

LADY'S-THUMB

Polygonum persicaria L.

Family: *Polygonaceae* (Buckwheat).

Other Scientific Names: *P. maculata*, *P. vulgaris*.

Other Common Names: Spotted knotweed.

Legal Status: Not categorized.



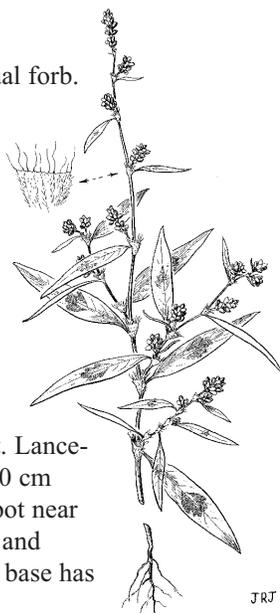
Identification

Growth form: Annual forb.

Flower: Flowers are pink or purplish and are carried in crowded, rounded, spike-like clusters at the ends of the stems or from the leaf axils.

Seeds/Fruit: Seeds are black, shiny, smooth, and 2–3 mm long. They are either 3-sided or lens-shaped.

Leaves: Basal leaves are absent. Lance-shaped leaves are alternate, 3–10 cm long, and usually have a dark spot near the middle. The stalks are short and thick and a papery sheath at the base has long hairs.



Stems: Stems are much branched and can be prostrate or erect, 0.2–1.0 m long.

Roots: Taproot.

Seedling: Smartweeds (lady's-thumb) and knotweed (*Polygonums*) have a papery sheath where the leaf joins the stem.

Similar Species

Exotics: Green smartweed (*Polygonum lapathifolium*) also has the distinctive dark blotch on the leaves, but it has white flowers and sticky yellow hairs on the underside of the leaf and lacks long, bristly hairs on the leaf sheath.

Natives: Forms of lady's-thumb that lack the typical dark blotch can be confused with water-pepper (*Polygonum hydropiperoides*). Water-pepper has rhizomes and the flowers are carried in slender racemes.



Impacts

Agricultural: A common weed of cereals, oilseeds, vegetables, berries, and forages. It competes with crops, causing yield reductions. Smartweeds (lady's-thumb) can delay harvesting since the large, succulent plants are slow to dry.

Ecological: Occurs along roadsides and ditches and in disturbed areas, especially where moist or shady. Sometimes found in riparian areas, such as in moist meadows and along lake or pond shorelines.

Human: No information available.

Habitat and Ecology

General requirements: Found along roadsides and ditches, on cultivated land, and in disturbed areas.

Distribution: Present in all agricultural regions but most common in southwestern BC, becoming less frequent in northern regions (Douglas et al. 1999). Common throughout southern Canada and the northern US.

Historical: Introduced from Eurasia.

Life cycle: Overwinters as seed. Germinates in spring and completes its life cycle in one season.

Mode of reproduction: By seed.

Seed production: No information available.

Seed bank: No information available.

Dispersal: Small seeds can be carried by water or wind. Seeds carried in mud can be carried on vehicles and equipment. Contaminated crop seed disperses the weed over long distances.

Hybridization: Not known.

Management

Biocontrol: None.

Mechanical: Hand-hoeing or harrowing can kill young plants. Repeated cultivation will stop emerging plants from setting seed and will eventually exhaust the seed bank. Frequent mowing in pastures and meadows will prevent seed-set.

Fire: Not known to control lady's-thumb.

Herbicides: There are many herbicides registered for control, depending on crop. Consult the most recent edition of BC Ministry of Agriculture, Food and Fisheries Crop Production Guides for specific recommendations. **Before applying herbicides, read the label for full use and precautionary instructions.**

Cultural/Preventive: Use clean, high-quality seed. Clean vehicles and equipment before leaving an infested area. Keep forage crops and pastures in a competitive state. Minimize disturbance to riparian

areas where control options are limited. Monitor these areas and remove new outbreaks by hand-pulling.

Integrated Management Summary

Early detection is important because this plant has a limited distribution in BC. Hand-pull plants and remove plant material from the site before a seed bank can establish. Apply appropriate herbicides on new infestations to prevent seed-set and dispersal. Seed disturbed areas to perennial grasses and forbs to provide cover and competition against lady's-thumb. Manage grazing animals to maintain perennial plant communities.

References

BC Ministry of Agriculture, Food and Fisheries. 1998. Weed Guide—Lady's-thumb.

Douglas, G. W., D. Meidinger, and J. Pojar, eds. 1999. *Illustrated Flora of British Columbia*. Vol. 4: *Gymnosperms and Dicotyledons (Orobanchaceae through Rubiaceae)*. Province of British Columbia.

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