

# Common Mullein *Verbascum thapsus*

Scrophulariaceae—Figwort family

by Tom Reaume © 2011 Nature Manitoba

Grant: **Manitoba** 

**A** biennial wildflower, solitary or in a small assembly, averages 114 (34–244) cm tall, most parts covered with multi-branched hairs, soft to touch; **taproot** rough, branched, 5–30 cm long by 2–26 mm wide; **side roots** 3–15 cm long by 0.5–1.3 mm wide; in grassy fields, gravelly railway slopes and roadsides.

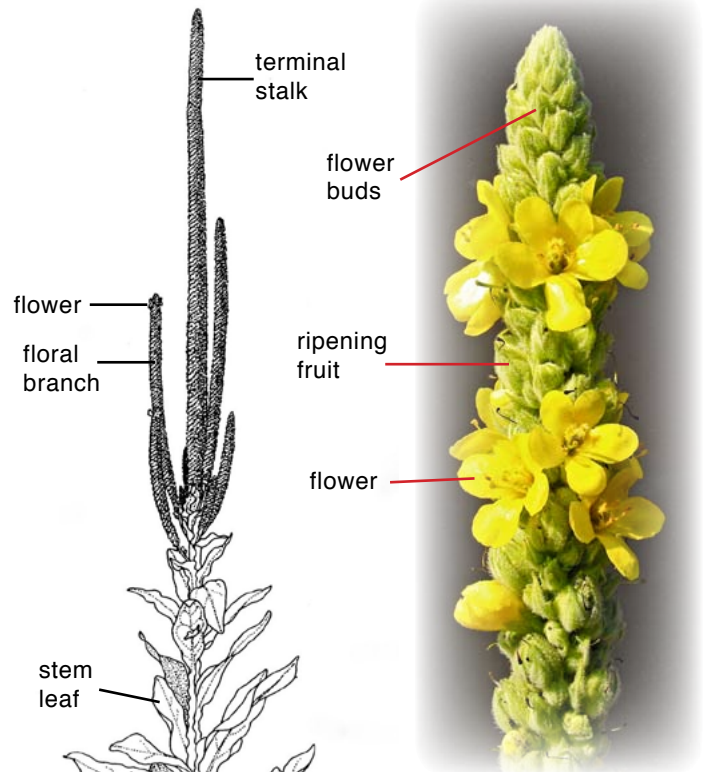
● **FLOWERS** yellow, blooming June–September; **inflorescence** a spike, compact, erect, terminal and lateral, forming once then the plant dies, terminal ones 6–110 cm long by 2–4.3 cm wide, often the tallest plants may form 4 (1–20) additional lateral floral branches 2–67 cm long; **flowers** perfect, sessile, 15–40 mm wide by 12–17 mm long, horizontal to slightly ascending, few to several blooming at once in no obvious order, closing in early afternoon; **subtending bracts** (of flowers) 3, one large keeled bract and 2 smaller ones c. 9 mm long by c. 2 mm wide, very hairy, entire, reduced above; **calyx** tubular, 6–9 mm long, 5-lobed, the lobes 4–6 mm long, pointed, erect even in fruit; **corollas** 1.1–1.9 cm long, 5-lobed (4-), dropping whole while still yellow; **corolla tube** pale yellow, shiny, 6.5–9.5 mm long, partially hairy, with a flat round basal opening 2.5–3.3 mm wide; **corolla lobes** ascending to spreading, blunt, 6–11 mm long by 4–10 mm wide, hairy on outside, with microscopic yellow glands at the inner apices; **stamens** 5, (rarely 4 or 6) yellow, between the corolla lobes, of 2 different lengths, 4.2–7.5 mm long in a large bud; **filaments** 6–10 mm long depending on position, attached c. 2.5 mm from the base of corolla tube, the 3 shorter upper posterior ones very hairy, the 2 longer lower anterior filaments glabrous to slightly hairy on one side only; **anthers** orange, arched, hairless, with a suture along the top; **pollen** bright orange; **pistil** 1, from 9–14 mm long; **ovary** very hairy, 5-sided, 2.5–4.5 mm long by 2.5–2.7 mm wide, tapered above; **style** 6–9 mm long, hairy at base, visible after corolla falls; **stigma** green, curved, 1–1.3 mm wide by 0.6–0.9 mm tall; **fruiting stalks** brown, erect, stiff, overwintering; **flower to fruit** 5–7 weeks.

