

wing similar to fore wing; costals forked only near the pterostigma one to three transversals basad of radial sector. Length ♀ 18 mm. expanse 37 mm. Phoenix, Arizona, September [Dr. Kunze].

Nearer to *B. minusculus* than to any other species, but easily separated from that by the lack of median lines on the pronotum, unmarked hind femora, etc.

SOME NEW SPECIES OF ATHYSANUS.

By E. D. BALL, Fort Collins, Colo.

↓ *Athysanus frigidus*, n. sp.

General appearance of *A. exitiosa* broader and shorter. As broad as *obsoletus*, with a rounder vertex. Length, ♀ 4-4.5mm, ♂ 3.5mm; width, ♀ 1.6mm, ♂ 1.2mm.

Vertex two and one half times wider than long, half longer on middle than against eye, the surface sloping and broadly rounding to the tumid front; ocelli distant from eyes; front wider than long, twice wider at apex than the parallel margined clypeus; pronotum half longer than vertex, lateral margins very short, humeral margins long, rounding; elytra slightly longer than the body in both sexes, narrowing behind, venation normal, apical cells rather short.

Color: Grayish or brownish white; a large oval spot on either side the middle of the anterior margin of the vertex, a large round one between the ocelli and the eyes, sometimes three small ones on the disc, forming a triangle, a pair of elongate marks on the pronotum back of the anterior margin and a pair of spots on the disc of the scutellum, black; elytra covered with a whitish "bloom," the nervures obscure; face light, a pair of large spots below those on the vertex, another pair, irregular in shape, near the apex of front. Light colored specimens may lack some of the spots on face, while darker ones—and the males as a rule have brown stripes—between the light veins of the elytra.

Genitalia: Female, ultimate ventral segment twice longer than penultimate, shallowly emarginate posteriorly, with a broad, slightly, roundly, bilobed, median tooth; pygofer twice longer than wide, equaling the ovipositor; male, ultimate ventral segment long, half longer than valve; valve broad, obtusely rounding, plates broad at base, regularly narrowing to the slightly divergent points, scarcely twice longer than the valve.

Described from numerous specimens collected at Fort Collins, Colo., and back into the lower foot-hills. Found only on *Artemisia frigida*, to which the white color and powdery "bloom" of both larvæ and adults well adapt it.

↓ *Athysanus arctostaphyli*, n. sp.

Shorter and stouter than *A. instabilis*, with shorter elytra,

deep chestnut brown; vertex yellow, with transverse fuscous lines. Length, ♀ 4mm, ♂ 3.5mm; width, ♀ 1.6mm, ♂ 1.2mm.

Vertex obtusely angulate, twice wider than long, not quite two-thirds as long against eye as on middle, anterior margin thick, rounding to the face; front a little longer than wide, but little wider at the apex than the clypeus; pronotum strongly arcuated anteriorly, the side margins very short; elytra short and stout, reaching the end of the abdomen, appendix minute, apical cells short, sometimes a second cross nervure between the sectors.

Color: Vertex tawny yellow, a line between the fulvous ocelli, broken forwards in the middle, a transverse band back of this, and a crescent near each basal angle connected by a curved line, dark brown; pronotum yellowish, irrorate with fuscous except on the anterior margin; elytral nervures pale, testaceous, heavily margined with fuscous; face yellow, sutures, arcs of the front and a spot on the clypeus fuscous; below brownish fuscous, legs annulate with fuscous.

Genitalia: Female, ultimate ventral segment little longer than penultimate, posterior margin shallowly excavated either side of the middle; pygofer over twice longer than wide, equalling the ovipositor. Male, valve broad, obtusely rounding; plates broad at base, triangular, three times longer than valve, outer margin thickly set with coarse hairs.

Described from numerous specimens taken in the mountains west of Fort Collins, Colo., between 7,000 and 9,000 feet altitude, and one specimen from Leadville, Col. (C. P. Gillette). The Fort Collins specimens were all taken, together with their larvæ, from bearberry (*Arctostaphylos uva-ursi*).

✓ *Athysanus alpinus*, n. sp.

General form and color of *obsoletus*, with the longer vertex of *extrusus*. Pale clouded yellow, with two transverse fuscous bands on the vertex. Length, ♀ 5.5–6mm, ♂ 4.5mm; width, ♀ 2mm, ♂ 1.5mm.

Vertex nearly as long as the pronotum, twice as long on the middle as against eye, three-fifths as long as the basal width, obtusely angulate before, the margin blunt and rounding; front, no longer than its basal width, twice longer than clypeus; pronotum two and one-half times wider than long; elytra shorter than the abdomen in the female, slightly exceeding it in the male.

Color: Dirty straw yellow, a fuscous, transverse band between the ocelli, angled forwards nearly to the apex of the vertex, a brownish fuscous band just behind and parallel with the first, forking at each end, the anterior forks running forward to the ocelli, the posterior ones back to the basal angles; pronotum with four

longitudinal stripes commencing at the anterior margin, the outer pair divergent, the inner pair meeting across the scutellum; elytral nervures light, apical cells finely margined in the male; face yellow, a spot above each antennd about seven arcs on the upper part of the front, fuscous.

Genitalia: Female, ultimate ventrigment half longer than the penultimate, outer angles rounded, outer median process tipped with two divergent teeth, either side which is a narrow angular emargination. Male, valve as broad as the ultimate segment and about half as long, plates triangular two-thirds the width of the valve and two and one half times as long, their margins straight or slightly concave.

Described from fifteen specimens taken from a damp mountain meadow on the Little Beaver river county, Colorado, at an elevation of 9,500 feet.

NOTES ON EASTERN *CYCHRUS*.

GEO. A. EHRMANN, Pottsville, Pa.

Cychnus nitidicollis Chev.

I have taken this species but in this locality, a single specimen; I have, however, taken several times at Charleroi, Washington county, and received from Fairmount, W. Va. All were found during the months of August and September.

C. nitidicollis, var. *bravoorti*, Lec.

Of this extremely rare form I found but one specimen, at Charleroi, November 12, 1896, since then have not happened across it.

C. stenostomus Web.

I only found three specimens under leaves at base of beech-nut tree, on September 4, 1896, since since.

C. stenostomus, var. *lecontei*, Dej.

The most abundant of the *Cychnus* in this section.

I have taken this form in every month of the year, sometimes during January imbedded in ice, holding these in my hand, the heat of which would soon resate them.

C. stenostomus, var. *bicarinatus*, Lec.

I found one specimen only of this rare form on September 9, 1897.

C. canadensis Chd.

Is recorded as being found at Pottsville. I find, however, after examining the collections in collection, that all specimens are from Prof. Jerome Schmitt, of Vincent's College, who has frequently taken it at Chestnutridge, Cambria county, Pa.

C. elevatus Fab.

This is also recorded as found in this section. The specimen upon which the record in Harn's list of Coleoptera of Western Pennsylvania, is based, the locality as Jean-