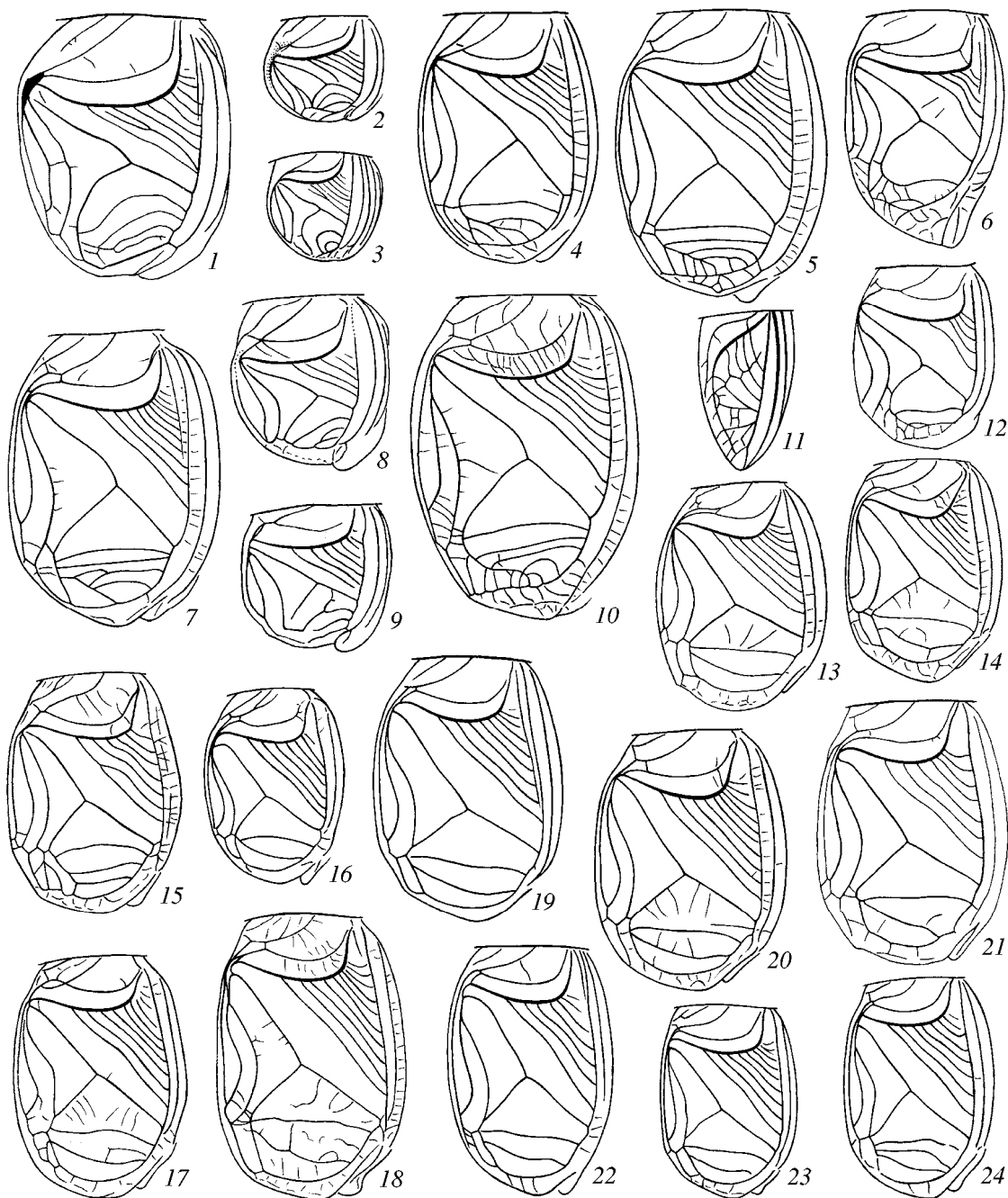


Fig. 3. *Uvaroviella*, dorsal part of upper elytron of male: (1) *U. (Acla) crassicornis* (Sauss.), holotype; (2) *U. (A.) trinidad* nom. n.; (3) *U. (Paracloides) guyanensis* (Des.-Grand.), paratype; (4) *U. (Aclodes) cryptos* (Nischk et Otte); (5) *U. (A.) ?cryptos*; (6) *U. (Topacla) spelaea* (Des.-Grand.), paratype; (7) *U. (Reacla) bora* (Des.-Grand.); (8) *U. (R.) meioptera* sp. n., holotype; (9) *U. (Subacla) nouragui* (Des.-Grand.); (10) *U. (Holoacla) nebulosa* sp. n., holotype; (11) *U. (Uvaroviella) cavicola* Chop., lectotype; (12) *U. (U.?) pequegna* (Des.-Grand.); (13) *U. (Euacla) pequegnita* (Des.-Grand.); (14) *U. (E.) ?pequegnita*; (15) *U. (E.) antennalis* sp. n., holotype; (16) *U. (E.) parantennalis* sp. n., holotype; (17) *U. (E.) andensis* sp. n., holotype; (18) *U. (E.) finitima* sp. n., holotype; (19) *U. (E.) chamocoru* (Nischk et Otte); (20) *U. (E.) ?chamocoru*; (21) *U. (E.) rumococha* (Des.-Grand.); (22) *U. (E.) mococharu* (Nischk et Otte); (23) *U. (E.) feredemissa* sp. n.; (24) *U. (E.) demissa* sp. n. After: (Desutter-Grandcolas, 1992a (1, 9, 12, 13, 21), Nischk and Otte, 2000 (4, 19, 22), Chopard, 1923 (11), and orig.

—Epiphallus with distinct median prominence between distal lateral processes (Fig. 1, 34, 36; 2, 20). Structure of ectoparameres (Fig. 1, 33, 35–37; 2, 18, 21) different from that of type species of

the subgenus *Holoacla*. Elytra of male with developed or reduced stridulatory apparatus; apex of their dorsal part occasionally clearly angular (Fig. 3, 6, 11).

8. Median prominence between distal lateral processes of epiphallus narrow (Fig. 2, 20). Ectoparameres formed by 1 distinct lobe (Fig. 2, 18). Elytra of male with developed stridulatory apparatus and angular apical area (Fig. 3, 6)
 *Topacla* Gorochov, subgen. n.

[**Composition.** Only type species *Aclodes spelaea* Desutter-Grandcolas, 1992 (Fig. 2, 18–21; 3, 6), French Guiana].

