White-edged nightshade

Solanum marginatum

www.weedbusters.org.nz

Family
Solanaceae (nightshade)

Where is it originally from?
North Africa

What does it look like?
Much-branched, perennial shrub or small tree (<5 m tall) with a shallow taproot. White stems are covered with yellow prickles, and young branches have a hairy, white-felted appearance. Thick, broadly ovate leaves are indented, with green upper surfaces with white edges and prominent veins, undersides always white-felted, and prickles on both sides. White to pale mauve flowers with a yellow centre (Nov-Mar) are followed by poisonous, round, tomato-like fruit (<4cm) maturing from mottled green to yellow when ripe, and containing many brown seeds.

Photo: Trevor James

Are there any similar species?
Devil's fig (*Solanum torvum*) leaf margins lack the white edge and are less lobed. Apple of Sodom (*Solanum linnaeanum*) is more common, shorter and more shrubby, spines are shorter and yellow. Its leaves lack the white margins, and it has violet rather than white flowers.

Why is it weedy?
Seeds live a long time in the soil. Forms dense, impenetrable stands.

How does it spread?
Water, wind, contaminated soil and feed, machinery, wildlife and people. Fruit is not attractive to birds or other animals, but seeds can attach to animal fleeces and fur.

Photo: Trevor James

What damage does it do?
Thick stands displace native species in natural areas and create large ungrazable areas in farmland. Blocks access for animals and humans and may harbour pests such as rabbits and possums. Fruit is poisonous and dust from plants can cause respiratory irritation.

Which habitats is it likely to invade?
Scrub, poor pasture, wasteland, forest margins, sand dunes coastal areas. Prefers warm sunny situations in higher rainfall areas, favouring maritime habitats. More likely to be found in shaded areas but will grow on any soil type.

Photo: Trevor James

What can I do to get rid of it?
Note: Check with your local regional council first. This is classed as a pest plant in some regions and the council may be responsible for its control.
1 Physical removal - Grub or dig out prior to fruit maturing. Ensure gloves are worn if handling the plants to avoid injury from prickly leaves and stems.
2. Cut and paste - Cut the stem as close to the ground as possible. Apply a solution of diesel and triclopyr (20:1 diesel:triclopyr) or commercial formulations (120g triclopyr/l of oil or product containing triclopyr and picloram 50ml/L water mix) over the entire exposed surface of the freshly cut stump, i.e. top and sides.
3. Foliar spray - Apply herbicide using a hand held sprayer/knapsack. Use the label recommended adjuvant. Apply either glyphosate (360 g/L active ingredient at 20ml/L knapsack, 1L/100L gun and hose) plus organosilicone penetrant (2ml/L), to cover entire plant. Note: Glyphosate overspray will kill other (desirable) plants OR triclopyr herbicide (600g/L active ingredient at a 6ml/L) plus organosilicone penetrant 1ml/L OR picloram/triclopyr herbicide (picloram 100g/l and triclopyr 300g/l active ingredient at 6ml/L) plus penetrant to thoroughly wet all parts of plant. Note: Triclopyr and picloram herbicides are 'grass friendly' but overspray will kill other (desirable) broadleaf plants. Picloram has residual activity in the soil which may leach and kill other plants. Do not use under and around other (desirable) broadleaf plants.
CAUTION: When using any herbicide or pesticide, PLEASE READ THE LABEL THOROUGHLY to ensure that all instructions

and directions for the purchase, use and storage of the product, are followed and adhered to.

What can I do to stop it coming back?
Follow up initial control regularly to remove seedlings.