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Ministry of Natural Resources

DOG-STRANGLING VINE

Cynanchum rossicum and C. louiseae

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Background

Dog-strangling vine describes two invasive plant species from Eurasia that are members of the milkweed family; *Cynanchum rossicum* and *Cynanchum louiseae*. These plants were introduced to the northeastern United States in the mid 1800s and have been present in the Toronto area for many decades. These herbaceous perennial vines can grow from one to two metres in height by twining on to trees and other plants. In open areas, they form dense patches that 'strangle' other plants and small trees.

Range

Both species are widely distributed throughout southern Ontario (Figure 1). *Cynanchum rossicum* can be found between Ottawa and London. *Cynanchum louiseae* has a similar distribution but is less common.

Description

Leaves are dark, shiny green, opposite, oval to oblong in shape, 5-10 cm long, with rounded bases and pointed tips (Figure 2). Flowering begins in late June as clusters of small pink, red-brown or maroon flowers are produced at stem tips and upper branches (Figure 3). Fruit are thin, 4-6 cm long pods that split open to release several fluffy white seeds similar to native milkweed. An extensive rooting system allows these plants to re-sprout after above-ground shoots have been cut.

Distribution and Habitat

Dog-strangling vine can grow in a wide range of habitats. It prefers open sunny areas but will grow very well in filtered shade, e.g. within pine plantations (Figure 4). It grows along fence lines, travel and utility corridors, and other unmanaged areas. It is a perennial plant that reproduces by seed and by underground rhizomes.

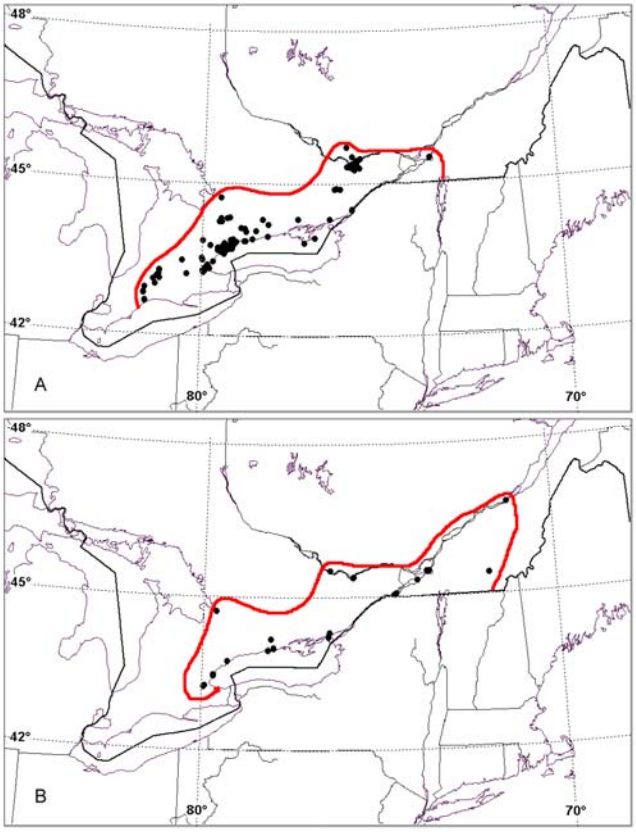

Figure 1 *Distribution of C. rossicum (top) and C. louiseae (bottom) in Ontario.*

Ecological Impact

Both species form dense patches that overwhelm other ground vegetation. Many environments including prairies, alvars, shorelines, conifer

plantations and natural forests are being affected, or are vulnerable. Both species are expected to continue to spread across Canada. Along with other ecological impacts, *C. louiseae* is a hazard for monarch butterflies. Females lay their eggs but larvae do not survive on this species.

Figure 2 *Dog-strangling vine leaves.*

Figure 3 *Dog-strangling vine flowers.*

Management and Control

Landowners should learn to identify dog-strangling vine and monitor their property to prevent this plant from becoming established. Dog-strangling vine may be most easily seen in late summer when plants turn bright yellow and pods are fully developed. Think about limiting your travel through areas infested with dog-strangling vine during seed dispersal (late summer and fall). Seeds should be removed from boots and clothes, pets, bicycles and other equipment when coming out of infested areas.

Gardeners can fight dog-strangling vine by removing the plant or applying herbicides. It is possible to eradicate the plants by digging them out during the first year of establishment. Since they can re-sprout from root fragments left in the ground, it is necessary to make sure all roots are removed. Manually pulling plants become more difficult in the second year because the roots have become stronger and larger. Seed spread can be controlled if the plants are cut back or pulled before they go to seed.

Figure 4 *Red pine stand after invasion by dog-strangling vine.*

Larger infestations can be controlled by applying herbicides, although more than one application may be required. Remember to check product labels and always follow label instructions.

Mowing/cutting and burning are generally ineffective, although persistent mowing before the plants go to seed can help if repeated over a few years.

Dog-strangling vine is a plant that is difficult to control. Several research groups are searching out and investigating biological control agents such as insects and diseases that are specific to dog-strangling vine and may one day slow its spread and limit its invasiveness. It may take many years before any such agents are found, evaluated and proven safe for release into the environment.

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