Narrow-leaved bitter-cress

(Cardamine impatiens)





Key ID Features

Leaves: Leaves at the base of the stem form rosettes, pinnately compound with 5-11 leaflets. The leaflets are oblong to lance-shaped and become smaller higher up the stem.

Flowers: Flowers are Small and white, about 2-3 mm and have 4 petals in a cross shape. Bloom from late spring to early summer.

Fruit: Seeds are stored in a narrow seed pod that is 1-2 inches long held close to the stem. The seed pod is explosively dehiscent when mature (seed pod bursts open and disperses seed forcibly).

Stem: Stem is slender, smooth, and upright, greenish to purple in color and can grow up to 1-2 feet tall.

Root: Shallow fibrous root system with a short taproot.

Growth Habit: Narrow-leaved bitter-cress is an annual or biennial plant that can grow up to two feet in height. The plant's small white flowers bloom from May to September. This plant is able to spread easily due to its seed-shooting ability. Each flower contains ten to 24 seeds. Seeds are also spread by water and can stick to clothing and animals.



The Impact

- Rapidly grows in forests, meadows, and moist environments, reducing biodiversity.
- The seeds are extremely resilient to harsh conditions, germinating after deep freezing and exposure to standing water.
- Seeds are easily spread by human activity as well as wildlife.

Quick Facts

Plant Family: Mustard Family (Brassicaceae)

Origin: Central and Eastern Europe as well as Western and Central Asia

Habitat: Early successional forest, forest edges, floodplain forest, herbaceous wetlands, rivers and streams, roadside, vacant lots, yards, and gardens.

Present in Vermont?: Yes

Method of Spread: This plant is able to spread easily due to its seed-shooting ability. Each flower contains ten to 24 seeds. Seeds are also spread by water and can stick to clothing and animals.

Native Plant Alternatives



Virginia Waterleaf (<u>Hydrophyllum</u> <u>virginianum</u>)

A shade tolerant rapid grower that provides erosion control and pollinator support.



Two-Leaved Toothwort (<u>Cardamine diphylla</u>)

One of the earliest bloomers in spring, critical for spring bees. forms natural spring carpets on forest floor.

Method of Introduction

It is not known how narrow-leaved bitter-cress came to the United States from Europe. However, the first record of the plant in New England was from Peterboro, New Hampshire in 1916. The plant then appeared in Connecticut, followed by a subsequent spread across Connecticut, and later reports from Massachusetts (1991), Vermont (1992), and Acadia National Park in Maine (1994).

Common Look-alike

Pennsylvania bitter-cress (<u>Cardamine pensylvanica</u>)



Distinguishing features:
Pennsylvania bitter-cress has
more rounded toothed leaflets
and the overall plant is shorter
around 6-18 inches versus
narrow leafed bitter-cress
which is around 1 to 2 feet tall.

Control Information

To learn more about identification & control options, check out the Gallery of Land Invasives on WTinvasives.org and these additional resources:

Minnesota DNR, Wisconsin DNR, Uconn

References: Forestry images, New York Invasives, Minnesota Wildflowers

