

FIGURE 6. Distribution of Ovatus Group species.

Aglaothorax gurneyi (Rentz & Birchim, 1968)

Aglaothorax ovatus—Tinkham, 1944: 289 (Incorrect synonymy).

Neduba (*Aglaothorax*) *gurneyi*—Rentz & Birchim, 1968: 65.

Fig. 6 (distribution), Fig. 14 (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. Gurney's Shieldback.

History of recognition. Confused with *A. ovatus* (Tinkham 1944) before description. Described in *Neduba* (*Aglaothorax*) (Rentz & Birchim 1968). Returned to *Aglaothorax* (Rentz & Colless 1990) where it is currently classified (Cigliano *et al.* 2025). See Cigliano *et al.* (2025) for complete synonymy.

Type material. The holotype male deposited in ANSP is from Lake Arrowhead in the San Bernardino Mountains, San Bernardino County, California. Images of the type are available at OSFO (Cigliano *et al.* 2025). PARATYPES EXAMINED: (n=5), USA, CA, San Bernardino Co., Barton Flats, 34.172509, -116.863083, 1937 m, 21-VIII-1936, no collector, CAS, 1♀; Lake Arrowhead, 34.248340, -117.189208, 22-VIII-1958, P. Paige, CAS, 1♂; same data except IX-1958, P. Paige, CAS, 1♂; same data except VII-1958, no collector, CAS, 1♂; San Bernardino Mountains, 4 mi. W of Running Springs, 34.207766, -117.179377, 2195 m, 12-X-1952, ER Tinkham, CAS, 1♂; TOPOTYPES EXAMINED: (n=11) USA, CA, San Bernardino Co., San Bernardino Mountains, 0.8 mi. E of Lake Arrowhead City on Hwy 173, 34.248339, -117.175167, 1520 m, 20-VII-1992, d B Weissman, CAS, 2♂, 2♀; SR173 near Old Mill Road, Cedar Glen, 34.2562, -117.1683, 1900 m, 12-VII-2002, JA Cole, AMNH, 1♂, 1♀; same data except LACM, 2♂, 3♀.

Measurements. (mm, ♂n=6, ♀n=8) Hind femur ♂18.04–19.80, ♀19.84–22.60, pronotum total length ♂12.15–13.40, ♀11.35–13.10, prozona length ♂4.77–5.48, ♀5.25–7.54, metazona dorsal length ♂6.82–8.18, ♀5.05–7.50, pronotum constriction width ♂3.35–3.75, ♀2.94–4.77, metazona dorsal width ♂8.05–9.20, ♀7.21–8.80, head width ♂5.40–5.90, ♀5.25–6.74, ovipositor length ♀16.75–19.45.

Distribution. San Bernardino and San Gabriel Mountains of the Transverse Ranges of Southern California.

Habitat. Coniferous forest understory. Taken from *Ceanothus* spp., Whorl-leaf Penstemon (*Keckiella* sp.), peavines (*Lathyrus* sp.), *Pinus* spp., and California Black Oak (*Quercus kelloggii* Newberry). Hides in leaf litter at the base of vegetation during the day. Several males (S89-56) collected singing at night from piles of brown twigs on the ground. Males also heard in the canopy.

Seasonal occurrence. Summer (7-VII-2004, JA Cole, LACM) through Fall (12-X-1952, ER Tinkham, CAS), adults presumably active until first freezing weather. Nymphs present into summer (1-VII, no collector, CAS).

Stridulatory file. (n=6) length 4.75–5.30 mm, 93–105 teeth, tooth density 19.3±0.8 (18.2–20.2) teeth/mm.

