

Nova Scotia Noxious Weeds

White Cockle - *Lychnis alba* Mill.

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White cockle is a biennial or short lived perennial. It forms a rosette of leaves in the first year, and produces flower stems in the second. The leaves and stems are covered with short, spreading hairs. The stems grow from 30 to 100 cm tall, and are swollen at the nodes. Night flowering catchfly is often mistaken for white cockle, but it has sticky stems, while the white cockle stems are not. The margins of the leaf blades are often slightly wavy or wrinkled. The middle and upper leaves of the stem are not stalked, and do not have toothed margins. The leaves range from 2.5 to 10 cm in length, and are elliptical, tapering to a point. Leaves are in opposite pairs on each node.

The taproot of white cockle may be up to 40 cm deep. Thick, fleshy roots branch off from the main taproot and spread outward in the soil.

The fragrant flowers of white cockle occur on individual stalks in a branching pattern, and have 5 deeply lobed petals. The flowers are usually white, although pink ones have been found and are believed to be hybrid forms.

Smooth, hairless seedpods are formed following flowering and are 10-15 mm long. They usually remain surrounded by the calyx tube of the flower. Each seedpod contains up to 500 seeds, and there are, on average, 50 seed pods per plant. This plant flowers and sets seed throughout the summer.



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White cockle originated in Europe and was probably brought to North America in crop seed. It may also have been introduced as a result of grain ships dumping their rubbish onto ballast heaps in harbour areas. It requires a relatively long season in order to ripen its seed and is prevented from spreading northward by this limitation. It is also known as evening lychnis or white campion.

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Life Cycle

White cockle is a biennial or short lived perennial spread by seed, but root and stem fragments can produce new plants as well. It is a very prolific seed producer as a single plant may produce over 25,000 seeds in one year. This makes it difficult to eradicate. If the plant is damaged while in the rosette form, it may remain in this form for successive years, becoming a short lived perennial. Once it has flowered and set seed, the plant will die.

Habitat

White cockle prefers dry, well aerated soils, and will not proliferate in waterlogged soils. It is most commonly found in hayfields, grainfields, along roadsides and railway tracks, or in waste places.

In Nova Scotia, white cockle is found primarily on the northwestern side of the province, in Kings and Annapolis counties.



Effects

White cockle is a major weed of field crops throughout Canada and the United States, especially alfalfa, clover, and small grains. Its seeds are a common impurity in clover and forage. It is a nuisance in any field crop and a prolific seed producer which will spread rapidly unless controlled.

Control

White cockle can survive regular cultivation due to its high seed production and regeneration of plant fragments. It is essential to prevent white cockle from going to seed.

It is very resistant to herbicides, including 2,4-D and MCPA. Some control of white cockle may be obtained using dicamba applications in the spring and early fall. For specific recommendations and application rates for this herbicide, consult your weed inspector or the latest Guide to Weed Control (Publication 75).

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