



Leguminosae (Caesalpiaceae) Senna

Some Native and Exotic Senna species from the Moreton Pastoral District.

CONTENTS:

| Species | Page |
|---|-------------|
| Senna gaudichaudii – Climbing Senna | 3 |
| Senna surattensis – Scrub Senna | 4 |
| Senna aciphylla – Creeping Senna | 5-6 |
| Senna sophera var. sophera - Pepper-leaved Senna | 7-8 |
| Senna sophera var. (40Mile Scrub J.R. Clarkson+ 6908) | 8-9 |
| Senna barclayana – Smooth Senna | 9-10 |
| Senna coronilloides – Brigalow Senna | 10-11-12 |
| Senna pendula var. glabrata – Easter Cassia (Exotic) | 13-14-15 |
| Senna septemtrionalis – Smooth Senna (Exotic) | 16-17 |
| Senna occidentalis – Pepper-leaved Senna (Exotic) | 17-18-19 |
| Senna didymobotrya – Popcorn Senna (Exotic) | 19-20-21-22 |
| Senna alata, candlestick Senna (Exotic) | 22 |

Senna gaudichaudii – Climbing Senna



Form - Strong shrub in the open, if near a shrub, tree or structure will become a climber to 5m, no thorns, no tendrils present.

Leaves – Opposite leaflets, 8-12, 2-5cm long, end leaflets larger, often notched, oblong to oblanceolate, ± golden hairs, (if hairy far less hairy than *S. pendula* var. *glabrata*) discolorous, glaucous green under leaf.

Glands – 1-3 (usually 1) stalked, and situated at the base pair of leaves.

Flowers – Yellow, bisexual, Fertile stamens 10, unequal filaments, showy flowers.

Pods – 10-12 cm long, 8mm wide, flat, curved, black when ripe, seeds glossy black.



Stalked gland between first leaflets.



Seed pods brown and open when ripe.

Senna surattensis – Scrub Senna



Flowers.



Leaf top and underneath.

Form – Shrub to small tree 5-6m, common in Brigalow communities.

Leaves – 12-20 leaflets (often less), elliptic to obovate, 2.5-4.5 long, 2-5cm long, end leaflets not notched, \pm golden hairs, discolourous, pale colouration under-side of leaf.

Glands – 1-2 (usually 1) stalked, and situated at the base pair of leaves.

Flowers – Yellow, petals 15-25 mm, fertile stamens 10, filaments \pm equal, showy flowers.

Pods – Blackish, fading to grey when ripe, 8 – 15cm long, curved, brown to black glossy seeds.



Flowers.



Flat, curved, Seed pods.



Example of one stalked gland, and 2 stalked glands.

Senna aciphylla – Creeping Senna.



Form.



Flowers.



Glands multiple, and hairy stems.

Form – Upright or prostrate Sprawling shrub to 2 m high.

Leaves – Leaves 3–5 cm long, glands several, between all pinnae pairs; pinnae 8–12 pairs, linear to elliptic, 20–25 mm long, 1–4 mm wide, usually obviously revolute, apex acuminate and often mucronate, and then almost pungent; petiole 2–5 mm long, rarely winged.

Glands – Multiple stalked glands

Flowers – Peduncles 2–5 cm long, 2- or 3-flowered. Fertile stamens 10; anthers on short \pm equal filaments or rarely 1 longer.

Pods – Pod \pm flat, 6–8 cm long, 5–6 mm wide, oval in section, without pith.

Senna sophera var. sophera - Pepper-leaved Senna.



Senna sophera var. sophera flowers.

Form – Small shrub 1-1.5m high.

Leaves – Leaves compound, alternate, leaflets glabrous 8-14 narrowly elliptic to lanceolate, opposite, and pinnately compound. Leaves discolorous.

Glands – Small stalked gland (2mm) between first leaflets.

Flowers – Showy yellow flowers to 20-30mm.

Pods – Semi-cylindrical 4 – 10cm long.

Senna sophera var. (40Mile Scrub J.R. Clarkson+ 6908).



