## Vascular Plants of Williamson County <br> Amsonia ciliata T. Walter - FRINGE BLUESTAR, THREADLEAF AMSONIA [Apocynaceae]

Amsonia ciliata T. Walter (if recognized, var. texana), FRINGE BLUESTAR, THREADLEAF AMSONIA. Perennial herb, creeping woody rootstock, not rosetted, 1 -several-stemmed at base from ground-level short crown (caudex) at top of root, with several axillary shoots from successive nodes in canopy below inflorescent, ascending, in range to 35 cm long; shoots with only cauline leaves, foliage feathery, glabrous; latex milky, drying translucent and gummy. Stems: cylindric, to 3 mm diameter (green and blushed reddish) or 4 mm diameter with periderm at ground level, internodes on lower shoot to 13 mm long and in canopy having dense foliage $1-3 \mathrm{~mm}$ long, having projecting leaf buttresses, internodes appearing smooth but with inconspicuous blisters = hair bases with or without a minute hair. Leaves: helically alternate, simple and subsessile, stipules obscure; stipules = minute bumps at base of petiole associated with minute, reddish structures appearing in axil; petiole flat on upper side, to $1.5 \times 1.5 \mathrm{~mm}$, greenish; blades linear and flat, (15-)30-40 $\times$ 2.5-4.3 mm along the lower stem (elliptic-linear) and 40-57 $\times 1-1.5 \mathrm{~mm}$ in canopy, entire, acute at tip, pinnately veined (lower leaves) with midrib raised on lower surface and appearing 1 -veined with midrib raised on lower surface (canopy leaves), lower surface with abundant stomates. Inflorescence: panicle, terminal, having several ascending branchlets, each branchlet racemelike with a 1-4-flowered cyme, in flower dome-shaped with showy flowers, bracteate, essentially glabrous; peduncle stemlike, erect, to 25 mm long, aging glossy dark green or with tannish periderm; bract subtending branchlet acuminate, at the lowest node to 3 mm long decreasing upward, the lowest bract sparsely ciliate on margins and aging reddish; bractlet subtending pedicel, triangular, $<1.5 \mathrm{~mm}$ long; pedicel to 6 mm long, at top with enlarged receptacle. Flower: bisexual, radial, $16-20 \mathrm{~mm}$ across (star-shaped corolla), faintly scented (daytime) probably strongly scented (nighttime); calyx 5-lobed, green, glabrous; tube cuplike, ca. 0.8 mm longl lobes subequal, linear-triangular, $\pm 1.8-2 \times 0.7 \mathrm{~mm}$ with 1 lobe shorter, green with narrow membranous margins and sparsely ciliate on margins, persistent; corolla 5-lobed; tube somewhat hourglass like expanding around ovaries at base and gradually flaring at top, $3.5-4.5 \times 1 \mathrm{~mm}$, white at base and streaked light violet to light violet; throat bell-shaped flared at orifice, $3.5 \times 2.5 \mathrm{~mm}$, greenish, with 5 ribs to sinuses, inner surface densely villous in bell around anthers and some in upper tube, exposed throat white and shortvillous, orifice closed by dense hairs; lobes widely spreading, obtuse-ovate, alternately slightly overlapped at base, $7.5-9 \times 3-4 \mathrm{~mm}$, pale light violet and pale violet and white next to throat or white blushed pale violet, margins papillate; stamens 5 , attached at top of corolla tube, included; filaments ascending, $\pm 1 \mathrm{~mm}$ long, white; anthers dorsifixed, dithecal, $1.3-1.5 \mathrm{~mm}$ long, reddish orange, longitudinally and inwardly dehiscent; pollen colorless; pistils 2, fused at lower style, scepterlike, 5 mm long, included below dense hairs of corolla throat; ovaries hemiovoid, ca. $1 \times 0.8 \times 0.5 \mathrm{~mm}$, green aging reddish, with flat sides facing, each ovary with ca. 15 green ovules; styles 2 at base fused above with a pair of opposite furrows, erect axis $4-4.4 \times 0.4 \mathrm{~mm}$ and greenish aging light green (after pollination), head of pistil, just below level of anthers, ca. $1 \times 1 \mathrm{~mm}$, green, bumpy with a short overhanging margin 0.3 mm long at base concealing the uppermost axis, top of head with 4 stigmatic lobes indented in center, appearing viscid. Fruits follicles, (1-)2,
ascending, each to 15 -seeded, cylindric $\pm$ straight to slightly curved, in range 55-115 $\times 3$ mm , light green drying tan, not constricted between seed, acute at tip flared open from 30 mm from tip, when 2 fused $<2.5 \mathrm{~mm}$ on inner side at base; with triangular appressed to receptacle at base of fruit. Seed: shaken from follicle tip, trapezoidal cylindric angled on ends, (5-)6.5-7.5(-9.5) $\times(1.4-) 1.8-2.2 \mathrm{~mm}$, dark orangish red, in interrupted corky ridges and bumps.
A. C. Gibson

