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4-30-1984

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### Recommended Citation

Atwood, N. Duane; Goodrich, Sherel; and Welsh, Stanley L. (1984) "New *Astragalus* (Leguminosae) from the Goose Creek Drainage, Utah–Nevada," *Great Basin Naturalist*. Vol. 44 : No. 2 , Article 6.

Available at: <https://scholarsarchive.byu.edu/gbn/vol44/iss2/6>

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## NEW ASTRAGALUS (LEGUMINOSAE) FROM THE GOOSE CREEK DRAINAGE, UTAH - NEVADA

N. Duane Atwood<sup>1</sup>, Sherel Goodrich<sup>2</sup>, and Stanley L. Welsh<sup>1</sup>

ABSTRACT.— A new species, *Astragalus anserinus* Atwood, Goodrich, & Welsh, is described from specimens taken from tuffaceous outcrops in the Goose Creek drainage of Box Elder County, Utah and Elko County Nevada.

A distinctive small-flowered species of *Astragalus* (Fig. 1.) was taken from tuffaceous outcrops in the Goose Creek drainage of Box Elder County, Utah, and adjacent Elko County, Nevada. Affinities of this handsome dwarf and matted species apparently lie with the section *Argophylli*. Within that section, because of the tiny flowers, they would appear to be allied to *A. subvestitus* Barneby, a species of moderate elevations in Tulare and Kern counties, California. The plants are villous-tomentose and shortly caulescent. The valves of the thinly villous pods are apparent through the vestiture. In shape they are nearly identical with pods of varieties within *A. purshii*, being dorsiventrally compressed and curved in such a manner that the beak lies almost parallel with the base of the pod. The pods are strictly unilocular, with no apparent septum within the locules of those examined.

The tiny flowers are unique in the section, being 9–11.2 mm long, which is smaller than those reported for *A. subvestitus*.

*Astragalus anserinus* Atwood, Goodrich, & Welsh, sp. nov. Affinis dubius sed similis *Astragalo subvestito* Barneby in floribus parvis et pilis sparsis sed in floribus parvioribus et semina paucioribus differt.

Dwarf, tufted or matted, shortly caulescent, perennial herbs from a slender taproot; stems 3–11 cm long, decumbent-spreading; herbage villous-tomentose; stipules all free; leaves 1–4 cm long; leaflets 5–15, 3.2–6.5 mm long, obovate; peduncles 1.1–2.4 cm

long; racemes with 3–7 flowers, the axis 1–5 mm long, little if at all elongating in fruit; bracteoles lacking; bracts ca 2 mm long, lance-subulate; pedicels 0.6–1.2 mm long; calyx tube 3.6–4.8 mm long, the teeth 1.1–1.8 mm long, subulate; flowers 9–11.2 mm long, pink-purple; pods sessile, 9–12 mm long, 5–7 mm wide, deciduous from within the calyx; dorsiventrally compressed, falcately curved, conspicuously trigonous-beaked, thinly villos; ovules 16–20; seeds 1.2 mm long.

TYPE: USA. Utah. Box Elder Co., T14N, R19W, S15 (SE1/4), 22 km NW of Lynn, Goose Creek drainage, 6.5 km S of Utah-Idaho line, white tuffaceous sand, nearly barren slope along a wash, 23 June 1982, D. Atwood and S. Goodrich 8989 (Holotype BRY; isotypes NY, POM, US, RM, UTC).

ADDITIONAL SPECIMENS: Utah. Box Elder Co., 22.5 km NW of Lynn, 23 June 1982, D. Atwood & S. Goodrich 8990 (BRY, UT,UTC,NY); ca 25.5 km NW of Lynn, Goose Creek, ca 0.5 km due E of Utah-Nevada line, 23 June 1982, D. Atwood & S. Goodrich 9000 (BRY,NY,US); Utah-Nevada line at the Hardister VABM, 7 km S of Idaho line, 23 June 1982, D. Atwood & S. Goodrich 9004 (BRY); Nevada. Elko Co., T47N, R70E, S29 (SW1/4), 6 km S of Idaho on the Utah-Nevada line, D. Atwood & S. Goodrich 9002 (BRY,ID,M0,NY,RENO,RM,US).