—Median prominence between distal lateral processes of epiphallus wide (Fig. 1, 34, 36). Ectoparameres consisting of 2 lobes: lower and upper; lower lobe elongate, not shorter than upper one and not shifted in proximal part of ectoparamere; upper lobe similar in size to lower lobe and partly covered ventrally by latter (Fig. 1, 33, 36). Elytra of male in type species of the subgenus *Uvaroviella* with reduced stridulatory apparatus and with angular apex of dorsal part (Fig. 3, 11) *Uvaroviella* s. str.

[**Composition.** Type species *U. cavicola* Chopard, 1923 (Fig. 1, 33–35; 3, 11), Jamaica; also, probably, *Aclodes pequegna* Desutter-Grandcolas, 1992 (Fig. 1, 36, 37; 3, 12), French Guiana].

Uvaroviella (Euacla) antennalis Gorochov, sp. n.

Material. Holotype: ♂, Ecuador, western spurs of Andes near Puerto Lopez, 10 km E of Agua Blanca Vill., San Sebastian shelter, 700 m, foggy forest, among boulders along stream, at night, 26–29.X.2005, Gorochov (ZIN). Paratypes: 12 ♂, 1 ♀, as holotype (ZIN).

Description. Male (holotype). Body rather large. Coloration spotty, but not very contrasting; face with following dark areas against pale background: pair of very dark vertical stripes at sides of rostrum below median ocellus, darkish triangle below these stripes, darkish areas below antennal sockets (with paler spots at upper and lower margins), dark spot in form of turned “V” on clypeus, dark punctures at sides of clypeus near clypeal suture, darkish lower half of mandibles, and pair of vertical stripes in median part of base of labrum; upper part of head and pronotal disc weakly spotty; lateral lobes of pronotum dark, separated from disc by curved longitudinal pale stripes and bearing pale spot in lower part; upper elytron uniformly grayish brown, with dorsal part slightly paler. Rostrum between antennal sockets about 0.4 times as wide as scape; ocelli small, rounded; antennal funicle in middle part with distinct sparse tufts of long, differ-

ently pointed hairs. Elytra not covering fairly long part of abdomen; shape and venation of dorsal part of upper elytron as in Fig. 3, 15. Apex of anal plate rounded; genital plate with short, inconspicuous median hook at apex; genitalia with rounded emargination at epiphallus apex and with apically rounded ectoparameres (Fig. 1, 1–3).

