LABOPS VERAE, NEW SPECIES, WITH LABOPELLA, NICHOLIA, AND PRONOTOCREPIS, NEW GENERA OF NORTH AMERICAN MIRIDAE (HEMIPTERA).

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Labops verae n. sp.

Distinguished from allied species by the relatively narrow head and smaller eyes; width of head across eyes about equal to basal width of pronotum; length of second antennal segment much greater than width of head.

8. Length 3 mm., width 1.55 mm. Head: width 1.09 mm., vertex .70 mm.; width of eyes greater than the transverse diameter, nearly round, prominent but not pedunculate; base of vertex with an arcuate elevated ridge from eye to eye, the posterior slope of this ridge pale except on median line; juga normal, not swollen. Rostrum, length 1.39 mm., reaching upon third ventral segment, rather thick, black. Antennae: segment I, length .49 mm., thickness .15 mm., constricted at base; II, 1.51 mm., greatest thickness .12 mm. near apex, tapering to slender at base; III, .59 mm., slender; IV, .67 mm.; black, clothed with short pubescence. Pronotum: length .53 mm., width at base 1.06 mm.; calli defined in front by an impressed line. Hemelytra short, leaving the last four abdominal segments exposed. Clothed with short, sparsely set, yellowish hairs, and intermixed with prostrate, deciduous, silvery white scales.

Color black, embolium and more broadly at apex, basal half of corium to within radial vein, posterior slope of ridge on vertex except on middle, spot beneath eye. narrow ventral margin of propleura, tips of coxae and transverse mark near base, and margins of ostiolar peritreme, pale; middle and hind tibiae yellowish to brownish on dorsal aspect. Genital claspers distinctive, right clasper much as in *hirtus* Kngt., but with the lower distal angle produced as an incurved, blunt, acuminate hook.

9. Length 3.4 mm., width 1.9 mm. Head: width 1.14 mm., vertex .71 mm. Antennae: segment I, length .50 mm.; II, 1.45 mm.; III .59 mm.; IV,

.71 mm. Pronotum: length .55 mm., width at base 1.11 mm. Hemelytra, pubescence and coloration very similar to the male.

Holotype: & August 9, 1928, Van Trump Park, alt. 6000 ft., Mt. Rainier, Washington (Mrs. Vera G. Davidson); author's collection.

Allotype: same data as the type.

Paratypes: 29, taken with the types. & July 4, 38 19 July 20, 9 July 21, 1925, Banff, Alberta (Owen Bryant). Named in honor of Mrs. Vera G. Davidson who collected and presented the first specimens seen by the writer.

Labopella new genus.

Arolia erect and converging at apices as in subfamily Orthotylinae; the broad head and large eyes indicate a relationship with *Labops* Burm. of the tribe Labopini, but eyes broader at base and more oval as viewed from the side. Frons broad, tumid near tylus, basal edge of vertex elevated into a carina, forming an arcuate line in continuation with posterior margins of the eyes. Tylus strongly arcuate as viewed from the side. Rostrum moderately slender, scarcely attaining hind margins of middle coxae. Calli prominent, front margins coincident with anterior margin of pronotum, smooth; pronotal disk and propleura rugulose punctate, lateral margins straight, anterior angles in close contact with and obscured by the eyes, basal margin transverse on middle third. Scutellum triangular, moderately convex, finely pubescent but not distinctly punctate; mesoscutum moderately exposed. Hemelytra fully developed, texture translucent, embolar margins nearly straight, cuneus moderately deflexed, areoles and membrane normal. Legs moderately slender. Antennae slender, length of first segment not equal to diameter of an eye. Genotype: *Labopella claripennis* n. sp.

Labopella claripennis n. sp.

9. Length 3 mm., width 1.44 mm. Head: width 1.03 mm., vertex .46 mm.; basal carina set with bristles, vertex slightly sulcate on middle, finely pubescent; yellowish to orange red, frons, tylus, juga, and surrounding base of antennae, fuscous to black. Rostrum, length .92 mm., almost attaining hind margins of middle coxae, segment I reaching upon middle of xyphus, orange yellow, apex fuscous. Antennae: segment I, length .18 mm., not equal to diameter of an eye, reddish brown to dusky; II, broken, evidently slender. Pronotum: length .50 mm., width at base .98 mm.; calli strongly convex. smooth; disk evenly rugulose punctate. Scutellum moderately convex. smooth, pubescent; mesoscutum moderately exposed.

