Broom

Cytisus scoparius

www.weedbusters.org.nz

Family
Fabaceae (pea)

Also known as
Synonym of: *Sarothamnus scoparius*, Common Broom

Where is it originally from?
Europe, Asia Minor, Russia

Photo: Trevor James

What does it look like?
Erect, much branched, almost leafless, deciduous shrub (<2.5 m) with a woody rootstock. Silky-hairy young twigs mature into woody, flexible green stems that are 5-ribbed and hairless. Leaves are divided into three sections (each 5-20 mm) that readily fall off the stems. Single or paired, golden-yellow (occasionally reddish), pea-like flowers (15-25mm, Sep-Apr) are followed by oblong green pods (30-60 mm) that turn black as they mature and eventually disperse seeds explosively, leaving empty coils hanging from the plant.

Photo: Trevor James

Are there any similar species?
Montpellier, Spanish and white broom. Tree lucerne, *Teline stenopetala*, and native *Carmichaelia* species are all similar.

Why is it weedy?
Prolific seeder that spreads rapidly, matures quickly, and colonises large areas, forming pure stands that dominate habitats. As it is a legume and can fix nitrogen in the soil, it can change the types of plants which can survive where it has been growing, disturbing the ecology of an area. Particular problem on riverbanks and lakesides, roadsides, forest tracks and firebreak areas. Tolerates warm to very cold temperatures, most well drained soil types, grazing, fire, and high to low rainfall.

Photo: Trevor James

How does it spread?
Explosive seed mechanism spreads seed 1-5 m from the parent plant, and they are also spread by machinery, soil and water movement, and possibly birds and feral pigs. Common seed sources include quarries, roadsides, forest tracks, metal dumps, fire breaks, exotic forests, skid sites, riverbeds, domestic gardens, and disturbed land.

What damage does it do?
Forms pure stands in many habitat types. Dominates low canopy habitats, preventing the seedlings of native species from establishing. Increased nitrogen in gumlands and other impoverished soil types may result in changing habitats and plant species being present to the detriment of specialised plants eg orchids, ferns, herbs, kauri, or can lead to further weed invasion.

Which habitats is it likely to invade?
River systems, shrublands, forest margins, low canopy habitats, coastline, tussockland, fernland, wetland, consolidated sand dunes, gumlands, regenerating and disturbed forest, and bare land.

What can I do to get rid of it?
Firstly establish plant is not native broom (*Carmichaelia sp*)
1. Physical removal - Hand pull small plants, or dig out entire plant including roots (all year round).
2. Cut and paste - Apply picloram gel (43g/l strength) or metsulfuron gel (10g/L strength) to the entire cut stem. Do not use near desirable plants or overwater or wetlands.
When a gel is inadequate 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) can be used. Apply the mixture over the entire exposed surface of the cut stump, i.e. top and sides.
3. Foliar spray (Late Spring to late Autumn) - Apply herbicide using a knapsack to small areas and plants <1m tall, or gun

and hose for larger infestations. Use the adjuvant recommended on the label.
Apply glyphosate (360 g/L active ingredient) herbicide at 20ml/L plus organosilicone penetrant (2ml/L) to cover entire plant. Note: Glyphosate overspray will kill other (desirable) plants.
OR apply metsulfuron herbicide (600g/kg active ingredient at 0.5g/L knapsack or 35g/100L gun and hose) + organosilicone penetrant (3ml/L).
*Note: Overspray will kill other (desirable) broadleaf plants and has residual activity in the soil which aids in killing below ground parts.
4. Biocontrol - For information about biocontrol agents for broom please visit:
https://www.landcareresearch.co.nz/discover-our-research/managing-invasive-species/weed-biocontrol/projects-agents/biocontrol-projects/broom
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?
Resprouts after slashing. Colonises bare areas, reinvades after non-selective spraying, fire or soil disturbance. Not long-lived, relying on seedling replacement. Light lover, so is succeeded in tall canopy habitats by taller native species where their seedlings exist (not in kauri or tanekaha forest). These sites can be left, regeneration can be speeded by slashing, selective spraying or replanting of shade-creating species. Clear roads, metal dumps, quarries. Maintain pest and livestock control, as broom is not browsed as readily as native species and recovers more quickly from browsing.