Variations. Dorsal part of head and pronotal disc occasionally dark, areolet in elytra frequently more similar to that in Fig. 3, 76.

Female. Shape of body and coloration as those in dark males, but antennal funicle without distinct tufts of long hairs; elytra reaching only middle of abdominal tergite I, contiguous and bearing in dorsal area 4 or 5 somewhat chaotically arranged longitudinal veins.

Length (mm). Body: male 16–18, female 16.5; pronotum: male 2.8–3.2, female 3.3; elytra: male 6.5–8, female 3; hind femur: male 14.5–17, female 15; ovipositor 11.

Comparison. The new species differs from the known species of the subgenus in the presence of a rounded emargination at the apex of the epiphallus, combined with the characteristic shape of the ectoparameres, and also in the distinctive structure of the antennal funicle of the male. The species differs from the congeners known only from females in the darker lower part of the facial section of the epicranium and/or in the shorter ovipositor.

Uvaroviella (Euacla) parantennalis
 Gorochov, sp. n.

Material. Holotype: ♂, Ecuador, eastern Andes, 75 km EES of Quito, near El Chaco Vill. on Rio Quijos River, 1500 m, rather sparse forest, on a rock at the river, at night, 18–22.XI.2005, Gorochov and Ovchinnikov (ZIN). Paratypes: 6 ♂, 4 ♀, as holotype (ZIN).

Description. Male (holotype). Body slightly smaller and slightly darker than that of the preceding species: face very dark, with inconspicuous, paler vertical line originating under median ocellus, bifurcating below rostrum, and passing then into long transverse paler lines far below antennae and eyes, and with inconspicuous pair of paler spots below medial halves of antennal sockets; upper part of head dark, with 4 longitudinal paler lines; pronotum colored as that of *U. antennalis*, but disc dark; upper elytron also dark, one-colored. Structure of head and outer parts of abdomen as that of *U. antennalis*, but elytra slightly

shorter; shape and venation of dorsal part of upper elytron as in Fig. 3, 16. Genitalia with slightly undulate apical emargination of epiphallus (Fig. 1, 5), with distal lateral processes of epiphallus shorter and hooked (Fig. 1, 6), and with ectoparameres subacute apically (Fig. 1, 4).

Variations. Paired pale spots on facial part of epicranium occasionally more distinct, and paler lines inconspicuous; pronotal disc occasionally with longitudinal pale median stripe.

Female. Shape of body and coloration as those in male, but antennal funicle without distinct tufts of long hairs. Elytra as those in female of *U. antennalis*, but reaching apices of abdominal tergite I and bearing 3 or 4 nearly straight longitudinal veins in dorsal area.

Length (mm). Body: male 15.0–16.5, female 16–17; pronotum: male 2.6–2.8, female 2.6–3.0; elytra: male 6.0–6.5, female 3.4–3.6; hind femur: male 14.0–15.5, female 13.5–15.0; ovipositor 16–18.

Comparison. The new species differs from the known species of the subgenus in shape of the distal part of the epiphallus, combined with the apically pointed ectoparameres, and from the congeners known only from females, in the darkened facial part of the epicranium and/or in the longer ovipositor.

Uvaroviella (Euacla) finitima Gorochov, sp. n.

Material. Holotype: ♂, Ecuador, eastern Andes, 75 km EES of Quito, near El Chaco Vill. on Rio Quijos River, 1500 m, rather sparse forest, on a rock by the river, at night, 18–22.XI.2005, Gorochov and Ovchinnikov (ZIN). Paratype: ♂, as holotype (ZIN).

Description. Male (holotype). Size of body subequal to that of *U. parantennalis*. Coloration clearly spotty; face dark, with slightly paler (darkish) lower areas, fine spot below median ocellus, and vertical line extending downward from spot; pair of distinct pale spots lying below median parts of antennal sockets and paler oblique stripes present on genae; upper part of head and pronotum colored as those in specimens of *U. parantennalis* with pale longitudinal median stripe on pronotal disc; upper elytron nearly one-colored, dark. Rostrum between antennal sockets approximately half as wide as scape; ocelli similar to those of the preceding species, but hair tufts on antennal funicle less distinct. Elytra nearly reaching apex of abdomen (Fig. 3, 18). Anal plate with truncate apex; apex of genital plate without hook; in genitalia, epiphallus

similar to that of *U. parantennalis*, but ectoparameres wider in middle part, narrower in proximal part, and rounded apically (Fig. 1, 7–9).