Dorsum clothed with rather fine fuscous pubescence. Thorax and legs yellowish to deep orange, legs and sternum more orange red, tibiae paler, tarsi fuscous apically; meta-pleura and venter greenish, genital segments becoming yellowish. Hemelytra uniformly pale translucent, membrane and veins pale, anal area dusky.

Holotype: Q July 12, 1917, Deming, New Mexico (H. H. Knight), taken on tent used as a trap light; author's collection.

Nicholia new genus.

Pseudarolia large, arising from basal angle of the claw, free and running parallel with claw to the apex; a pair of bristle-like arolia arising between bases

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of the claws. Refers to the tribe Oncotylini; allied to Lopus Hahn but differs in the free pseudarolia which in form are more like Macrotylus Fieb. Antennae thick as in Lopus but the head more vertical; eyes prominent, vertical height equal to one and one-half times length of first antennal segment; posterior surface of eyes more transverse than in Lopus. Rostrum moderately thick, just attaining hind margins of middle coxae. Pronotum with a slight flat collar on anterior edge as in Lopus; lateral margins rounded, slightly sulcate, basal margin broadly and evenly arcuate; calli large but only slightly convex. Scutellum strongly convex, mesoscutum moderately exposed, elevated somewhat above base of scutellum. Hemelytra rather long, cuneus elongate, surpassing tip of venter, membrane fully developed; embolar margins nearly straight or slightly sinuate. Tibiae with six rows of spines nearly as in Oncotylus guttulatus Uhler. Male genital structures distinctive; left clasper broadly U-shaped, somewhat thicker on basal half, a dorsal spine at base while the distal incurved portion is somewhat twisted and flattened, the apex lying above base of the small right clasper; chitinous tip of the aedaegus is directed upward and transversely to the left side, not closely supported by the left clasper. Genotype: Nicholia criogoni n. sp.

Nicholia eriogoni n. sp.

8. Length 4.3 mm., width 1.4 mm. Head: width .80 mm., vertex .36 mm.; frons evenly convex, smooth, tylus straight, forming a right angle with lower margin of bucculae: yellowish, base of vertex and base of tylus more or less fuscous. Rostrum, length 1.2 mm., just attaining hind margins of middle coxae, yellowish, apex black. Antennae: segment I, length .30 mm., thick, constricted at base; II, 1.21 mm., cylindrical, equal to segment I in thickness; III, 1.18 mm., slightly more slender than II; IV, .52 mm., slightly more slender than III; uniformly black. Pronotum: length .80 mm., width at base 1.24 mm.; disk rather evenly convex, lateral margins rounded, not at all angulate; pale to yellowish, disk becoming fuscous, calli brownish, propleura nearly white. Scutellum strongly convex, smooth, pale to yellowish, mesoscutum fuscous.

Clothed with rather prominent, simple, inclined, yellowish pubescence, moderately thick and evenly distributed on the dorsum. Hemelytra pale, disk of corium and of clavus becoming fuscous; cuneus yellow and tinged with reddish. Membrane uniformly fuscous, veins pale. Sternum and sides of venter fuscous. Legs pale yellowish, unspotted, basal half of coxae fuscous, tarsi black, tips of tibiae fuscous; tibiae with six rows of black spines, length of spines not equal to diameter of tibia. Genital structures distinctive, see generic description.

2. Length 4.6 mm., width 1.77 mm. Head: width .86 mm., vertex .46 mm. Antennae: segment I, length .30 mm.; II, 1.3 mm., slightly more slender on basal half; III, 1.18 mm.; IV, .52 mm.; black. Very similar to the male in general form, color and pubescence.

Holotype: & September 9, 1928, Tucson, Arizona (A. A. Nichol); author's collection.

