

Hypericum perforatum L.

Standardized Common Name: St. John's Wort

Other Common Name: Klamath Weed

Family: Hypericaceae or Clusiaceae (Guttiferae)

Parts in Commerce: Whole herb

Identification:

Stem

- With 2 longitudinal lines, not with 4 lines or wings or round
- Hairless
- With few small black glandular dots on lines

Leaves

- Pale green
- Oblong to elliptical or linear, mostly 10–30 mm long
- Secondary veins curving to become parallel over most of leaf length, with inconspicuous netted tertiary venation between
- Glands in blade usually pale, conspicuous below; occasionally with a few black dots
- Hairless
- Petiole very short or absent
- Leaf base rounded to tapering, or cordate and somewhat clasping in one Asian subspecies
- Margins entire, often slightly revolute, with few small black glands near apex

Sepals

- 5, 3–4 mm long, narrow
- Surface has clear glandular spots; black dots or streaks absent or sparse
- Lacking elongated oil vesicles
- Margins usually entire, with no or few black glands

Petals

- 5, 10–12 mm long, obovate
- Orange-yellow, with darker veins
- Few black dots near margin, sometimes with black dots or streaks or pale glands elsewhere on surface

Stamens

- Numerous, borne in 3 bundles (very rarely in 5)
- Filaments long, narrow, yellowish
- Black glands present on anthers

Adulterants: Several European species of *Hypericum* have been found as adulterants. All of these, as well as similar American species, can be distinguished morphologically.

Hybridization between *H. maculatum* and *H. perforatum* is known to occur in eastern Europe, and a series of intermediates exists. *H. maculatum* is characterized by:

- Stem lines 4
- Leaves with few or no clear glandular dots
- Leaf veins conspicuously netted
- Sepals broader and somewhat toothed
- Petals with few black dots along the margins but with numerous black dots and streaks elsewhere on the surface

First-generation hybrids are intermediate in form, often having 2 conspicuous and 2 weak lines on the stem. Gene flow between the two species is probably uncommon but of long-standing natural occurrence.

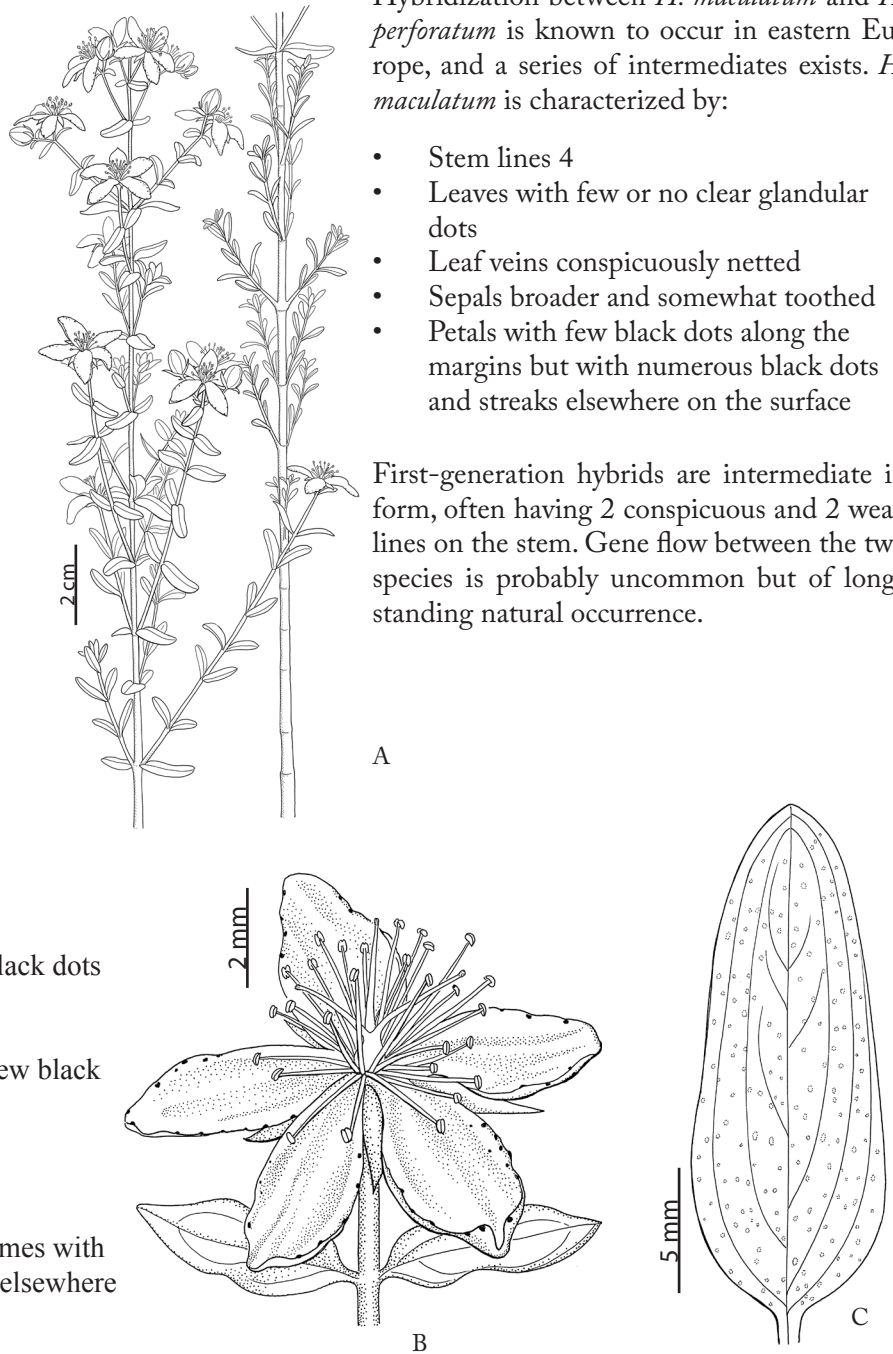


Figure 33: *Hypericum perforatum* habit, flower, and leaf.

Taxonomy: *Hypericum* is a widespread and very diverse genus of about 450 species, divided into about 30 sections and ranging from herbaceous weeds to large trees. *H. perforatum* is the type species of Sect. *Hypericum*, which includes 52 herbaceous species. The species is native to Eurasia, where it may have originated through hybridization between *H. maculatum* Crantz and *H. attenuatum* Choisy. The best taxonomic treatment recognizes four subspecies of *H. perforatum*, of which only subsp. *perforatum* (Europe and North America) and subsp. *veronense* (Schrank) H. Lindb. (Europe and Southwest Asia) are widely distributed. Considerable intergradation exists between these subspecies in Europe.

Description: Perennial herb; stems (20–)30–70(–100) cm high, branching, clustered at base, tough, with 2 raised longitudinal ridges, bearing small dark glands. Leaves opposite, sessile or subsessile, elliptic to linear-oblong, (5–)10–30(–35) mm long, 2–10 mm wide, with translucent glandular dots; apices obtuse; margins entire. Inflorescences cymose, leafy, many-flowered. Sepals narrowly lanceolate, 3–4 mm long, glandular-punctate; apex acute to acuminate or attenuate. Petals orange-yellow, obovate, 10–12 mm long, often slightly toothed at apical end on one side, with black dots on the margin and occasional black streaks. Stamens numerous, grouped in 3(–5) clusters, 6–8 mm long. Styles 3(–5); ovary of 3(–5) fused carpels. Fruit a septical capsule, 6–8(–10) mm long, ovoid, with elongated apex.

Seeds numerous, brown to blackish, glossy, with netted ridges on surface.

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