## Wild Cucumber Echinocystis lobata

Cucurbitaceae — Cucumber family by Tom Reaume © 2010 Nature Manitoba

Grant: Manitoba Hydro

An **annual herbaceous vine** 5–12 m long or tall from several unbranched radiating shallow tan **roots** 4–15 cm long by c. 1 mm wide; climbing with coiled tendrils up and over vegetation, buildings, fences and trees; in moist thickets, ditch banks, ravines, fence rows and shores of rivers; **monoecious**.

- FLOWERS white to pale green, fragrant, blooming June-October; inflorescence a panicle (or raceme), each 5-30 cm long by 2-8 cm wide, axillary from all but the lowest leaves; peduncles 0-6 cm long, green, ridged, 2-4 mm thick; pedicels 4-13 mm long, spreading, hairy; hypanthium veined, c. 1.5 mm wide; flowers unisexual; calyx lobes 6, filiform, spreading, each 1.5-3 mm long, pale green; male flowers 8-80, appearing weeks before the female flowers and making up the bulk of each panicle, each 8-17 mm wide by 4-5 mm tall; corolla tubular, the tube c. 1 mm long, 6-lobed, the lobes pointed, often with a partial twist, rotate, 4-9 mm long by 1-2 mm wide, with tiny gland-tipped hairs on the sides and margins; stamens 3 (2), united; filaments c. 0.5 mm long; anthers 3, pale green, c. 1 mm long by 0.8 mm wide, S-shaped; female flowers white, 15-24 mm wide by 5-7 mm tall, 1-4 developing later at the base of most panicles; corolla tubular, the tube c. 1 mm long, 6-lobed (7-), each lobe 7-12 mm long by 1.2-2 mm wide, hairs short and glandtipped; ovary green, 2-chambered, 3 ovules per chamber, softly prickly outside, 4-5 mm wide by 3-4 mm tall (including the prickles); ovules c. 0.8 mm long by c. 0.6 mm wide, with a slight notch on one side; style green, c. 1 mm long, thick; stigmas blunt, oval, included, 1.2-1.8 mm wide by c. 1 mm tall; flower to fruit 4-6 weeks.
- FRUIT a pepo with 12–18 thin, long green veins, bladder-like, hanging, light green when opening, very moist but drying to tan after seeds are expelled, body 3–5 cm long by 2.5–3.5 cm wide (not including the prickles), apex peels back with 5 or 6 wide flaps revealing 2 oval pores 8–12 mm long by 3–6 mm wide at the apex of the white inner net lining; pedicels 4–33 mm long by 0.8–2 mm wide; prickles soft (not hurtful), 2–10 mm long by 0.4–0.5 mm wide at their bases, straight and mostly spreading, not hooked, each with a tiny apical gland-tipped hair when young; seeds brown, 4 (1–6) per pepo, smooth, 12–20 mm long by 7–10 mm wide by 2.6–3.8 mm thick, dull, dark brown with darker markings; seed coat c. 0.3 mm thick.
- LEAVES alternate, simple, usually 5-lobed (3- or 7-), barely toothed; internodal distance 11.7 (1.2–15.6) cm; blades 3–21 cm long and wide, short hairy along the margins, scabrous above, glabrous and slightly lighter green below, dull, soft, some veins ending with thick marginal hairs, a soft prickle 2–5 mm long at the tip of each lobe; petioles 5 (1.2–15.5) cm long by 2–4 mm wide and thick, glabrous, ridged; stipules absent; tendrils axillary, one per node, pale green; stalk 3 (2.5–5.6) (-16) cm long by 2–3 mm thick, then 3-parted (2- or 4-), the parts tightly coiled, to c. 15 cm long.
- STEM climbing to trailing, hollow, branched, not stiff, 5-ridged; 3–5 mm thick throughout, naked at base.
- RANGE: (CAN) 9 provinces; (USA) 41 states, absent in the SE and SW; native and naturalized.



