

Wild Licorice *Glycyrrhiza lepidota*

Fabaceae—Pea family

by Tom Reaume © 2010 Nature Manitoba

A perennial wildflower 83 (30–123) cm tall by 40 (30–60) cm wide from an extensive woody rhizomes 20–100 cm long by 2–15 mm wide with a slight licorice flavor; in large patches of several m², or several plants widely spaced; in prairies, along railways, stream valleys, slough banks, roadsides and ravines; a **native**.

● **FLOWERS** whitish pale yellow to slightly pinkish purple, blooming May–August; **inflorescence** a raceme (spikelike), vertical, each 1.5–10.5 cm long by 2–3 cm wide of 10–60 flowers, usually with 1–8 (–36) racemes per plant, and 1–3 racemes from apices of the floral branches, a 10 cm long inflorescence may take 14–16 days to finish blooming; **floral branches** up to 12 per plant, each 30 (14–50) cm long, reduced above; **peduncles** axillary, glandular, stiff, slightly hairy, angled, grooved, 4.5 (1–9.5) cm long by c. 2 mm wide; **pedicels** less than 1 mm long in flower, ascending, glandular, 0.5–3 mm long in fruit; **subtending bracts** (of flowers) 5–8 mm long by c. 2 mm wide with scattered hairs; **flowers** perfect, 5–7 mm wide by 9–15 mm long, each blooms for 1–2 days; **rachis** hairy; **calyx** total length 5–8 mm, tubular, with scattered gland-tipped hairs, tube 3–3.5 mm long by c. 2 mm wide, teeth five, 1–3 mm long; **petals** 5, glabrous; **banner** (1 petal) 10–14 mm long, pointed; **wings** (2 side petals), each 8–9.5 mm long by c. 2 mm wide, claw 2.8–3 mm long; **keels** (2 petals) partially united, c. 8 mm long by c. 1.8 mm wide, the claw c. 2.5 mm long; **stamens** 10, diadelphous (9+1), 5–5.5 mm long, enclosed and ending c. 2 mm from the tip of the keel; **anthers** yellow, c. 0.5 mm long; **pollen** yellow; **pistil** green, included in the keel, c. 6 mm long by c. 1 mm wide; **ovary** c. 2.5 mm long with several rows of short thick green prickles, walls c. 0.2 mm thick; **ovules** 5–7 in a row, each c. 0.4 mm long by 0.3 mm wide, green, smooth; **style** smooth, tapered, c. 3.3 mm long, curved at its tip; **stigma** flat, green, c. 0.3 mm wide; **fruit clusters** 3–9 cm long by 2.5–3.5 cm wide, some overwintering on the plant.

● **FRUIT** a legume (pod or bur), 15–48 per cluster, reddish to dark brown, straight, each 10–21 mm long by 8–13 mm wide (including the prickles), with an apical projection c. 2 mm long, pods eventually splitting lengthways, each half c. 4 mm wide (not including the prickles), walls c. 0.3 mm thick, smooth, light tan inside; **prickles** hooked, 2–3.5 mm long by c. 0.3 mm wide at their bases, spreading; **clusters of burs** 5.8 (2.6–8.8) cm long by 3.5 (2.5–4.2) cm wide, straight; **seeds** 2–5 per pod, each 2.5–3.8 mm long by 2–2.5 mm wide by 1.5–1.9 mm thick, smooth, medium grayish green, slightly lighter around the 0.4 mm wide by 0.3 mm tall oval hilum, slightly shiny, with a shallow groove below the hilum, they produce a faint rattle when a ripe cluster of pods is shaken, not stirred.