Variations. In paratype, rostrum below median ocellus nearly uniformly dark.

Female unknown.

Length (mm). Body 15–16; pronotum 2.6–2.7; elytra 9.2–9.5; hind femur 13.2–13.6.

Comparison. The new species differs from the known species of the subgenus in the wider ectoparameres, combined with the characteristic shape of the apex of the epiphallus and with the large elytra of the male, and from the congeners with an obscure subgeneric position, in the dark facial part of the epicranium.

Uvaroviella (Euacla) andensis Gorochov, sp. n.

Material. Holotype: ♂, Ecuador, eastern Andes, 75 km EES of Quito, near El Chaco on Rio Quijos River, 1500 m, rather sparse forest, on a rock by the river, at night, 18–22.XI.2005, Gorochov and Ovchinnikov (ZIN). Paratypes: 11 ♂, 9 ♀, as holotype (ZIN); 3 ♂, 1 ♀, Ecuador, eastern Andes, 95 km E of Quito, near fall San Rafael on Rio Coca River, 1300 m, primary forest, on branches and leaves of bushes by a stream, at night, 23–26.XI.2005, Gorochov and Ovchinnikov (ZIN).

Description. Male (holotype). Body slightly smaller than that of *U. finitima*, coloration slightly darker: face very dark, only with pair of fine paler spots below medial parts of antennal sockets; pale stripes along lateral margins of pronotal disc interrupted slightly behind their middle. Structure of head and outer parts of abdomen, and also relative size of elytra as those of *U. finitima*, but hair tufts on antennal funicle nearly invisible, and shape and venation of dorsal part of upper elytron as in Fig. 3, 17. Genitalia with strongly convex posterior margin of epiphallus between its distal lateral processes and with strongly widened distal parts of ectoparameres (Fig. 1, 10–12).

Variations. Dorsal part of upper elytron frequently slightly paler than its lateral part, and areolet occasionally separated from longest chord, nearly as that of *U. finitima*.

Female. Structure of body and coloration similar to those of male, but antennal funicle without tufts of long hairs, elytra reaching base of abdominal tergite I,

not contacting, with 3 or 4 weakly curved longitudinal veins in dorsal area.

Length (mm). Body: male 13–14, female 12–16; pronotum: male 2.1–2.4, female 2.4–2.7; elytra: male 7–9, female 2.2–2.4; hind femur: male 11–13, female 11.5–13; ovipositor 9–10.

Comparison. The new species is similar *U. leleupae* in shape of the apex of the epiphallus, but differs in the short and wider distal lateral processes of the epiphallus and in the not truncate elytral apex of the male. The new species differs from the other members of the subgenus in the characteristic apex of the epiphallus, and from the congeners with a vague subgeneric position, in the dark facial part of the epicranium and/or in the shorter ovipositor.

Uvaroviella (Euacla)? chamocoru
(Nischk et Otte, 2000)

Material. Ecuador, eastern plain: 5 ♂, 2 ♀, 80–85 km E of Lago Agrio, near Lake Lago Grande on Rio Cuyabeno River, flooded primary forest, 2–9.XI.2005, Gorochoy and Ovchinnikov (ZIN); 3 ♂, 70 km SE of Lago Agrio, near San Pablo de Kantesiya Vill. on Rio Aguatico River, not flooded primary forest, 10–17.XI.2005, Gorochoy and Ovchinnikov (ZIN). The specimens were collected at night from tree trunks not high above the ground.

The ectoparameres of the genitalia of these males (Fig. 1, 14) resemble those shown for *U. rumococha* and *U. mococharu* (Fig. 1, 19, 21) rather than those depicted in the original description of *U. chamocoru* (Fig. 1, 13). However, the areolet in the elytra of the males examined (Fig. 3, 20) is similar to that of *U. chamocoru* (Fig. 3, 79), being more transverse than that of *U. mococharu* and *U. rumococha* (Fig. 3, 21, 22). Probably, the authors of the description of *U. chamocoru* were inaccurate illustrating the genitalia (Nischk and Otte, 2000 : fig. 16).

Uvaroviella (Euacla) demissa Gorochoy, sp. n.

Material. Holotype: ♂, Ecuador, eastern plain, 80–85 km E of Lago Agrio, near Lake Lago Grande on Rio Cuyabeno River, flooded primary forest, on branches in shrub layer, at night, 2–9.XI.2005, Gorochoy and Ovchinnikov (ZIN).

