Salix xfragilis

COMMON NAME
Crack willow

SYNONYMS
Salix alba L. x S. euxina I.V. Belaeva; S. fragilis L.

FAMILY
Salicaceae

AUTHORITY
Salix fragilis L.

FLORA CATEGORY
Vascular – Exotic

STRUCTURAL CLASS
Dicotyledonous Trees & Shrubs

CONSERVATION STATUS
Not assessed

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, .4~.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

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

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

REFERENCES AND FURTHER READING

MORE INFORMATION