● **FRUIT** a capsule, tan, crowded, woody, 6–10.5 mm long by 5–6 mm wide and thick, 2-valved, 2 main sutures open apically, hairy, c. 80 per 10 cm of spike, veined, overwintering and slowly disintegrating on the stalk; **pedicels** 2–5 mm long; **seeds** dark brown, 438 (280–550) per capsule, 0.7–1.3 mm long by 0.4–0.6 mm wide and thick, ribbed and angular.

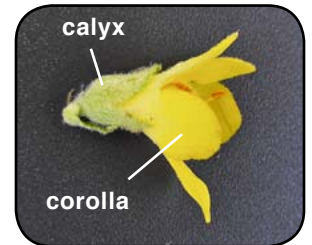
● **LEAVES** basal and stem; **vegetative rosettes** 14 (2–63) cm wide of 5–55 leaves, winter hardy; **basal leaves** 8–12+, spreading, 13–30 cm long (including petioles) by 3–12 cm wide; **petioles** pale green, 3–7 cm long by 4–10 mm wide, not grooved above; **stem leaves** alternate, hairy, imbricate, arched below to erect above, 2–56 cm long by 1–16 cm wide, 19–50 per plant, reduced and sessile above, teeth blunt, wide and shallow, upper blades with wavy margins and twisted pointed tips, the wavy margins continue down the stem forming parallel wavy wings, some stem leaves form axillary leaves.

● **STEM** erect, tough, branched or not, mostly hidden by wings; 5–30 mm wide near the leafy, solid, hairy base; **internodal lengths** on four plants 1.2–1.6 m tall were 3.5 (0.9–7.5) cm.

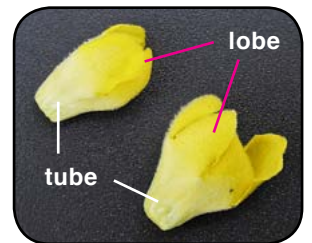
● **RANGE:** (CAN) 10 provinces; (USA) 48 states; **naturalized** in North America.



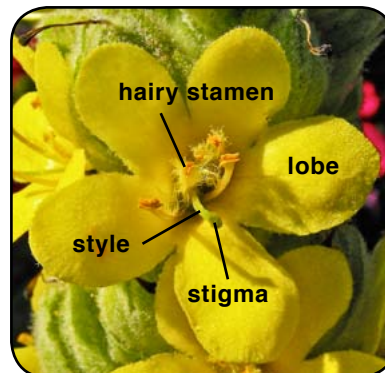
Terminal flowering stalk 4 cm wide



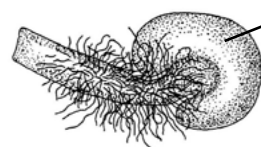
Flower 1.6 cm long



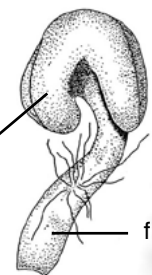
2 fallen corollas 1.5 mm long



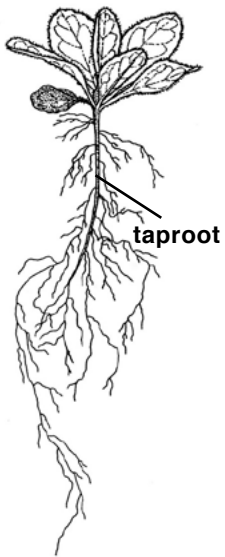
Flower 3.5 cm wide, 5-lobed, 5 stamens, 1 pistil



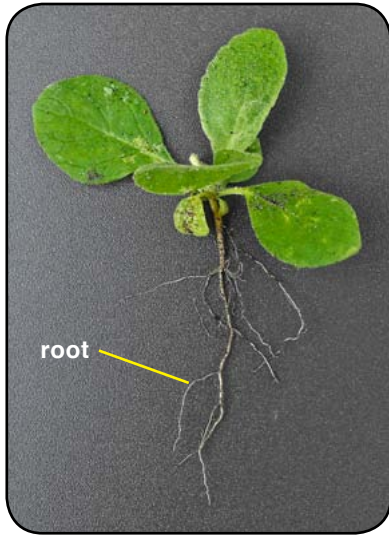
Hairy stamen x12, in bud



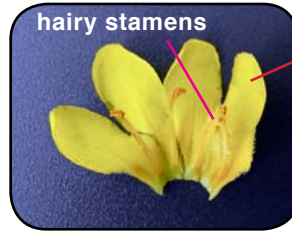
Less hairy stamen x10, in bud



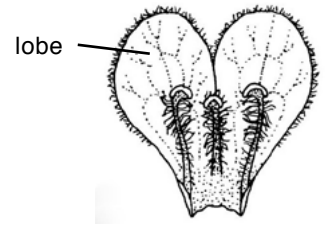
Young rosette x0.6



Young vegetative plant 5 cm wide with a thin taproot



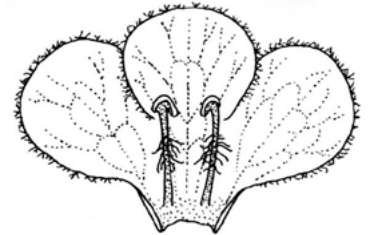
Open corolla 1.7 cm long with 3 hairy stamens