Description. Male (holotype). Size of body and coloration nearly as these of *U. andensis*, but face with inconspicuous, slightly paler spots in lower half and

on genae, pronotal disc with fine paler spots along posterior margin, and dorsal part of upper elytron slightly paler than its lateral part. Rostrum between antennal sockets about 0.4 times as wide as scape. Ocelli, antennae, and outer parts of abdomen as those of *U. andensis*. Elytra nearly reaching apex of abdomen (as in *U. andensis* and *U. finitima*), but with slightly narrower dorsal part (Fig. 3, 24). Genitalia (Fig. 1, 16–18) similar to those of *U. rumococha*, *U. chamocoru*, and *U. mococharu* (distal lateral processes of epiphallus narrow, nearly spiniform, Fig. 1, 13–22), but epiphallus posteriorly (between its distal lateral processes) almost roundly emarginate (not undulate) and distal (narrowed) parts of ectoparameres shorter, ectoparameres beveled in such manner that their apices appearing directed backward and slightly sideways.

Female unknown.

Length (mm). Body 12.5; pronotum 2.5; elytra 7; hind femur 12.

Comparison. This species is similar to *U. mococharu* in structure of the male elytra, but differs from this and the other species of the subgenus in the characters of the male genitalia listed above. The new species differs from the congeners with uncertain subgeneric placement in the mainly dark facial part of the epicranium.

Uvaroviella (Euacla) feredemissa
Gorochoy, sp. n.

Material. Holotype: ♂, Ecuador, eastern plain, 70 km SE of Lago Agrio, near San Pablo de Kantesiya Vill. on Rio Aguatico River, not flooded primary forest, on a tree trunk not high above the ground, at night, 10–17.XI.2005, Gorochoy and Ovchinnikov (ZIN).

Description. Male (holotype). Specimen very similar to holotype of *U. demissa*, differing only slightly in darker coloration (face, pronotum, and upper elytron very dark, nearly without any paler areas), slightly shorter elytra (Fig. 3, 23), more or less rounded apex of anal plate, short distal lateral processes of epiphallus, roundly convex posterior margin of epiphallus between these processes, and not beveled apex of ectoparameres (Fig. 1, 23–25).

Female unknown.

Length (mm). Body 12.0; pronotum 2.5; elytra 6.2; hind femur 12.2.

Comparison. In structure of the epiphallus apex the new species slightly resembles *U. andensis* and *U. leleupae*, but clearly differs from both in the less convex posterior margin of the epiphallus between its distal lateral processes. From the other congeners the new species differs in characters of the male genitalia listed in the description, and from the congeners with a vague generic position, in the entirely dark head.

Uvaroviella (Euacla)? pequegnita
(Desutter-Grandcolas, 1992).

Material. 1 ♂, 1 ♀, Ecuador, eastern plain, 80–85 km E of Lago Agrio, near Lake Lago Grande on Rio Cuyabeno River, flooded primary forest, on a tree trunk not high above the ground, at night, 2–9.XI.2005, Gorochov and Ovchinnikov (ZIN).

The ectoparameres of the male genitalia depicted in the original description of *U. pequegnita* (Fig. 1, 26) appear to lack the sharp curvature of the lateral margin, characteristic of the male discussed (Fig. 1, 28). In addition, they seem to be obviously shorter than the ectoparameres of the latter specimen. However, another figure in the same publication (Fig. 1, 27) shows the ectoparameres slightly different, and the dorsal part of the male upper elytron is shown there to be very similar to that of the specimen discussed (for comparison, see Fig. 3, 13, 14).

Uvaroviella (Acla) trinidadii Gorochov, nom. n.

= *Aclodes cavicola* Chopard, 1954 [junior secondary homonym of *U. cavicola* Chopard, 1923].

1 ♂, 1 ♀, Trinidad Island, “Anipo Caves, Trinidad,” 15.III.1942, “D.K. Kevan” (NHM).

These specimens are labeled as the types of this species and correspond to their redescription (Desutter-Grandcolas, 1992a).

Uvaroviella (Aclodes)? cryptos
(Nischk et Otte, 2000)

Material. 2 ♂, Ecuador, eastern plain, 70 km SE of Lago Agrio, near San Pablo de Kantesiya Vill. on Rio Aguarico River, not flooded primary forest, on a tree trunk not high above the ground, at night, 10–17.XI.2005, Gorochov and Ovchinnikov (ZIN).

