

FIGURE 6. Distribution of Ovatus Group species.

***Aglaothorax strobilion* Cole, Weissman, and Lightfoot, sp. nov.**

Fig. 6 (distribution), Fig. 12 (male and female habitus, calling song, male and female terminalia, karyotype), Plate 4 (male terminalia), Plate 7 (female subgenital plate), Plate 10 (male titillators), Plate 14 (male calling song)

**Common name.** Currant Shieldback.

**History of recognition.** Noted as intergrades between *armiger* and *segnis* with small body size (Rentz & Birchim 1968). We describe this population as a new species based on cytogenetic, morphological, and phylogenetic evidence, and also the remote, isolated geography.

**Type material.** HOLOTYPE MALE: USA, NV, Nye Co., Currant Summit, 38.82081, -115.33528, 1950 m, 19-VIII-2009, DB Weissman, DC Lightfoot, CAS S09-140, R09-211, D36, T09-7, SING0371, deposited at CAS, Entomology type #20383. PARATYPES (n=8) USA, NV, Nye Co., 9.9 M E Currant on Hwy. 6, 38.742013, -115.290742, 2042 m, 29-VIII-1986, d B Weissman, BI Weissman, d CF Rentz, CAS, 6♂; same data as holotype, CAS, 2♂.

**Measurements.** (mm, ♂n=5) Hind femur ♂14.86–17.58, pronotum total length ♂9.85–11.73, prozona length ♂4.26–5.13, metazona dorsal length ♂5.59–6.60, pronotum constriction width ♂3.37–3.75, metazona dorsal width ♂6.80–7.62, head width ♂5.06–5.62.

**Distribution.** Limited records are from the Currant Mountain Wilderness in the White Pine Range, Humboldt-Toiyabe National Forest, Nevada.

**Habitat.** Pinyon-juniper woodland at high elevations, from 1950–2050 m. Sings from high in junipers.

**Seasonal occurrence.** Limited records suggest late summer adult activity (19-VIII-2009, DB Weissman & DC Lightfoot, CAS to 29-VIII-1986, DB Weissman, BI Weissman, DCF Rentz, CAS). Adult activity late in the season corresponds with high elevation habitat.

**Stridulatory file.** (n=5) length 3.90–4.15 mm, 85–107 teeth, tooth density  $24.5 \pm 2.3$  (20.7–26.6) teeth/mm.

**Song.** (n=2) Pulse trains  $50 \pm 10$  ms in length are repeated at a rate of  $9.65 \pm 0.57$  s<sup>-1</sup>. Mean peak frequency is  $11.45 \pm 1.71$  kHz. Echemes group 2–4 (mean  $3 \pm 1$ ) pulse trains with 0.93–1.77 (mean  $1.35 \pm 0.60$ ) s of silence between echemes.

male HOLOTYPE USA. NV: Nye Co.  
S09-140, R09-211, D36, T09-7



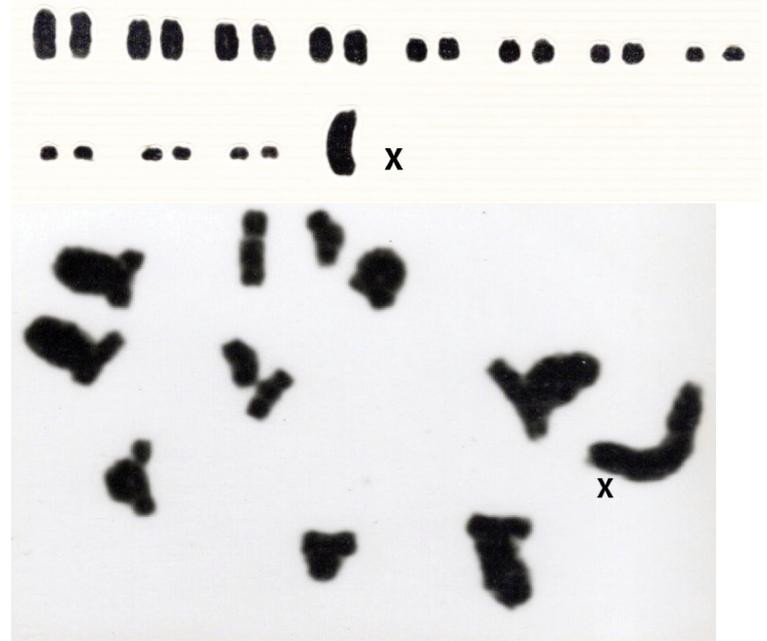
male PARATOPOTYPE USA. NV: Nye Co.  
S09-140, T09-8



calling song HOLOTYPE USA. NV: Nye Co. 21.0°C R09-211



karyotype PARATYPE USA. NV: Nye Co. S86-103, T86-101



male terminalia HOLOTYPE USA. NV: Nye Co.  
R V



titillator PARATYPE  
S86-103, T86-117



FIGURE 12. *A. strobilion* male habitus, calling song, terminalia, and karyotype.

**Karyotype.** (n=5)  $2n\♂=23$  (22t+Xt), S86-103, T86-101, paratype.

**Recognition.** Morphology, karyotype. Small body size for Ovatus Group, pronotum length 10–12 mm. Similar in habitus to *A. segnis* but smaller. Like *A. segnis* and unlike all other Ovata Group species, including *A. armiger*, paraproct process with apical, mesally directed tooth. Paraproct processes shorter in *A. strobilion*, about 2 times as long as wide, than *A. segnis* in which those processes are about 3 times as long as wide. Pronotal disk with abundant black longitudinal streaks unlike *A. armiger*, which has reduced black streaking on pronotal disk. Karyotype  $2n\♂=23$ , typical for Ovatus Group but unlike  $2n\♂=24$  *A. segnis*. Female unknown.

**Etymology.** Gr. *strobilion* a small pinecone. Refers to the small body size and pinyon-juniper habitat preference.

**Notes.** This population highlights the need for additional fieldwork in the mountains of the Nevada Basin and Range province, where endemics may yet be found on remote mountain island habitats. The impetus to delve further into this population came from its classification as an intergrade (Rentz & Birchim 1968). Karyotyping showed that this population (Fig. 12) did not have the same chromosome complement as *A. segnis* (Fig. 10). The concatenated phylogenetic hypothesis found this population more closely related to *A. armiger* (Fig. 4), with which it shares the typical  $2n\♂=23$  karyotype, than with the karyotypically divergent *A. segnis*. The type locality of *A. strobilion* is separated from that of *A. segnis* by about 150 km and from that of *A. armiger* by approximately 280 km (Fig. 6). A distinct constellation of characters, together with its geographic isolation, prompted specific distinction.

**Material examined.** See Type Material above.