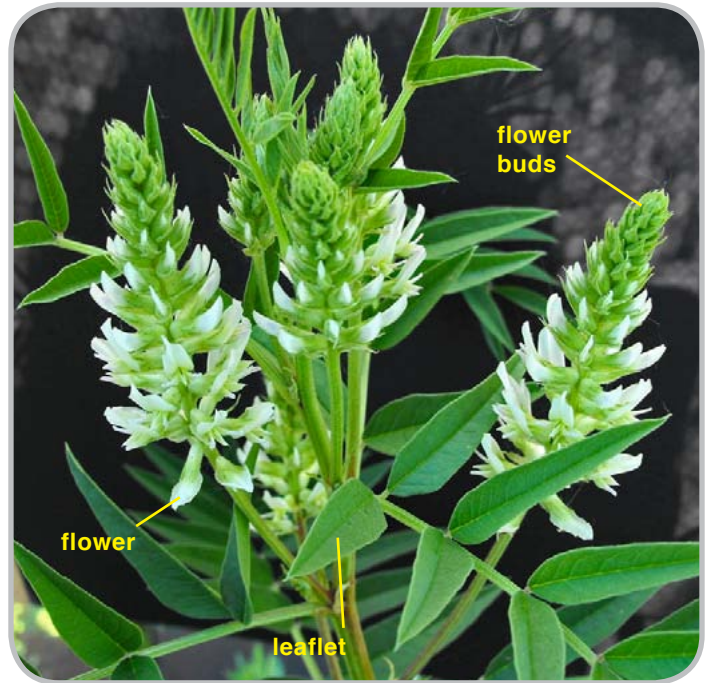
● **LEAVES** alternate, compound (odd-pinnate); **stem blades** 3–20 cm long by 2–13 cm wide; **leaflets** 7–21 per leaf blade, mostly ascending but not erect, entire, mucronate, each 1.5–6.5 cm long by 0.3–2.5 cm wide, more hairy below on raised midrib, glandular punctate below, less so above; **petioles** 1–5 cm long and hairy; **stipules** 3–9 mm long by 1–2 mm wide, pointed, deciduous; **rachis** hairy, with tiny whitish scales; **petiolules** 1–2 mm long.

● **STEM** erect, stiff, one to several, ridged, hairy, with tiny white scales, stalked glands or not, by late summer turning a medium reddish brown, striate and mottled, branched; often overwintering; 2–6 mm wide near the naked base.

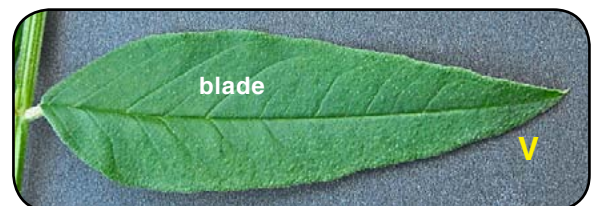
● **RANGE:** (CAN) 5 western provinces; (USA) 31 states.



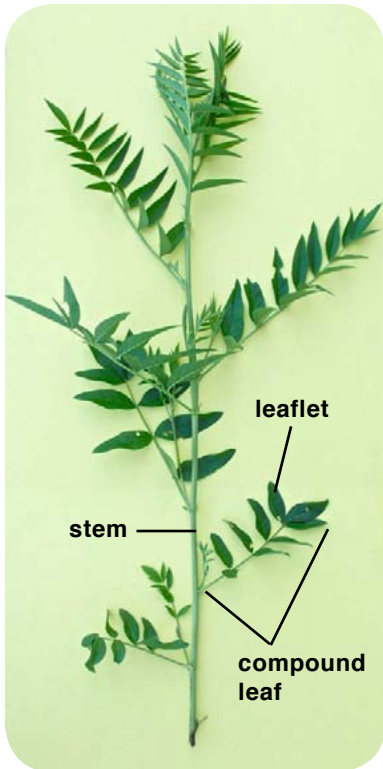
A large patch of Wild Licorice about 80 cm tall occupies the eastern part of Living Prairie Museum in Winnipeg, Manitoba



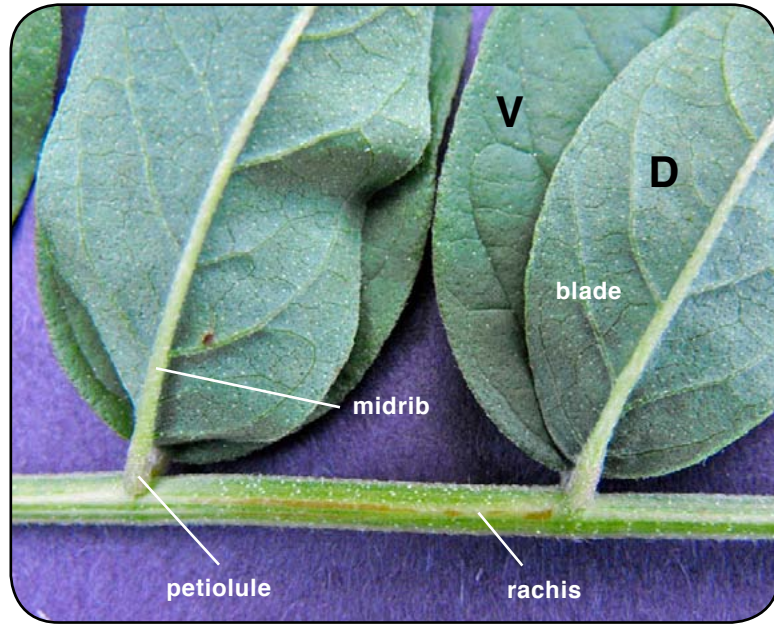
Ascending racemes starting to bloom from the bottom upward; right raceme is 7 cm long