The images of the male genitalia of *U. cryptos* in the original description somewhat disagree with the genitalia of the males examined. The differences in the structure of the upper part of the epiphallus apex and

in the shape of the lower part of its distal lateral processes are especially evident (for comparison, see Fig. 2, 10, 11 and Fig. 2, 12, 13). Some discrepancy in the form of the epiphallus apex in different figures of the original description allows me to suppose that the authors of the description of *U. cryptos* have made an inaccuracy in the figures, rather than that the males examined by me belong to a new species.

Uvaroviella (Paraclodes) guyanensis
(Desutter-Grandcolas, 1992), nom. rest.

= *Aclodes aptera* Chopard, 1912 [junior secondary homonym of *Endacustes aptera* Giglio-Tos, 1897 = *U. crassicornis* (Saussure, 1878)].

2 ♂, Guyana, “British Guiana, Essequibo R., Moraballi Creek,” 13.VIII–7.X.1929, “Oxf. Univ. Expedn” (NHM).

The resurrected name had been placed in synonymy of the name given by Chopard (Desutter-Grandcolas, 1994). However, after uniting the former genera *Acla* and *Paraclodes* the latter name becomes a junior secondary homonym of the name given by Giglio-Tos, which, in its turn, was placed by Hebard (1928) in synonymy with *U. crassicornis*. According to the International Code of Zoological Nomenclature, this secondary homonymy needs resurrection of “*guyanensis*” as a valid replacement name.

Uvaroviella (Reacla) meioptera Gorochov, sp. n.

Material. Holotype: ♂, Guyana, “British Guiana, Essequibo R., Moraballi Creek,” 21.X.1929, “Oxf. Univ. Expedn” (NHM). Paratypes: 4 ♂, 1 ♀, same data, but 19.VIII–28.XI.1929 (NHM, ZIN); 1 ♂, Guyana, “British Guiana, Cuyuni R., Kamaria Landing,” 20.XI.1929, “Oxf. Univ. Expedn” (NHM).

Description. Male (holotype). Body large against the standards of this genus, nearly uniformly brown, but with darker (dark brown) upper half of head, pronotum, and lateral parts of elytra, slightly paler and indistinctly spotty abdominal tergites and anal plate, and also with vague spots on middle femur. Rostrum between antennal sockets about 0.4 times as wide as scape; ocelli small, rounded; antennal funicle with sparse and not very conspicuous tufts of long hairs. Elytra strongly shortened, reaching base of abdominal tergite III; dorsal part of upper elytron as in Fig. 3, 8. Apex of anal plate subtruncate; genital plate apically with long (length 0.6 mm) median hook directed forward; genitalia with small membranous areas at sides

of epiphallus and with long narrow hook-shaped process on each ectoparamere (Fig. 2, 22–24).

Variations. Other males slightly or considerably smaller; in some of them, entire facial part of epicranium dark, but with pair of not very distinct, paler spots below medial margins of antennal sockets.

Female. Shape of body and coloration similar to those of males mentioned in the preceding paragraph, but with additional paler spots behind and below eyes; elytra very strongly shortened (scale-shaped) and projecting only slightly from under lateral parts of posterior margin of pronotum.

Length (mm). Body: male 17.5–21.0, female 19; pronotum: male 3.2–4.2, female 3.9; elytra: male 5.2–5.8, female 1.0; hind femur: male 14.5–19.8, female 17.5; ovipositor 18.8.

Comparison. The species described clearly differs from the second species of the subgenus (*U. bora*) in the nearly uniform coloration (the same character differentiates it from the congeners known only from females), more strongly shortened elytra, smaller membranous “fenestrae” at sides of the epiphallus, and shape of hooked processes of the ectoparameres.

Uvaroviella (Reacla) bora
(Desutter-Grandcolas, 1992)

Material. 5 ♂, Ecuador, eastern plain, 80–85 km E of Lago Agrio, near Lake Lago Grande on Rio Cuyabeno River, flooded primary forest, on a tree trunk not high above the ground, at night, 2–9.XI.2005, Gorochoy and Ovchinnikov (ZIN).

The listed specimens perfectly fit the original description of this species, the type series of which originates from Peru.

Uvaroviella (Holoacla) nebulosa Gorochoy, sp. n.

Material. Holotype: ♂, Ecuador, western spurs of Andes near Puerto Lopez, 10 km E of Agua Blanca Vill., San Sebastian Shelter, 700 m, foggy forest, on a tree trunk not high above the ground, at night, 26–29.X.2005, Gorochoy and Ovchinnikov (ZIN). Paratypes: 8 ♂, 3 ♀, as holotype (ZIN).