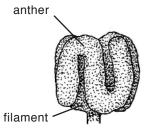
Wild Cucumber vine c. 6 m long climbing across a thatched roof in Assiniboine Park, Winnipeg, Manitoba



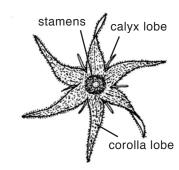
Male flower 17 mm wide; above



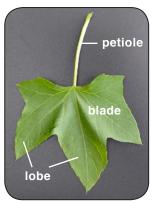
6-lobed male flower 17 mm wide; side/below



Stamen x20; side; S-shaped anther



Male flower x2; above



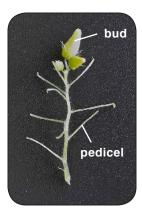
Lobed leaf 13 cm wide; upper (ventral) side



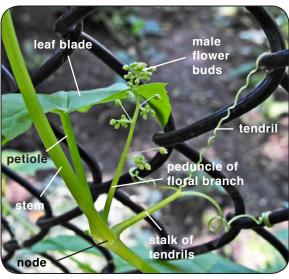
Leaf margin, prickle at tip is c. 4 mm long, dorsal side



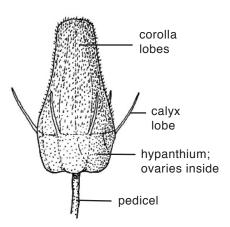
Leaf 13 cm wide; dorsal side



Small floral branchlet 2.5 cm long with male flowers removed; a few buds at tip



From each upper stem node is a tendril, a floral branch and a leaf



Male flower bud x10; side



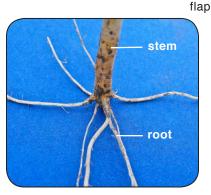
Floral branch 14 cm long with several branchlets with male flowers and buds



Stem 5 mm wide, 5-ridged and hollow



Young tendril 3 cm long



Root system at base of 4 mm wide stem of Wild Cucumber



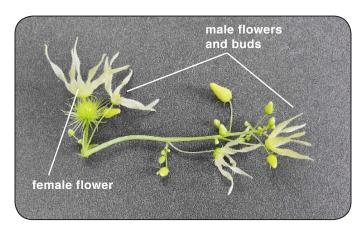
Fruit opens while still green and moist to dispel seeds



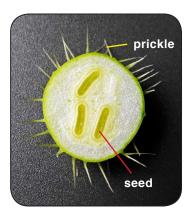
Open green fruit drips water and houses seeds in central whitish net lining



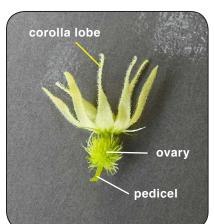
A Darner, genus *Aeshna*, resting at midday near a tan dry empty fruit



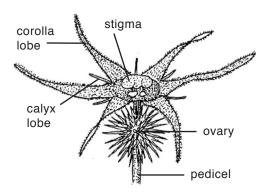
Floral branch 5 cm long with a female flower developing at its base; male flowers and buds above



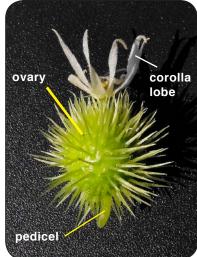
Green expanding fruit 18 mm wide with 3 young seeds



Female flower 11 mm long and wide with 7 corolla lobes; side view



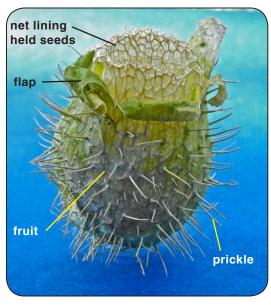
Female flower x4; side view



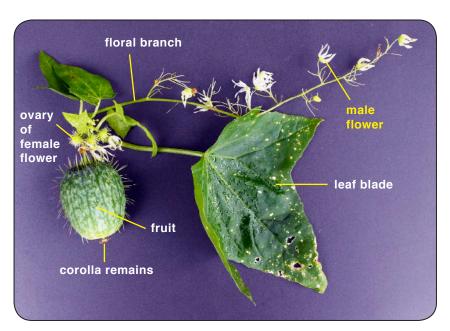
Female corolla of Wild Cucumber persists as ovary 1.7 cm wide continues to grow

flap of apical

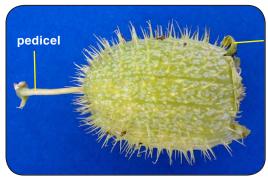
opening



Fruit 3 cm wide; apex rolled back revealing whitish net lining that held the expelled seeds



Fading male flowers with 2.5 cm wide fruit and 3 small female flowers with prickly ovaries c. 8 mm wide in axils of small leaves crowded at branch's base



Green fruit 3 cm wide, open at right end with 5 or 6 flaps peeled back



Cross-section through 3 cm wide fruit with 4 large seeds



Mature seeds 1.5 cm long by c. 3 mm thick