Open corolla x2, with 3 hairy upper stamens



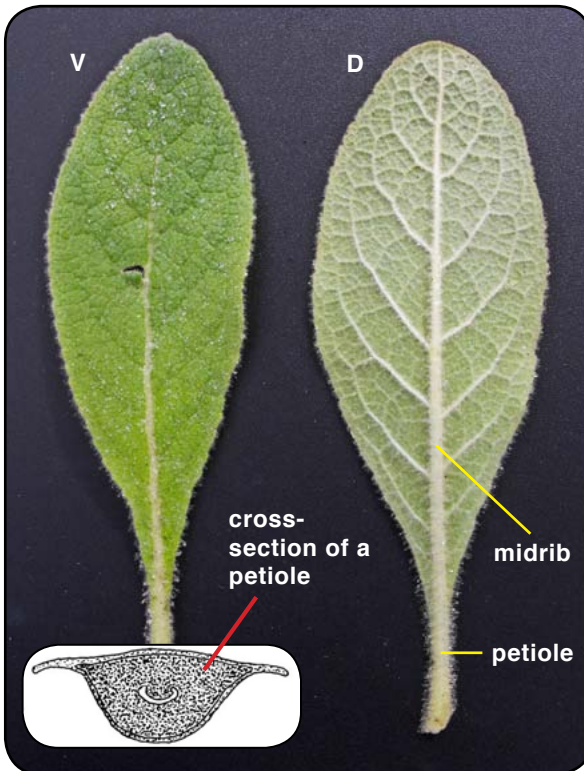
Short hair x40



Open corolla x2, with 2 slightly hairy lower stamens



Rosette 36 cm wide of Common Mullein in Winnipeg, Manitoba



Two leaves – left leaf, hairy ventral (upper) side; insert is a cross-section x5, of winged petiole; right leaf is 5.2 cm wide, dorsal view with raised veins



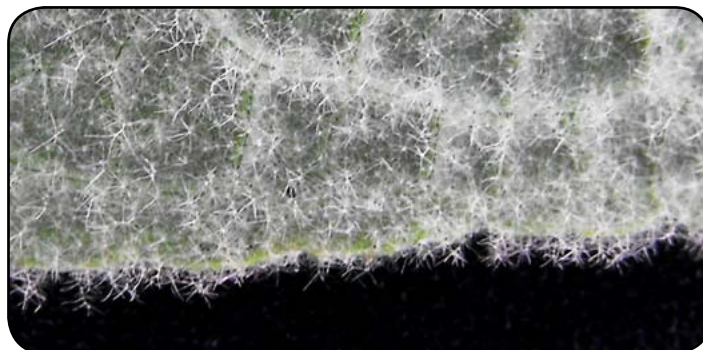
Long angular hair x25



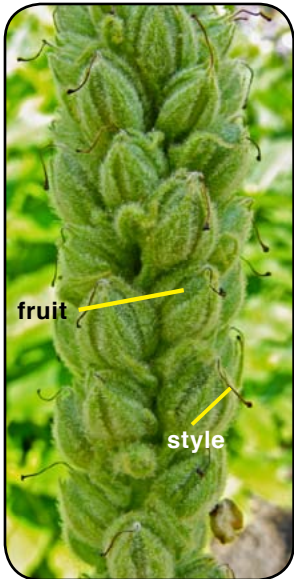
Long sinuous hair x32



Short wide hair x32



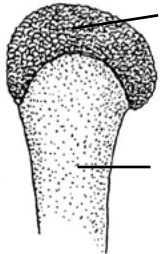
Leaf margin with numerous branched hairs, dorsal side



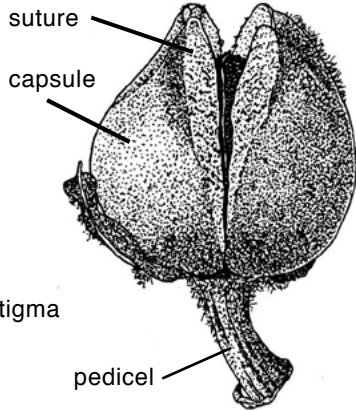
Stalk 2.5 cm wide of green ripening fruit