Allotype: same data as type.

Paratypes: 23 19, taken with the types on Eriogonum sp. where the species was breeding. 23 19, Sept. 13, 1925, alt. 4500 ft., Oracle; 83 9 Sept. 9, 43 29 Sept. 4, 1925, Santa Rita Mts., Arizona (A. A. Nichol). 3 July 22,

1925, Tucson, Arizona (R. B. Streets). & Sept. 7, 1925, alt. 3500 ft., Rincon Mts., Arizona (A. A. Nichol).

The genus is named in honor of Mr. Andrew A. Nichol who has favored the writer with numerous species of Miridae collected in Arizona.

Pronotocrepis new genus.

Claws straight, curved only at tips, pseudarolia prominent, connate with the claw, narrow, slightly expanded and free at tip within the sharp curve near apex of the claw; a pair of bristle-like arolia arise between bases of claws. Claws and pseudarolia much as in *Orectoderes* but the peculiar explanate form of pronotum requires the formation of a new tribe which may be known as *Pronotocrepini*.

Pronotum with lateral margins explanate, straight, broadly and strongly reflexed, basal angles broadly rounded, basal margin sinuate on middle, anterior margin flat with no indication of a collar, fitting closely upon collum and behind the eyes; disk irregularly rugose, sparsely set with short black hairs which arise from shallow punctures; calli moderate, slightly convex, delimited by an impressed line except on outer angles; propleura broadly and deeply sulcate below the explanate lateral margins of disk, coxal cleft extending far up to near anterior angles; xyphus sulcate, lateral margins bluntly carinate. Scutellum moderate-ly convex, mesoscutum somewhat exposed.

Head longer than wide, triangularly produced, slightly inclined: tylus arcuate, scarcelv indented at base, merging with the broad evenly convex frons; vertex ecarinate, but with row of short black bristles where vertex merges with collum; eyes suboval, position oblique: gula and genae long, a short suture extending down from base of lora. Rostrum reaching upon third ventral segment, first segment extending to middle of xyphus. Antennae with second segment strongly clavate, first segment only moderately thick, its length not equal to width of vertex, third segment slender Embolar margins arcuate, cuneal fracture deep, cuncus strongly deflexed: membrane fully developed, large areole normal, smaller areole inconspicuous Legs moderately thick, tibiae with six rows of black spines which in length do not equal thickness of segment on hemelytra. Genitalia with chitinous tip of aedaegus prominent, turned transversely to the left side, resting within the bend of the rather slender left clasper. Genotype: *Pronotocrepis clavicornis* n. sp.

Pronotocrepis clavicornis n. sp.

3. Length 5.8 mm., width 3 mm. Head: width 1.18 mm., vertex .62 mm.; a few scattering black bristles on genae as well as frons. red. frons more yellowish, base of vertex pale, apical half of tylus becoming fuscous. Rostrum, length 2.9 mm., reaching upon third ventral segment, reddish brown, becoming fuscous on apical half. Antennae: segment I, length .50 mm., thickness .16 mm., more slender at base, set with short black hairs, reddish brown; II, 2.16 mm., strongly clavate, greatest thickness .21 mm., tapering to more slender at base (.105 mm. thick), dark brownish red, thickly set with short, recumbent, stiff pubescent hairs; III, slender, (broken). Pronotum: length I mm., width at base 2 mm.; form described under the genus. SEPT., 1929.

Dorsum dark fuscous brown, embolium and cuneus yellowish white, apex of cuneus infuscated; membrane and veins uniformly dark fuscous. Ventral surface and legs red, darker on venter, xyphus and propleura pale, the latter with a broad red ray across coxal cleft and extending to basal margin; tibiae more yellowish red, spines black, tarsi blackish. Genital orifice large, claspers and aedaegus situated within the distal half; tip of aedaegus large, turned transversely to the left side, resting within the arm of the small left clasper; both claspers much the same type as in *Plagiognathus* but right clasper relatively larger.

Holotype: & August 11, 1925, Ute Creek Ranch, Ft. Garland, Colorado (H. H. Knight); author's collection.