Japanese walnut

Juglans ailantifolia

www.weedbusters.org.nz

Family
Juglandaceae (walnut)

Also known as
Juglans sieboldiana, heartnut

Where is it originally from?
Japan

What does it look like?
Wide spreading deciduous hardwood tree (<15 m tall) with fissured bark and shoots with glandular hairs. Brown buds open into alternate divided leaves (<60 cm long) on a stalk (<40 cm long). Leaflets (6-18 x 3-8 cm) in groups of 9-17 are usually hairless above, densely hairy on veins below, with sparsely serrated edges. Single male catkins (<15 cm long) hang from stems, where female catkins are on erect spikes and are usually covered with purple hairs. Groups of 9-22 small flowers with prominent pink stigmas (Oct-Nov) are followed by clusters of 10-22 sticky, downy, rust-coloured fruit (25-40 mm) containing hard, thick-shelled nuts.

Are there any similar species?
Juglans regia (<20+ m tall), has 5-9 entire leaflets, and nuts (35-55 mm long) in clusters of 1-3. North American black walnut (*J. nigra*) has serrated leaves, few nuts, each irregular and sharply ridged.

Why is it weedy?
Long-lived (50 yrs +), canopy tree, prevents recruitment. Produces many, long-lived seed. Probably allelopathic. Tolerates hot to cold, wet to dry, semi shade.

How does it spread?
Water, occasionally dumped nuts. possibly by pigs or possums. Old homesteads and plantations.

What damage does it do?
Forms tall stands to canopy, not succeeded. Favoured by rats. Blocks waterways.

Which habitats is it likely to invade?
Disturbed forest and shrubland, especially edges of watercourses downstream from plantations.

What can I do to get rid of it?
1. Physical removal - Pull or dig seedlings or small plants (all year round).
2. Cut and paste: Cut the stem/trunk as close to the ground as possible and cover the entire stump with herbicide as soon as possible after cutting. Apply metsulfuron gel (10g/L strength) or picloram gel (43g/l strength) to the entire cut stem.
3. Drill or frill - Drill downward sloping holes around the circumference of the trunk about 8-10 cm apart, or Frill (make deep cuts into the sapwood at regular intervals around the base of the tree, taking care not to ring-bark the plant). Fill the holes or saturate the cuts with metsulfuron-methyl 600 g/kg (20-50g/L + penetrant)
4. Foliar spray - Apply herbicide using a hand held sprayer/knapsack to plants <1m tall or gun and hose for larger infestations. Use the label recommended adjuvant. Apply metsulfuron herbicide (600g/kg active ingredient at 5g/10L knapsack or 20g/100L gun and hose) plus organosilicone penetrant (3ml/L) Note: Metsulfuron overspray will kill other (desirable) broadleaf plants and has residual activity in the soil which aids in killing below ground parts. Do not use over or near water

Photo: Trevor James

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bodies or wetlands and use only as directed on label.
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.