Rubus phoenicolasius, **Wineberry**

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Common Name:	**Wineberry**
Scientific Name:	*Rubus phoenicolasius*
ID Description:	Wineberry is related to other raspberries and blackberries, and shares characteristics of both. Like raspberries, wineberry has silvery underleaves, a fruit core that remains on the stem when the ripe fruit is picked, and thorns. It is differentiated from other raspberry species by the fine red hairs that grow densely on its stems (and flowers) causing a reddish hue to the plant. Wineberry has small, greenish, hairy flowers with white petals and produces vibrant red glossy fruit.
Current Distribution in US and VT:	The North American distribution is from eastern Canada, New England and New York south to Georgia and west to Michigan, Illinois, and Arkansas. It is considered invasive in Maryland, Pennsylvania, Tennessee, Virginia, North Carolina, West Virginia, and the District of Columbia. According to iNaturalist, there are 2 unconfirmed possible locations in Vermont, Brattleboro and Burlington.
Habitat:	It prefers moist conditions and full sun to partial shade. It grows in forests, fields, streams and wetland edge habitats, open woods, savannas and prairie habitats. Many species of birds and mammals use the brambles for nesting and shelter.
Regulated/restricted in these Northeastern states:	MA, RI, NY, PA, MD, DE
Concern:	Wineberry creates spiny, impenetrable thickets that reduce an area's value for wildlife habitat and recreation. Wineberry replaces native vegetation, including native edible berry shrubs, thus decreasing food resources for wildlife.
Means of Introduction and Spread:	It was introduced to North America in the 1890s as breeding stock for raspberries. It was found invading natural areas by the 1970s, and it is currently recorded in most states east of the Mississippi River and in Alabama (USDA PLANTS Database). Wineberry spreads through seeds dispersed by animals consuming the fruit and through rooting of plant cane tips (vegetative).

Plant Pest Designation Rationale

Ecological Threat:

Wineberry's growth habits, prolific seed production, and ability to form dense thickets enables this plant species to outcompete native vegetation and disrupt ecosystem dynamics. It is more aggressive than many of the native raspberry and blackberry species, and has a wider range of tolerance for light, soil type, and moisture. Its establishment in forest understories as disturbance occurs can lead to its spread even in mature forests. Research conducted by Blossey and Skinner (2001) highlights the ecological impacts of *Rubus phoenicolasius* in invaded habitats, particularly in forests and riparian areas. The study found that wineberry can alter soil properties, reduce native plant diversity, and disrupt ecosystem processes, such as nutrient cycling. Furthermore, its ability to spread rapidly through both seed dispersal and vegetative reproduction exacerbates its ecological threat.

In addition to its direct ecological impacts, wineberry invasion can also have indirect consequences for native wildlife. For example, the displacement of native vegetation by dense wineberry thickets can reduce habitat availability and foraging opportunities for native species, potentially leading to declines in biodiversity.

Economic Impact:
The economic impact of wineberry infestation in the northeast United States can be substantial, affecting various sectors such as agriculture, forestry, and recreation. While specific economic studies on wineberry infestation may be limited, research on the economic impacts of other invasive plant species can provide valuable insights into the potential costs associated with managing wineberry.

A study by Pimentel et al. (2005) estimated the economic costs of invasive species in the United States, including impacts on agriculture, forestry, and recreational tourism. The study found that invasive plants, in general, impose significant economic burdens through reduced crop yields, increased management expenses, and losses in ecosystem services. Wineberry's ability to outcompete native vegetation and form dense thickets can lead to similar economic consequences, such as reduced timber production, decreased agricultural productivity, and increased costs associated with invasive species management.

Feasibility of control and spread prevention:
Mechanical methods, such as manual removal and mowing, can be effective in reducing wineberry populations, especially in smaller infestations and sensitive habitats where herbicide use may not be desirable. A study by Guo et al. (2020) evaluated the efficacy of different mechanical control methods for managing invasive plants and found that manual removal combined with follow-up treatments can significantly reduce plant cover and prevent re-establishment. This approach can be adapted for controlling wineberry infestations in the northeastern US, particularly in natural areas and conservation sites.