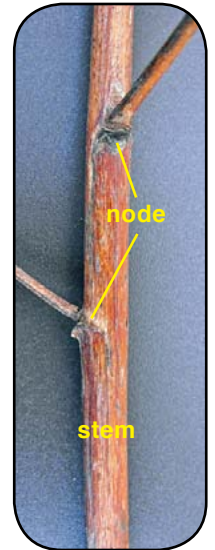
Leaflet 1.8 cm wide – top, ventral side; bottom, dorsal side, both sides glandular



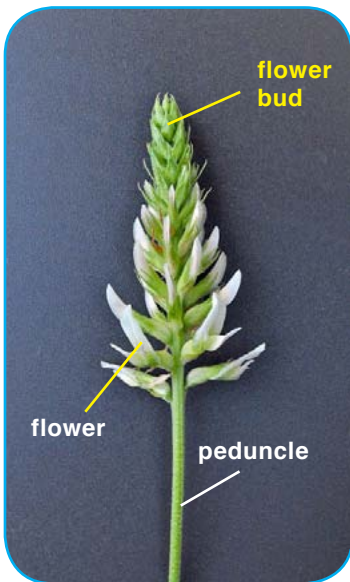
Young Wild Licorice plant 65 cm tall, mid-June; no flowers yet



Paired leaflets 5.5 cm long, nodes 2 cm apart along the rachis; glandular punctate (white dots) on both sides of blades; Winnipeg



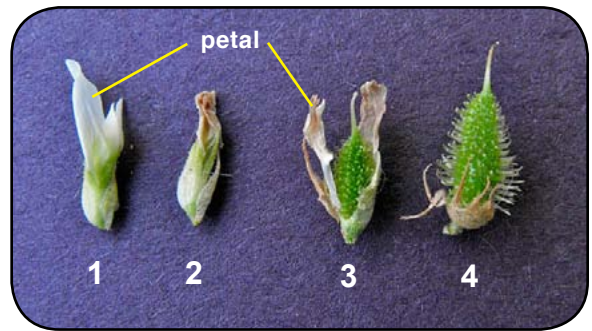
Stem turns reddish and woody in late summer



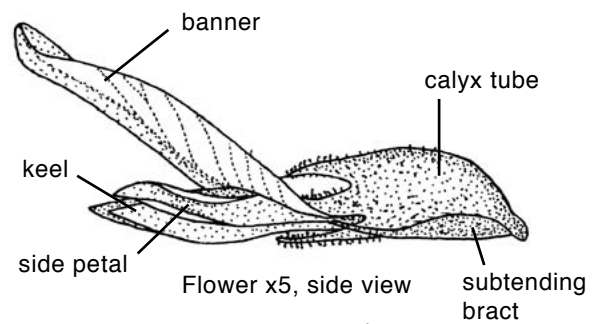
Inflorescence 4.6 cm long by 2.7 cm wide in mid-July



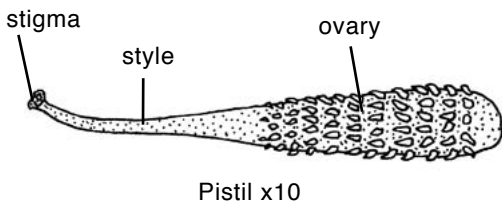
Inflorescence 8.6 cm long, c. 14 days later