Description. Male (holotype). Body rather large. Head dark, with following pale areas: face with pair of large spots above lateral areas of clypeus, clypeus (except for median transverse spot), and labrum; each gena with two paler spots (vertical anterior spot and

smaller posterior spot); upper part of head with 6 longitudinal lines, among which 1 pair of very short lateral lines situated behind eyes, and 1 pair of medial lines connected by narrow V-shaped spot. Pronotum also dark, but with inconspicuous paler spots on disc, spot in anteroventral corner of lateral lobe, and pale curved stripes along sides of disc. Antennae, upper elytron, lateral part of lower elytron, and cerci brown with rufescent tint. Legs, pterothorax, and abdomen with distinct spots. Rostrum between antennal sockets about 0.33 times as wide as scape; ocelli small, more or less rounded; antennal funicle with poorly developed tufts of long hairs. Elytra (Fig. 3, 10) nearly reaching apex of abdomen. Apex of anal plate rounded; genital plate with well-developed median hook at apex, clearly shorter than that of *U. meioptera*; genitalia as in Fig. 2, 28–30.

Variations. Coloration occasionally slightly paler, with pale additional spots below antennal sockets and with median longitudinal stripe on pronotal disc. Number of dividing veins in areolet of upper elytron slightly varying.

Female. Coloration and shape of body similar to those of male, but elytra only reaching middle part of abdominal tergite II; dorsal area of elytra with 5 or 6 straight (occasionally slightly bent) longitudinal veins, one of which (second counting from side) usually bifurcating at apex.

Length (mm). Body: male 17–19, female 14.0–17.5; pronotum: male 3.3–3.6, female 3.5–3.7; elytra: male 10.0–10.7, female 4.7–5.0; hind femur: male 16–17, female 16.0–16.5; ovipositor 18.5–19.0.

Comparison. The new species clearly differs from *U. maculata* and *U. bordoni* in the wider emargination at the epiphallus apex and in the larger elytra of the male, and from the congeners known only from females, in the distinctly longer ovipositor and/or elytra of the female.

Uvaroviella (Subacla) subaptera
Gorochoy, nom. n.

= *Paraclodes aptera* Desutter-Grandcolas, 1992 [junior secondary homonym of *Endacustes aptera* Giglio-Tos, 1897 = *U. crassicornis* (Saussure, 1878) and *Aclodes aptera* Chopard, 1912 = *U. guyanensis* (Desutter-Grandcolas, 1992)].

This species, characterized by a very strong reduction of the male elytra, was mentioned in a published

variant of the catalogue “*Orthoptera Species File*” (Otte, 1994), but, apparently, was omitted in its later version presented in Internet (Otte et al., 2004).

Uvaroviella (Uvaroviella) cavicola Chopard, 1923

The species was described from four specimens, two of which (a male and a female) were designated as types, and the others (a female and a nymph), as co-types (Chopard, 1923; Desutter-Grandcolas, 1992a). In the latter paper, no lectotype was designated in the redescription of this species, but the genitalia of the mentioned male were illustrated. This male (Jamaica, Trelawney, Major A.C. Clarke, taken in a limestone cave, nearly a mile from daylight, Sept. 1921), deposited in NHM, is designated here as lectotype, and the other type specimens, deposited in the same museum, become paralectotypes.

Uvaroviella surda Gorochov, sp. n.

Material. Holotype: ♀, Ecuador, eastern plain, 80–85 km E of Lago Agrio, near Lake Lago Grande on Rio Cuyabeno River, flooded primary forest, on branche of a bush in the shrub layer, at night, 2–9.XI.2005, Gorochov and Ovchinnikov (ZIN).

Description. Female (holotype). Body medium-sized against the standard of this genus. Coloration spotty: head pale brown, with pair of dark vertical spots at sides of rostrum below median ocellus, pair of small spots below eyes, 2 pairs of fine spots behind eyes, pair of spots at sides of rostrum above antennal sockets, narrow transverse stripe between them in area of lateral ocelli, unpaired fine spot above median ocellus, and 3 longitudinal stripes on upper part of vertex; antennae darkened, with paler proximal areas and fine sparse spots on funicle; palpi very pale; pronotum dark, with pale median longitudinal stripe on disc, pair of stripes at sides of disc (these stripes curved and twice interrupted), and also with distinctly less pale pair of comma-shaped spots on disc and vague spots along posterior margin of disc; fore leg with vague spots, middle and hind legs with distinct spots; abdominal tergites also clearly spotty; lower parts of thorax and abdomen pale; elytra moderately darkened (brown), more or less uniformly colored, but with paler base; cerci pale brown, with slightly darker posterior half. Rostrum between antennal sockets about 0.67 times as wide as scape; ocelli small, rounded; antennal funicle without tufts of long hairs. Tympana absent. Elytra reaching posterior part of abdominal

tergite I, with widely rounded apices and slightly overlapping median areas; dorsal area with 4 more or less straight longitudinal veins curved at bases. Structure of apex of ovipositor typical of the genus.