Wineberry plants choking understory of second growth forest

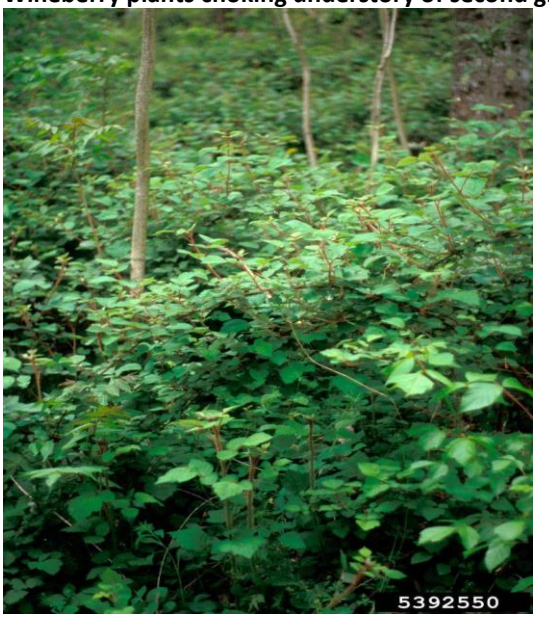
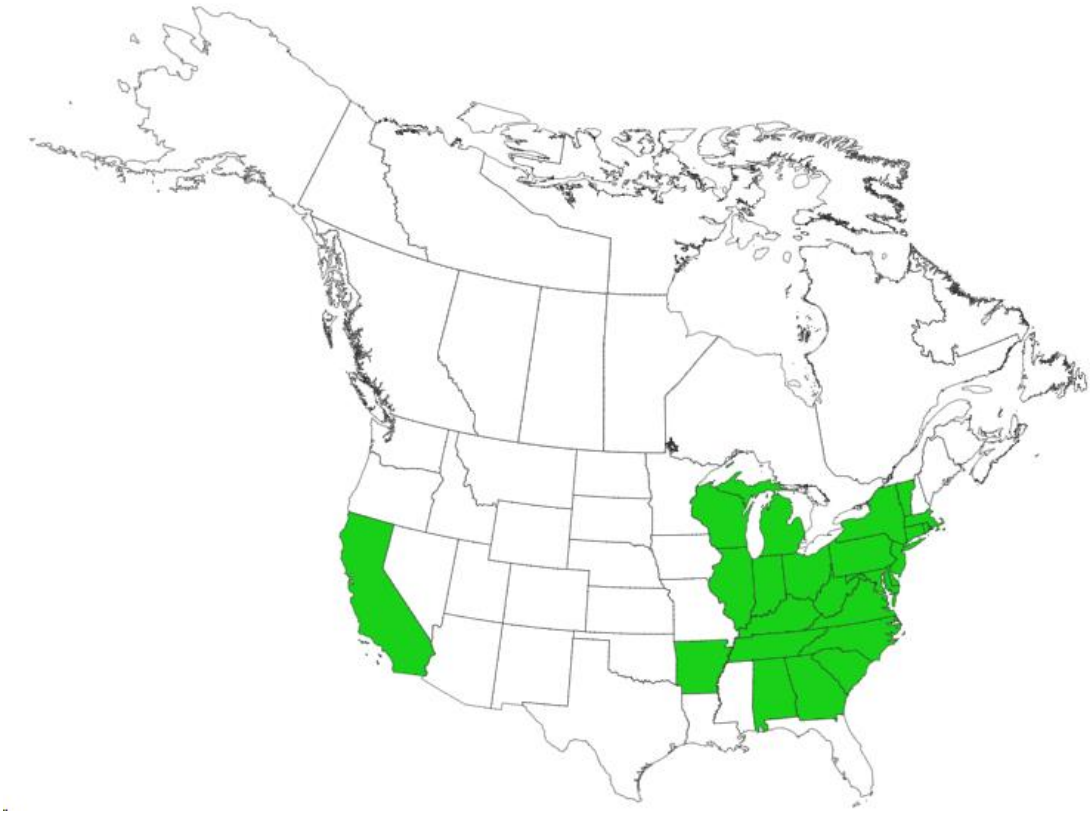


Photo: John M. Randall, The Nature Conservancy. Bugwood.org

Reported US distribution of *Rubus phoenicolasius* in EDDMaps



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*This content was edited with the assistance of a generative artificial intelligence, ChatGPT. The content has been reviewed and verified to be accurate and complete and represents the intent of the Plant Health Section of the VT Agency of Agriculture, Food and Markets.