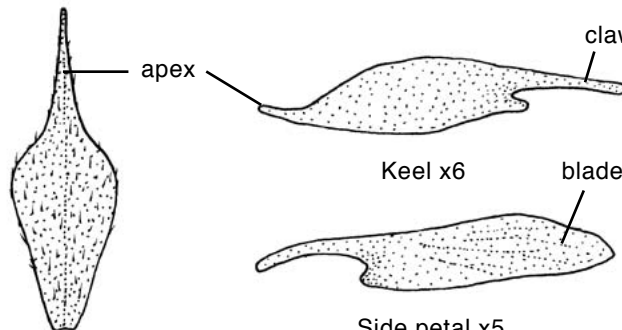
Four pieces from top to bottom of the 8.6 cm long inflorescence to the left; flower is 1.2 cm long; the prickles are c. 1.5 mm long on the right green bur



Flower x5, side view



Pistil x10



Keel x6

Side petal x5

Subtending bract of each flower x7



8 cm long cluster of Wild Licorice fruit in late summer in Winnipeg, Manitoba



Overwintering fruit (burs) 1–2.1 cm long are easily removed from a plant, but not your hair



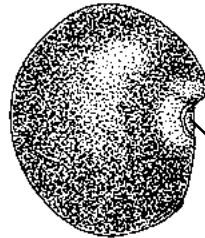
side

Cluster of overwintering fruit (burs) 6.5 cm long and 3.5 cm wide; rattles when shaken

above



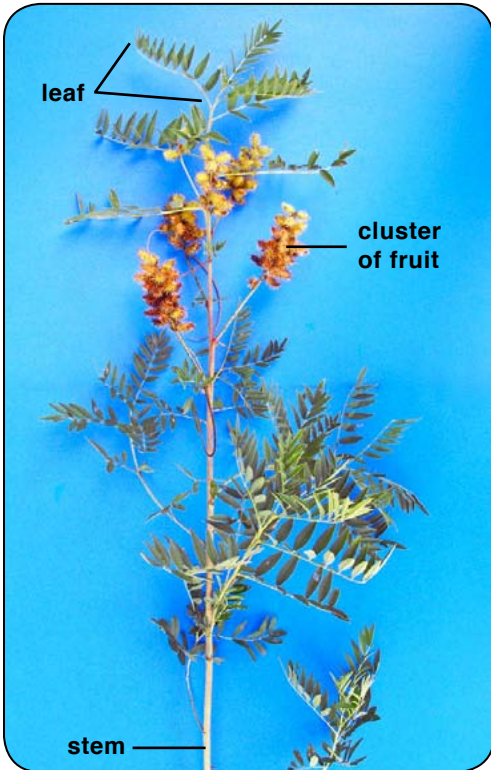
thick



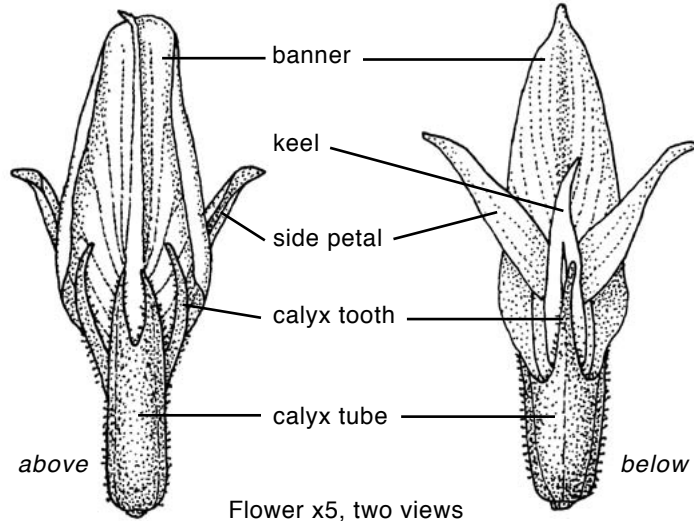
side

hilum

Seed x10



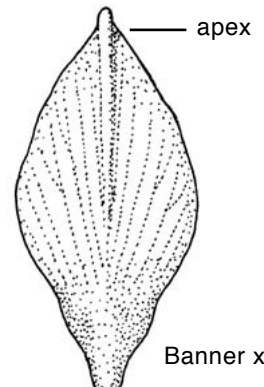
Plant 1 m tall with compound leaves and several ripening fruit clusters in fall



Flower x5, two views



Upper portion of vertical root 5 mm wide



Banner x4