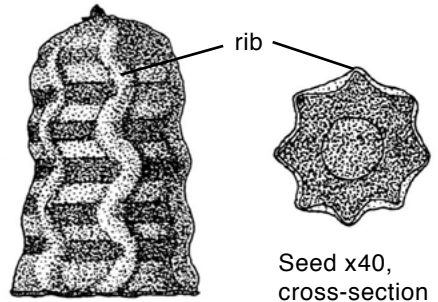
Green capsule 10 mm wide



Stigma x16, atop style



Ripe tan capsule x4, opening across wide suture; calyx mostly removed; side



Seed x42, side

Seed x40, cross-section

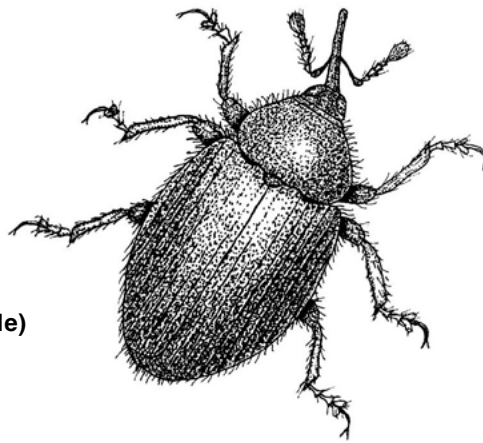


Base of main terminal fruiting stalk with two short side stalks in winter

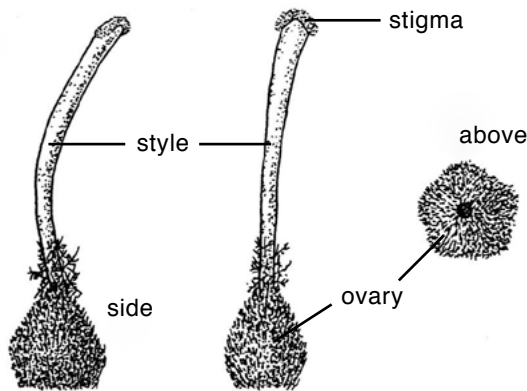


Overwintering, mostly empty capsules on stalk 4 cm wide

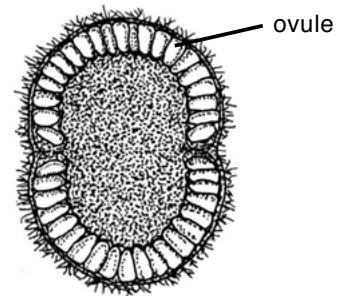
fruit (capsule) open



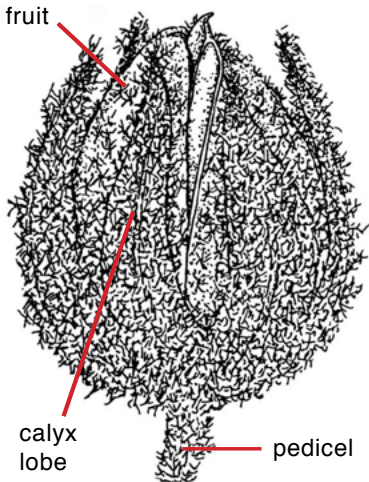
Mullein Seed Head Weevil, *Gymnetron tetrum* x10 from flower; its larvae eat the seeds of Common Mullein



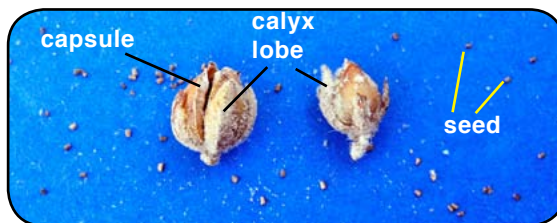
Pistil x5.5



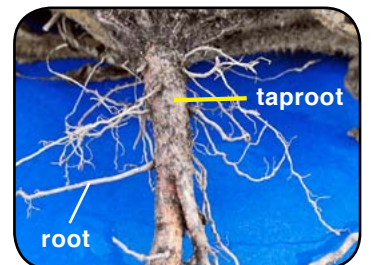
Cross-section of ovary x25, in a flower bud



Fruit (capsule) x5, opening at apex; Winnipeg, Manitoba



Two ripe capsules with scattered brown seeds; left capsule is 10 mm long with a short pedicel



Taproot 6 mm wide from a rosette 30 cm wide