Common plant of disturbance.



Flowers.



Leaves, pods, and seeds



Gland, some specimens are very hairy.

Form – Small shrub 1-1.5m high.

Leaves – Leaves compound, alternate, leaflets 8-14 finely to densely hairy, narrowly elliptic to lanceolate, opposite, and pinnately compound. Leaves discolorous.

Glands – Small stalked gland (2mm) between first leaflets.

Flowers – Showy yellow flowers to 20-30mm.

Pods – Semi-cylindrical 4 – 10cm long.

Senna barclayana – Smooth Senna.



Form and flowers.

Chocolate Royale type gland.

Form – Small shrub 1-1.5m tall.

Leaves – Leaflets 8-20 glabrous, narrowly elliptic to lanceolate, apex acute.

Glands – Solitary round chocolate coloured gland situated on petiole near base.

Flowers – Showy yellow flowers 8-12mm.

Pods – Cylindrical 3 – 5cm long.



Small rounded gland.

Senna coronilloides – Brigalow Senna.





Seed pods.



Flowers.



Gland between first 2 leaflets.

Form - Sprawling to upright shrubs to 2 m high.

Leaves – Leaves 5–9 cm long, glands 1 or 2; pinnae 9–12 pairs, elliptic, 10–20 mm long, 3–8 mm wide, glabrous or sparsely hairy; petiole 5–10 mm, often slightly winged.

Glands – 1 -2 in first and second leaflets

Flowers – Peduncles 1–2 cm long; 3–5-flowered. Fertile stamens 10; anthers on very short robust filaments.

Pods – Pod ± flat, 6–8 cm long, 4–6 mm wide, oval in section, without pith.

Senna pendula var. glabrata – Easter Cassia (Exotic).

Flowers.



Leaves top and bottom.



Flowers.



Golden leaf margin.



Grooved stem, with small blunt gland between first 2 leaflets.

Form – An erect or sprawling shrub, sometimes climbing usually growing 2-4 m tall. Prefers rain forest, dry scrubs, and waterways.

Leaves – The compound leaves (4-8 cm long) are alternately arranged along the stems and borne on stalks 20-40 mm long. They have three to six pairs of dark green leaflets with rounded tips. These leaflets are egg-shaped in outline or oval in shape, with those closer to the stem generally being smaller than those at the tip of the leaves (10-50 mm long and 5-20 mm wide). They are almost hairless (i.e. glabrous) with quite prominent entire margins that are yellowish in colour. There is a (i.e. on the rachis).

Glands – Small cone-shaped (i.e. conical) gland in between the two lowest leaflets of each leaf

Flowers – The flowers are bright yellow (about 30 mm across) with five large petals (20-25 mm long). They are borne in leafy clusters at the tips of the branches, and each has a stalk (i.e. pedicel) about 20-30 mm long. These flowers have two or three prominent stamens that are curved, four or five smaller stamens (i.e. six or seven in total), and three tiny petal-like structures (i.e. staminodes) at their centres. Flowering occurs throughout the year but is most prevalent during autumn (i.e. at Easter time).

Pods – The fruit are cylindrical black pods (10-20 cm long and 6-12 mm wide) that hang downwards (i.e. they are pendulous). These fruits turn from green to pale brown in colour as they mature, contain numerous (5-40) black seeds, and often have irregular constrictions.

Senna septemtrionalis – Smooth Senna (Exotic).



Stressed leaves, showing the glaucous underside of the leaf.



One single gland in between first 3 leaflets. Cylindrical pods immature.



Mature pods cylindrical.

Form - A shrub or tree, 1-5 m or 6.5m tall, the stem is rough, but hairless and prefers wet areas.

Leaves – Pinnate leaves, smooth, bright green, paler beneath. The leaflets 3-4 (5) pairs, the distal ones larger, broadly ovate (egg-shaped in outline with broad end at base) to lanceolate, 3.5-10.5 cm long, 1.1-3.5 cm wide. Leaf apex acuminate or caudate, base obliquely rounded or tapered (cuneate).