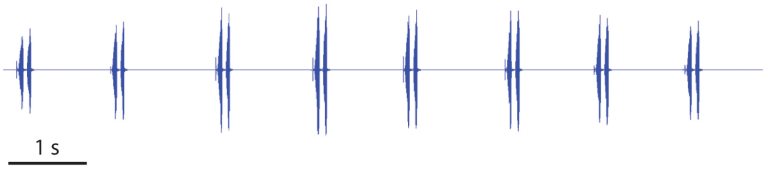
Song. (n=28) Frequently repeated single pulse trains or echemes that consist of no more than two pulse trains. Pulse trains last 70±20 s and repeat at a rate of 8.20±0.94 s⁻¹. Mean peak frequency is 12.41±3.08 kHz, with high frequency recordings showing peak frequencies as high as 18.93 kHz. The silent interval between echemes lasts 0.41–0.94 (mean 0.70±0.11) s.

Karyotype. (n=5) 2n♂=24 (22t+Xty t), T89-38 (S89-56).

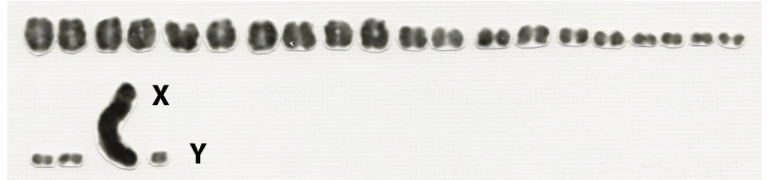
male USA. CA: San Bernardino Co. S89-56



calling song USA. CA: San Bernardino Co. 24.9°C JCR130723_00



karyotype TOPOTYPE USA. CA: San Bernardino Co. S89-56, T89-38



male terminalia USA. CA: San Bernardino Co. S89-56
R V

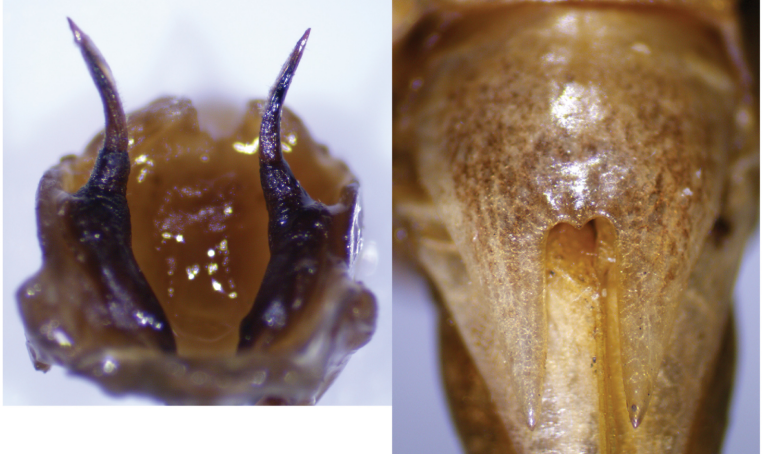


female TOPOTYPE USA. CA: San Bernardino Co. S92-77



titillators PARATYPE
USA. CA: San Bernardino Co.

female subgenital plate USA. CA:
San Bernardino Co. S92-77



male USA. CA: Los Angeles Co. JAC000002651



FIGURE 14. *A. gurneyi* male and female habitus, calling song, male and female terminalia, and karyotype. Idiogram shows karyotype $2n\♂=24$. Sex chromosomes X and y are marked.

Recognition. Morphology, song, geography, habitat, karyotype. Body color wood-brown instead of the green, yellow, or tan of other *Ovatus* Group species, and without a reddish middorsal abdominal stripe. Tegmina brown instead of white as in other *Ovatus* Group species. Calling song with maximum of 2 pulse trains/echeme. Geography and habitat unique among *Ovatus* Group species: high elevation coniferous woodland in San Gabriel and San Bernardino Mountains as opposed to desert shrubland, pinyon-juniper, or Joshua tree woodland. Karyotype $2n\♂=24$ shared only with *A. segnis* among the *Ovatus* Group species.

