Vascular Plants of Williamson County

Cucumis sativus – CUCUMBER [Cucurbitaceae]

Cucumis sativus L., CUCUMBER. Annual, taprooted, tendril-bearing, several-stemmed at base, prostrate and climbing on herbs, with unbranched shoots radiating from root crown; monoecious; shoots robust with large, yellow-green, spreading cauline leaves oriented upward, scabrous, puberulent and hirsute, not foul-smelling; tendril 1 per node, arising to 1 side of petiole base, unbranched, to 80 mm long, coiled initially and eventually coiling around support. **Stems:** 5-ridged, to 5 mm diameter, tough, with course hairs along ridges. **Leaves:** helically alternate, simple and unlobed or weakly lobed, long-petiolate, without stipules; petiole narrowly channeled and ridged, < 25–140 mm long, tough, scabrous, hirsute with enlarged bases; blade \pm circular in outline to broadly low 5-lobed, $< 45-170 \times$ < 45–170 mm, cordate at base, lobes obtuse to rounded and at tip, \pm dentate on margins, pinnately veined with 5 principal veins at base slightly sunken on upper surface and conspicuously raised on lower surface, puberulent and short-hirsute especially along veins. **Inflorescence:** flowers solitary (pistillate) and several-flowered raceme (staminate), axillary and ascending, unisexual, lacking bracts, short-hirsute to hirsute with larger hairs having bulbous bases; pedicel at anthesis ca. 1.5 mm long, of staminate flowers abscising at base, of pistillate flower increasing in fruit. **Staminate flower:** radial, 12–14 mm across; hypanthium bell-shaped, ca. 4×2.5 mm, green, outer surface densely hirsute, inner surface glabrate; sepals 5, arising from hypanthium, free, lanceolate, $2.5-3 \times 0.5$ mm, green, short-hirsute to hirsute; corolla 5-lobed, arising from hypanthium, bright yellow, conspicuously veined with ca. 5 raised veins per lobe, lower (outer) surface hirsute and glandular-hairy, inner surface glandular-hairy; tube 1.2–1.4 mm long; lobes spreading, ± ovate, ca. 6×2 mm; **stamens** 3, at top of hypanthium; filaments < 1.5 mm long, greenish; anthers basifixed, dithecal, sacs 1.6–1.9 mm long + a flame-shaped, stigmalike terminal process (together 3 mm long), flame irregularly divided and lobed, sacs short-hairy, longitudinally dehiscent; pollen orange-yellow; pistil absent. Pistillate flower: radial, 16–19 mm across; hypanthium bell-shaped, 3.5–3.8 × 4 mm, with 0.5 mm cylinder on top of ovary, green, mostly short-hirsute with shaggy hairs having scattered longer hairs with broad bases; sepals 5, arising from hypanthium, barely united at base, at anthesis widespreading, narrowly lanceolate, 3.5–4 mm long, green, lower (outer) surface with raised midvein and hirsute; corolla 5-lobed, arising from hypanthium, bright yellow, conspicuously veined with 5 raised veins per lobe, lower (outer) surface hirsute and glandular-hairy, inner surface glandular-hairy; tube 1–1.3 mm long; lobes spreading, \pm obovate, 8 × 3.6–4.1 mm; **stamens** 3, aborted, at midpoint of hypanthium, flanged triangular, ca. 0.8 mm wide; anthers absent; **nectary** dishlike, shallowly 5-lobed, encircling style base, ± 1.8 mm across, pale light green, glabrous; **pistil** 1; ovary conspicuously inferior (even in small bud), ellipsoid, at anthesis 8–9 × 5 mm, yellow-green, densely shorthirsute, 3-chambered with many ovules attached to outer wall; style included within hypanthium, to 4 mm long, stalk wedge-shaped, $2.2-2.5 \times 0.9$ mm, greenish, narrower at base, 3-branched, the branches reflexed and each 2-lobed (stigmas), saddlebaglike, ca. 1.5 \times 1.5 \times 0.5 mm; stigmas 6, not twisted, green, coarsely bumpy (not papillate). **Fruit:** mature fruits not observed in range, pepo (= indehiscent berry with tougher outer layer), many-seeded, ellipsoid-cylindric.

A. C. Gibson