Glands – 2-3 stalked glands are located on the leaf rachis, between the leaflets and not on the petiole.

Flowers – Flowers in axillary racemes (1.5-8) cm long. The pedicels (12-25) mm long. Bracts submembranous, linear, lanceolate, or subulate, (1.5-) 2-4.5 mm long, caducous as pedicels begin to elongate; calyx lobes yellowish green, yellowish brown, or completely yellow, the outer ones relatively firm, ovate (egg-shaped in outline with broad end at base)-elliptic, 4-6.5 mm long, the inner ones submembranous, oblong-obovate (egg-shaped in outline but with the narrower end at the base) or suborbicular, 6.5-10 mm long; flower petals bright yellow and sometimes have brown veins - the standard obovate to obovate-flabellate, deeply emarginate, the others obovate, the longest petal 12-16 mm long; staminodes 3, obovate or suborbicular, (1.7-) 2-2.6 mm long; filaments of 4 median stamens 1.3-2.2 mm long, those of 2 abaxial stamens dilated, ribbon-like, 7-10.5 mm long, that of abaxial central stamen 2-4 mm long.

Pods – Fruit is a green pod that matures brown. Pods ascending on a stiff pedicel, chartaceous, cylindrical or obtusely quadrangular, 6-10.5 cm long, 0.8-1.1 cm wide, cavity moderately pulpy, divided into 2 parallel rows of cells. Seeds oriented with broad face to the septum, olive or brown, compressed-obovoid, 3.6-4.9 mm long, constricted at the hilum, smooth or minutely pitted, without an areole" more details are in (Wagner et al., 1999; pp. 701-702).

Senna occidentalis – Pepper-leaved Senna (Exotic).



Leaves.



Rounded gland.



Flattened seed pods.

Form - <2.5m shrub, that lives for one to two years, progeny persists though long-lived seed.

Leaves – Compound leaves consist of 3-7 pairs of leaflets (2-10 cm long and 2-4 cm wide) pointed tips. Leaf veins are light coloured and are obvious.

Glands – Small chocolate royal like and coloured gland, on a mound at the base of the leaf, with no glands between the leaflets.

Flowers – The flowers have five yellow petals and are borne in small to medium clusters in the upper leaf forks.

Pods – Flattened, straight or slightly sickle-shaped, pods (7-13 cm long and 8-10 mm wide), starting off green, turning brown and eventually a grey to black.

Senna didymobotrya – Popcorn Senna (Exotic).



Flowers, and seed pods.



Form, 2m x 2m.



Leaf, leaflets finely acuminate.



Stipules, broadly ovate.



Old pods.

Form - <5m hairy shrub.

Leaves – Leaves to 50cm, alternate, leaflets 6-18 pairs (or 12 – 36 leaflets), leaflets with a finely acuminate tip.

Glands – Glandless

Flowers – The raceme and peduncle, 11-35 cm long. The flower buds 0.9- 2.7 cm long, 0.5-1.4 cm wide. with bright yellow or orangey petals 1.8-2.7 cm long, 1 - 1.6 cm wide.

Pods – Flattened, straight or slightly sickle-shaped, pods (7-13 cm long and 8-10 mm wide), starting off green, turning brown and eventually a grey to black.

Senna alata, candlestick Senna (Exotic).

Similar species – Senna alata, candlestick Senna (Exotic).

Form – 2 to 4m hairy shrub.

Leaves – Very large once-compound leaves 5-17 cm long and 2-5 cm wide, consisting of 8-14 pairs of finely hairy obovate leaflets, entire margins, rounded or slightly notched tips.

Glands – Glandless.

Flowers – At end of branch tips to 30-60 cm long, yellow.

Pods – Elongated pods (15-25 cm long) are four-angled and have papery wings.



Seedling Senna alata, soft finely hairy, notched leaflets.

References:

Queensland Biosecurity.

Plantnet NSW.

Keyserver Lucidcentral.