### LITERATURE CITED

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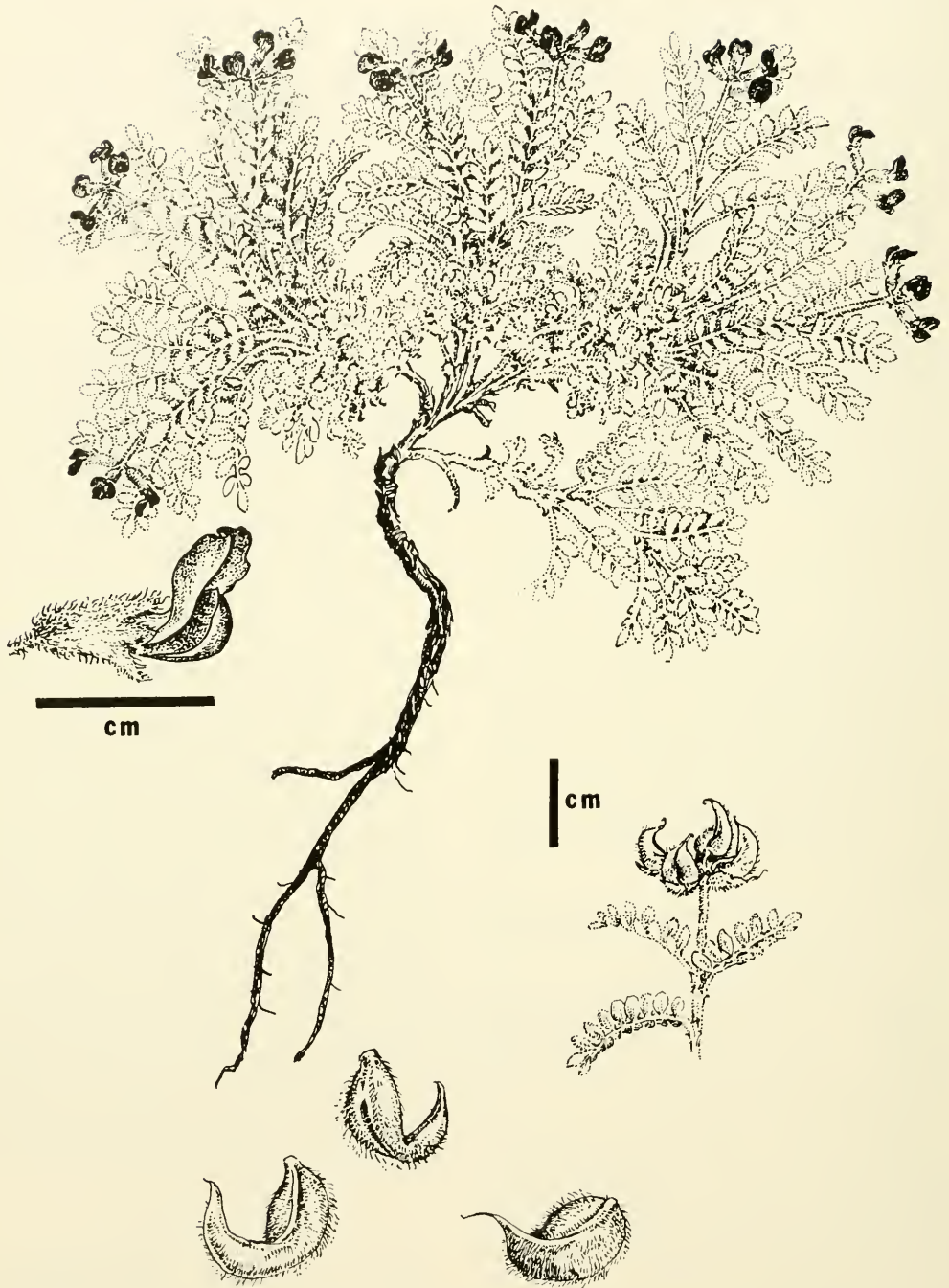


Fig. 1. Habit and details of *Astragalus anserinus* Atwood, Goodrich, and Welsh (Drawing by Kay Thorne).