Vascular Plants of Williamson County Cucumis melo var. melo – CANTALOUPE [Cucurbitaceae]

Cucumis melo L. var. melo, CANTALOUPE. Annual, tendrillar, taprooted, not rosetted, several-stemmed just above base, with radiating, long, trailing branches 100+ cm long having few or no lateral branches; monoecious; shoots with only cauline leaves, scabrous and somewhat prickly with a range of nonglandular hirsute (hispid) and short-hirsute hairs having enlarged bases (pustulate) and some parts having inconspicuous glandular hairs, the longest hairs with broad, multicellular bases < 1 mm long. foliage odorous when crushed; tendril 1 per node at base of petiole formed at successive nodes, slender and unbranched soon becoming flat-coiled, 100–150+ mm long (straightened), light green, often with 4–6 coils, weakly lobed with scattered short-hirsute hairs, upper portion glabrous flattish on 1 side; adventitious roots sometimes forming at nodes on training shoots. Stems: somewhat 4-sided with rounded angles and shallowly concave faces, to 7 mm diameter, flexible, internodes long, to 80 mm long, green aging paler, with coarse, stiff, multicellular hairs (hirsute-hispid) on each with minute glandular hairs especially on faces, short-hirsute at nodes; internodes hollow. Leaves: helically alternate, in range simple and unlobed (weakly lobed), petiolate, without stipules; petiole channeled from blade nearly to base, low ridged, to 70 mm long, the stiff hairs radiating along ridges and mostly absent on narrower strips between ridges; blade roundish in outline to broadly ovate, $40-80 \times 40-80$ mm (larger in cultivated specimens), upper surface green to dark green, cordate at base, subentire to low-crenate and wavy on margins, palmately veined at base with veins sunken on upper surface and vein network strongly raised on lower surface, scabrous, upper surface evenly short-hirsute mixed with fewer long hairs to 0.8 mm long, minute glandular hairs along minor veins, lower surface conspicuously scabrous along veins. Inflorescence: cyme of unisexual flowers, (1-)2-7-flowered, axillary, the first flower functionally staminate, only 1 flower open per cyme, lacking bracts, hirsute; pedicel at anthesis cylindric, 2-5.5 mm long, pale light yellow-green, \pm densely pubescent. Staminate **flower:** radial, in range 12–15 mm across, to 16 mm long; hypanthium funnel-shaped, \pm $2.5-3 \times 3$ mm, greenish, hirsute; calyx 5-lobed, arising as short cylinder from hypanthium fused as a ring; tube ca. 1 mm long; lobes arching to spreading, unequal, 2–4.5 mm long, pale green, hirsute; corolla 5-lobed, 10–12 mm long, conspicuously 25-ribbed with ribs raised on lower (outer) surface and sunken on upper surface, yellow, on outer (lower surface) short-hairy along ribs; tube 3-4 mm long; lobes obovate often subequal, to 8×6 mm, with 5 conspicuous veins at base and at least midvein pinnately branched, upper surface short-hairy and with sparse longer hairs, lower surface short-hairy and with longer hirsute hairs along ribs; stamens 5, fused to top of hypanthium, subsessile on 3 short filaments; anthers fused laterally into ring, ca. 3.5 mm long, pale light yellow, puberulent, longitudinally and inwardly dehiscent; pollen light yellow; pistil 1, sterile; ovary inferior, cup-shaped hemispheroid appearing truncate at top, $1.5-2 \times 2$ mm, green, apparently lacking ovules; styles fused to inner surface of stamens, stigmatic lobes 5, short stalked from stamens, ovoid, $1-1.5 \times 0.7$ mm, yellow. **Pistillate flower:** radial, 15–23 mm across; hypanthium hemispheroid to short bell-shaped, ca. 4×5.5 mm long, light green, hirsute; calyx 5-lobed, arising as short cylinder from hypanthium fused as a ring, light green, hirsute and short-hirsute; tube ca. 1 mm long; lobes arching to ascending, subequal, often somewhat cylindric blunt at tip, 3–5 mm long; corolla 5-lobed, 14–16 mm long,

commonly conspicuously 25-ribbed with ribs raised on lower (outer) surface and sunken on upper surface, yellow, on outer (lower surface) short-hairy along ribs; tube ± 4 mm long; lobes obovate often subequal, to 10×8 mm, with 5 conspicuous veins at base and at least midvein pinnately branched, upper surface short-hairy, lower surface short-hairy and with longer hirsute hairs along ribs, some lobes with short green extension of midvein; stamens 3 or absent, staminodes, yellow-orange; filaments flattened front-to-back, 1-1.5 mm long; anthers flame-shaped, 2-2.5+ mm long, opaque, papillate; pollen absent; nectary disc on top of pistil surrounding style, saucer-like, ca. 4 mm across and sides ca. 1.3 mm long, greenish; **pistil** 1; ovary inferior, ellipsoid, $10-12 \times 5-6$ mm, pale green, densely pubescent, 3-chambered, each long, slender chamber with many ovules attached to outer side (parietal placentation); style 1, ca. 5 mm long, lower portion thick-cylindric $2 \times$ 1.5 mm, greenish, stigmatic lobes erect, fleshy, triangular in outline, $3-5 \times 3$ mm, light green to orangish or blushed reddish, surface papillate and blunt at tips. Fruit: pepo (berry), in range not observed, many-seeded, spheroid to subspheroid, 200–240 mm long; of immature fruit surface (exocarp) green with tan blotches becoming raised patches of cork cells; pulp (mesocarp) thick, fleshy, initially whitish maturing light orange; center aging as chambers with thick longitudinal arrays of seeds attached to inner pulp. Seed: ovate in outline compressed front-to-back, ca. $8-8.5 \times 3.5-4 \times 1.5$ mm, whitish. A. C. Gibson