Vascular Plants of Williamson County

Clematis pitcheri var. *pitcheri* – PITCHER LEATHERFLOWER, BELLFLOWER CLEMATIS [Ranunculaceae]

Clematis pitcheri Torrey & A. Gray var. pitcheri, PITCHER LEATHERFLOWER, BELLFLOWER CLEMATIS. Perennial climber woody at base, dieback and deciduous, twining and often having a tendril-like tip on leaf, clammering over neighboring shrubs; shoots with only cauline, pinnately compound leaves, leaves widely spaced and variously oriented, "leathery," initially short-villous aging glabrescent with some soft hairs, not glaucous; precociously forming a pair of axillary shoot at each node on vigorous new shoot. **Stems:** somewhat 6-sided and inconspicuously 10-ridged, on new growth to 3.5 mm diameter but widely flaring where leaves fused across node, internodes to 200 mm long, tough, green often tinged purple-red on exposed side. Leaves: opposite decussate, odd-1-pinnately compound with 3-5 pairs of lateral leaflets, the leaflets 3-lobed, mitten-shaped, and unlobed, and the terminal leaflet (axis) either a diminutive blade or modified as a tendril to 12 mm long (often hooked), petiolate, without stipules; petiole channeled, to 45 mm long, widely flared at base; rachis with a pair of ridges on upper side bearing leaflets, tough, appearing segmented with pairs of leaflets widely spaced to 45 mm apart along rachis, often sparsely short-hairy; petiolule not much enlarged inconspicuously channeled, to 25 mm long, sparsely soft-hairy; blades of leaflets \pm broadly ovate and mostly unequally palmately 3-lobed or mitten-shaped to unlobed or with a pair of teeth or sublobes above midblade, in range $8-75 \times 4-66$ mm, of the lowest lateral leaflets usually the largest and decreasing upward, subcordate to rounded or broadly tapered at base, sinuses typically not to base, lobes and unlobed blade entire to subentire on thickened margins with or without fine hairs, mostly rounded to shallow-notched at tip, pinnately veined with 3 veined at base but forming an elaborate vein network slightly sunken on upper surface and principal and minor veins raised on lower surface, upper surface glabrescent or appearing glabrous, lower surface with some short-villous hairs. **Inflorescence:** cyme, terminal on axillary shoot, in range 1(-3)-flowered, having 2 cymes per node but 1 cyme developing earlier, bracteate; stem axis of flowering shoot ascending, cylindric, to 25 mm long, tough; bracts subtending peduncle (pedicel) 2 and opposite (2 nodes opposite decussate), 1-foliolate, leaflike and mostly unlobed, petiolate and fused across node, the petiole channeled, the blade ovate and to 45 mm long; pedicel enlarged at base and ridged especially above midpoint, to 220 × 2.5 mm, tough, ridges purple-red from midpoint and pedicel purple-red and generally curved downward or hooked approaching flower, puberulent at base, not glaucous. Flower: bisexual, radial, nodding, 16–22 mm across, bud conic depressed at base, with many broad, low ribs; receptacle with pistils (torus) hemispheric, $3 \times 5 - 5.5$ mm slightly increasing in fruit, green, pitted having rims with abundant short hairs surrounding bases of filaments and ovaries; nectaries absent; sepals 4, calyx appearing urn-shaped, free but adhering by short hairs on adjacent touching margins, gaping at anthesis forming recurved tip later separating downward, \pm acuminate-lanceolate, in range $29-38 \times 10-11$ mm (straightened) but opposite pairs of slightly different lengths (different tip lengths), violet or deep violet to violet-blue or blue, ca. 2 mm thick and strongly ridged including a midridge (7-9 ridges per sepal), of spongy tissue, outer surface with evenly spaced shortvillous hairs, inner surface glabrous and white below midpoint and deep violet with domed cells above midpoint, abscising in developing fruit; petals absent; stamens 70–85 in 4

series, helically alternate, free, included, lacking staminodes; filaments decumbent and erect above lower portion, 8–12.5 mm long, pale yellow to tannish, pilose above midpoint; anthers basifixed, dithecal, 6–6.8 mm long + fingerlike extension of connective 0.8–1.2 mm long, white with tannish connective, pilose on sacs and along connective, longitudinally dehiscent; pollen white; **pistils** ca. 45, helically alternate on elevated torus, included, 16–18 mm long, in a central, erect cluster of touching, parallel styles ending at the same level, densely fine-hairy to midstyle; ovaries superior, lanceoloid compressed side-to-side, ca. 3 × 1.1 mm, greenish, villous, 1-chambered with 1 greenish ovule; style indistinct from ovary, whitish, stigmatic on inner side from midpoint, initially long-strigose with dense, appressed, straight hairs reaching to stigma. Fruits: achenes, many, helically alternate on hemispheroid torus, 1-seeded, 20–35 mm long but not always intact; body acuminate-ovoid to acuminate-rounded compressed side-to-side with depressed centers, mostly $7-10 \times 12-15$ mm and indistinct from beak (persistent style), laterally attached, not winged, beak mostly crooked or curved and often broken below tip, body and beak with appressed hairs (sometimes concealed by mold growing on surfaces). A. C. Gibson