

Cucurbita pepo L. var. *pepo*, SQUASH, PUMPKIN. Annual vine, with tendrils, taprooted, several-stemmed at base, trailing or not; monoecious; shoots robust with large, ascending to erect, dark green leaves and having wide, hollow stems and petioles, conspicuously scabrous on axes along raised principal veins + minutely scabrous on upper surface of blade, conspicuously scabrous, densely short-hirsute, the larger hairs rigid, multicellular, and broad-based but < 0.75 mm long, hairs hardened by calcium deposits at base, not foul-smelling; tendril 1 per node, arising to 1 side of petiole base or sometimes also slightly below petiole base, 2–7-branched at top of stalk, the stalk 60–100 mm long, ridged, to 8 mm diameter, hollow, tendril branches unequal, each tendril to 245 mm long, > stalk, strongly coiled and sometimes compressed side-to-side, short-hirsute. **Stems:** conspicuously ridged, to 25 mm diameter, tough, the ridges 5 or more, irregular and rounded, flexible, striped pale green to purplish red, covered with short, erect, rigid hairs and scattered broad-based hairs. **Leaves:** helically alternate, ± palmately (3–)5–7-lobed, long-petiolate, without stipules; petiole somewhat ridged with shallow grooves and sometimes dimples, 200–370 mm long, to 19 mm diameter near base and gradually tapered to top; blade roundish in outline, 110–340 × 120–390 mm, lobes broad with terminal lobe ± clearly defined but basal lobes often weakly defined, cordate at base, shallowly toothed to dentate on margins, acute at tip, palmately veined with 3–4 principal veins at base and principal veins strongly raised on lower surface, primary veins to basal lobes 2-forked within 30 mm, scabrous and stiff-hairy, lower surface with larger hairs along principal veins. **Inflorescence:** flowers solitary, axillary, unisexual, staminate flowers on individual and within a population much more numerous than pistillate flowers, pistillate flower spreading, lacking bracts, short-hirsute; pedicel ± 5-angled, of staminate flower ± erect, 150–330 × 6–6.5 mm, green, solid, somewhat hispid, abscising at base, of pistillate flower spreading, to 12+ × 8–9 mm increasing 2× length and width in fruit, strongly 10-ridged and angled, and solid. **Staminate flower:** radial, 120–180 mm across; hypanthium deeply cup-shaped, ca. 10 × 16 mm, pale green with 10 darker green ribs, weakly hispid, short-hirsute, and glandular-hairy, hispid hairs 1.5–2.5 mm long, tapered from ± swollen base, with greenish basal cell and colorless above, hirsute hairs shorter and finer, glandular hairs stalked, < 0.3 mm long, initially with colorless head aging purplish red; **sepals** 5, arising from rim of hypanthium, linear-triangular, 25–39 × 2.5–4 mm, green, tapered and narrowly acute or acuminate at tip (occasionally with small, ovate flare), 3-veined on exposed side and channeled on hidden side (adaxial), hairy like hypanthium, rarely with tooth; **corolla** 5-lobed, arising from rim of hypanthium, broadly bell-shaped, with rounded sinuses, surfaces with soft, orange, beadlike hairs (villous-moniliform) and mostly colorless hirsute hairs; tube-throat 35–60 mm long, light green and internally greenish yellow changing to yellow-orange throat, conspicuously green-veined with 3 raised veins per lobe; lobes spreading, triangular to broadly triangular, 45–60 × 20–65 mm, orange, with 3 raised, principal veins and midvein terminating in green point at tip (cuspidate); **stamens** 3, to 35 mm long, fused at expanded bases and filaments completely to partially fused into a column 15–18 mm long; filament basal portion fused with hypanthium for ca. 5 mm, bulbous, 10–11 mm diameter, hollow, in ×-section circular or weakly 3-lobed, columnar portion narrowly conic and solid or partially fused, pale orangish yellow; anthers dorsifixed, strongly dithecal, 12–15 mm long, orange-yellow, 1 anther having 1 erect straight sac and other 5 sacs convoluted and generally folded 2× and forming 3 vertically

oriented subequal segments, the end segment ascending and the middle segment descending (sometimes also bent near tip or base), longitudinally and outwardly dehiscent; pollen orange-yellow; **nectary** 5-lobed, hidden beneath filament bases, thick 5-lobed ring 3–5.5 mm long, light yellow, producing nectar; **pistil** absent. **Pistillate flower:** radial, 120–180 mm across; hypanthium saucerlike, 18–22 mm across, 2.5–3 mm thick, pale green with 10 darker green ribs, weakly hispid, short-hirsute; **sepals** 5(–6), arising from hypanthium, free or barely united, at anthesis ascending, linear, 50–68 mm long, with serrate, leaflike tips 8–30 mm long, 6th sepal awl-shaped, < 15 mm long; **corolla** 5-lobed, arising from rim of hypanthium, broadly bell-shaped, with rounded sinuses, surfaces with soft, orange, beadlike hairs (villous-moniliform) and mostly colorless hirsute hairs; tube-throat 35–60 mm long, light green and internally greenish yellow changing to yellow-orange throat, conspicuously green-veined with 3 raised veins per lobe; lobes spreading, triangular to broadly triangular, 45–60 × 20–65 mm, orange, with 3 raised, principal veins and midvein terminating in green point at tip (cuspidate); **stamens** = column of irregular heights 5–20 mm tall, forming a cup around nectary, lacking anthers; tube pale light yellow, glabrous, with yellow hairs around base; **nectary** deeply lobed, encircling style base, to 6 mm tall, wide at base, pale light yellow, glabrous; **pistil** 1; ovary conspicuously inferior (even in small bud), spheric, at anthesis 20–25 mm, rough-hairy to ± short-hirsute and sessile to short-talped capitate-glandular, 3-chambered with many ovules attached to outer wall; style + stigma 30–35 mm long, thick, style pale green to pale orange-yellow, glabrous, 3-branched above midpoint, the branches ascending, to 5.5 mm long, stigmas 18–23 mm long, thick, to 10 mm width at midpoint, dividing into 2 stigmas deeply lobed at top and base, lobes touching side-to-side, the upper lobes fingerlike, unequal, 8–11 mm long, yellow-orange tinged green, stigmas coarsely papillate-glandular, sticky. **Fruit:** pepo (= indehiscent berry with hard, breakable outer shell), many-seeded, forms in range not determined. **Seed:** not available, compressed-ovoid, yellowish tan or yellowish ochre. Mid-June–late August.

Waif. Robust, cultivated annual vine occasionally observed growing in moist, shady woodland (e.g. *Salix*), where seeds were dropped or intentionally planted, but not persisting. In range *Cucurbita pepo* var. *pepo* includes types of squashes, most frequently zucchini. During heat of summer days, the large leaves experience temporary wilting each afternoon, when transpirational demands are not satisfied, and rehydrate and regain turgor during nighttime. The flowers are unisexual, light orange, and large, up to one hundred eighty millimeters in length. All early flowers and most of the subsequent ones are staminate; the pistillate flowers are easy to spot because each has a prominent spheric ovary beneath the perianth (inferior ovary), but in range the pistillate flowers tend to abort several days before anthesis.

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