

# Salix ×fragilis

## COMMON NAME

crack willow

## SYNONYMS

*Salix alba* L. × *S. euxina* I.V. Belaeva; *Salix fragilis* L.; *Salix ×rubens* Schrank

## FAMILY

Salicaceae

## AUTHORITY

*Salix ×fragilis* L.

## FLORA CATEGORY

Vascular – Exotic

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## BRIEF DESCRIPTION

Deciduous tree up to 25 m tall, branches not drooping but breaking easily, often with an audible crack (hence the common name), leaves narrow and lance-shaped, often with bright red swellings on them, flowers produced in spring about the same time as emergence of leaves, with long and narrow (up to 7.5 cm long and 1 cm across) yellow green in colour.

## DISTRIBUTION

Widespread and often abundant throughout New Zealand.

## HABITAT

Riparian margins of water bodies.

## FEATURES

Tree to 25m high, sometimes only a shrub; bark rough and fissured. Branches spreading but not pendulous. Shoots dark or brownish green, readily and audibly snapping when bent, not slender. Bud scales dark shining brown, becoming glabrous. Shoots and leaves somewhat silky when very young, but quickly glabrous. Petiole of leaves on reproductive shoots < 1cm long. Lamina 5–15 x 1–2.5cm, sometimes larger on water shoots, lanceolate, glaucous beneath, mainly shining above, glandular-serrulate; apex acuminate. Stipules minute. Catkins usu. male, rarely female, appearing with or after leaves. Male catkins 4–7.5cm long, spreading or curving downwards, narrow-cylindric; rachis villous. Bracts 2–2.5mm long, oblong-elliptic, incurved and generally cucullate when fresh, pale green or yellowish, densely clothed in antrorse hairs; apex rounded. Glands 2, 0.4–0.6mm long, elliptic-oblong, rectangular to square. Stamens 2; filaments hairy towards base. Female catkins similar to male. Ovary glabrous, sessile or shortly stalked.

## SIMILAR TAXA

Similar to other lanceolate leaved willows, but can be distinguished by the brittle green to reddish brown (rather than yellow) shoots, spreading rather than drooping branches and red galls on leaves.

## FLOWERING

September to October

## FLOWER COLOURS

Green



*Salix fragilis*. Photographer: John Smith-Dodsworth



*Salix fragilis*. Photographer: John Smith-Dodsworth

## FRUITING

Europe and West Asia

## LIFE CYCLE

Stem fragments dispersed by water and contaminated machinery.

## YEAR NATURALISED

1880

## ORIGIN

Europe, Western Asia

## REASON FOR INTRODUCTION

Erosion control for rivers and other waterways

## CONTROL TECHNIQUES

Can be controlled manually, mechanically or herbicidally depending on situation.

## TOLERANCES

The plant is intolerant of shade and highly tolerant of poor drainage. Physical damage and grazing result in resprouting.

## NOTES ON TAXONOMY

Recently recognised as a hybrid in Belyaeva, I. (2009) Nomenclature of *Salix fragilis* L. and a new species, *S. euxina* (Salicaceae). Taxon 58(4): 1344–1348. The hybrid between this entity and *Salix alba* = *S. ×rubens* is now included in the taxon *S. ×fragilis* as a synonym.

## ATTRIBUTION

Factsheet prepared by Paul Champion and Deborah Hofstra (NIWA). Features description from Webb et. al. (1988).

## REFERENCES AND FURTHER READING

- Webb, C.J.; Sykes, W.R.; Garnock-Jones, P.J. (1988). Flora of New Zealand Volume 4: Naturalised pteridophytes, gymnosperms, dicotyledons. Botany Division, DSIR, Christchurch.
- Popay et al (2010). An illustrated guide to common weeds of New Zealand, third edition. NZ Plant Protection Society Inc, 416pp.
- Johnson PN, Brooke PA (1989). Wetland plants in New Zealand. DSIR Field Guide, DSIR Publishing, Wellington. 319pp.
- Belyaeva, I.V. (2009). Nomenclature of *Salix fragilis* L. and a new species *S. euxina* (Salicaceae). Taxon 58(4): 1344-1348.

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/salix-fragilis/>