Male unknown.

Length (mm). Body 14; pronotum 2.5; elytra 2.8–2.9; hind femur 12.6; ovipositor 11.8.

Comparison. Judging from the appearance, absence of the tympana, size of the elytra, and structure of the ovipositor, the female described is most likely represents a species belonging to the genus *Uvaroviella* and characterized by the not very strongly reduced male elytra without stridulatory apparatus. Such structure of the elytra is known in this genus only in *U. cavicola* readily distinguished from the new species by the presence of the inner tympana.

ACKNOWLEDGMENTS

The author is grateful to Dr. G.W. Beccaloni and Mrs. Ju. Marshall for the opportunity of examination of the collection of the Natural History Museum, London.

The study was supported by the Russian Foundation for Basic Research (grant no. 04-04-48189).

REFERENCES

1. Chopard, L., “Description d’un Gryllide cavernicole de la Yamaïque (Orthopteres),” Bull. Soc. Entomol. Fr., 84–86 (1923).
2. Desutter, L., “Structure et evolution du complexe phalique des Gryllidea (Orthopteres) et classification des genres Neotropicaux de Grylloidea. Premiere partie,” Anns Soc. Entomol. Fr. (N. S.) **23** (3), 213–239 (1987).
3. Desutter-Grandcolas, L., “Les Phalangopsidae Neotropicaux (Orthoptera: Grylloidea): II. Le groupe des Aclodae,” Anns Soc. Entomol. Fr. (N. S.) **28** (2), 171–199 (1992a).
4. Desutter-Grandcolas, L., “Les Phalangopsidae de Guyane francaise (Orthopteres, Grylloidea): systematique, elements de phylogenie et de biologie,” Bull. Mus. natl. Hist. Nat. (S. 4) **14** (sect. A) (1), 93–177 (1992b).
5. Desutter-Grandcolas, L., “Revision of the Genus *Laranda* Walker (Orthoptera, Grylloidea: Phalangopsidae) with Notes on Its Distribution and Biology,” Entomol. Scand. **25** (3), 321–332 (1994).
6. Gorochov, A.V., “New and Little-known Crickets of the Subfamily Phalangopsinae (Orthoptera, Gryllidae): 1. Southern Asia and Soenda Isles,” Zool. Zh. **82** (8), 953–963 (2003a) [Entomol. Rev. **83** (6), 708–718 (2003)].

7. Gorochoy, A.V., "New and Little Known Crickets of the Subfamily Phalangopsinae (Orthoptera, Gryllidae): 2. Oceania, Sri Lanka, and Australia," *Zool. Zh.* **82** (9), 1064–1074 (2003b) [*Entomol. Rev.* **83** (6), 718–729 (2003)].
8. Gorochoy, A.V., "New and Little Known Crickets of the Subfamily Phalangopsinae (Orthoptera, Gryllidae): 3. Indonesia, the Philippines, and Seychelles," *Zool. Zh.* **85** (6), 691–701 (2006) [*Entomol. Rev.* **86** (4), 438–448 (2006)].
9. Hebard, M., "Studies in the Dermaptera and Orthoptera of Colombia," *Trans. Amer. Entomol. Soc.* **54**, 79–124 (1928).
10. Nischk, F. and Otte, D., "Bioacoustics, Ecology and Systematics of Ecuadorian Rainforest Crickets (Orthoptera: Gryllidae: Phalangopsinae), with a Description of Four New Genera and Ten New Species," *J. Orthoptera Res.* **9**, 229–254 (2000).
11. Otte, D., *Orthoptera Species File. Number 1. Crickets (Grylloidea)* (Orthopterists' Society and the Academy of Natural Sciences of Philadelphia, Philadelphia, 1994).
12. Otte, D., Eades, D.C., and Naskrecki, P., "Orthoptera Species File Online. Version 2," web site: <http://osf2.orthoptera.org/basic/HomePage.asp> (2004).