Notes. This species is sister to all other members of the *Ovatus* Group (Figs. 2–4; Cole 2016) suggesting that this is a relict lineage that has been isolated in the sky islands of the San Bernardino and San Gabriel Mountains for some time. Populations are sympatric with *A. hulodomus* in the San Bernardino Mountains where chaparral meets mixed woodland. This is the only *Ovatus* Group species that inhabits mesic mixed woodlands. Males call from a variety of heights, most commonly on the forest floor but also in low bushes and high in conifers and oaks. Singing males may be difficult to approach surrounded by dry oak and pine leaf litter, the disturbance of which renders the singer silent for many minutes.

Material examined. (n=51) **Los Angeles Co.**, Mescal Picnic Area, Angeles National Forest, 5 miles northwest of Wrightwood on County Road N4 (Big Pines Highway), 34.3901, -117.7206, 1868 m, 16-VII-2002, JA Cole, 1♂, 1♀ JAC; same data except 7-VII-2004, 2♂, LACM; same data except 8-IX-2008, 4♂, LACM; same data except 1♂ JAC; **San Bernardino Co.**, 0.7 mi. W of Skyforest on Hwy. 18, 34.235284, -117.191491, 1707 m, 17-VIII-1982, d B Weissman, CAS, 2♂; Arrowbear Lake, 34.21106, -117.08507, 1867 m, 19-20-VII-2013, JA Cole, JF Eguizabal, 1♂ song record; Barton Flats, 34.172509, -116.863083, 1937 m, 1-VII-1936, no collector, CAS, 1♀; Camp O-ongo, near Running Springs, 34.207786, -117.109205, 25-30-VIII-1968, CL Hogue, LACM, 2♂; same data except 28-31-VIII-1967, CL Hogue, LACM, 2♂; same data except 16-22-VIII-1980, CL & JN Hogue, LACM, 1♂, 1♀; same data except 24-25-VIII-1981, CL & JN Hogue, LACM, 1♂; same data except 1-IX-1970, CL Hogue, LACM, 1♂; same data except 21-27-VIII-1982, JN Hogue, CSUN, 1♂; same data except 23-VIII-1979, JN Hogue, CSUN, 1♂; same data except 25-VIII-1975, JN Hogue, CSUN, 2♂, 1♀; same data except 27-VIII-1975, JN Hogue, CSUN, 1♂; same data except 29-VIII-1973, JN Hogue, CSUN, 1♂; Crestline, 34.241951, -117.285599, 1439 m, 2-IX-1933, W Brandler, LACM, 1♀; Hanna Flat Campground, San Bernardino National Forest, 34.28778, -116.97556, 2152 m, 10-11-VIII-2022, JA Cole, C Wong, LACM, 1♂; same data except JAC, 2♂; same data except 10-VIII-2023, JA Cole, C Wong, JAC, 1♂; Hanna Flat, San Bernardino National Forest, 34.28945, -116.97948, 4-IX-1953, A Menke, LACM, 1♂; Running Springs, 34.21518, -117.12670 1913 m, 19-20-VII-2013, JA Cole, JF Ramirez, LACM, 5♂, 2♀, 1 pair in copula; San Bernardino Mountains, 2.5 mi. NW of Running Springs on Hwy. 18, 34.233429, -117.140217, 1829 m, 17-VIII-1982, d B Weissman, CAS, 5♂; San Bernardino Mountains, State Highway 18, 0.7 mi. W & E of Skyforest, 34.235284, -117.191491, 1750 m, 26-VII-1989, DB & DW Weissman, CAS, 5♂; San Bernardino, 34.088624, -117.280598, 9-VIII-1978, ER Tinkham, CAS, 1♂; Tiron, San Bernardino Mountains, 34.125566, -116.876415, 1829 m, 1-XI-1982, ER Tinkham, CAS, 1♂;

ERRONEOUS LABELS: (n=2) **USA, CA, San Bernardino Co.**, Blythe, 33.610302, -114.596346, 81 m, 1-VIII-1933, LJ Muchmore, LACM, 1♂, 1♀.