Invasive Species Profile: Himalayan Blackberry (Rubus armeniacus)

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Native Range: Armenia U.S. Introduction: 1885 Life Cycle: perennial shrub

<u>Means of Spreading:</u> runners along roots; berries, eaten by birds which

pass the seeds

<u>Commercially Available:</u> yes, though often hybridized with other species

<u>Control Method:</u> hand-pull <u>Good Alternative Species:</u> black raspberries (*Rubus occidentalis*)

<u>Comments:</u> Raspberry and blackberry species fall under the genus, *Rubus*. Precise naming can be difficult due to factors such as classification criteria and hybridizations. Of the nearly 250 species, around 13 are found in Fairfax County of which 10 are native. The Himalayan blackberry



Figure 1. Himalayan blackberry's emerald green leaves usually have seven (sometimes three) leaflets. Both leaves and stems possess barbs.

(*Rubus armeniacus*, previously *R. discolor*), which actually originated from Armenia, is one of the non-native species now in the county. It was introduced to the United States in 1885 for horticultural purposes. At that time, Himalayan blackberries gained fame for their berries and people actively brought them into gardens all around the world. Though some folks argue that these fruits lack the tastiness of other blackberries and raspberries, botanists cross-bred Himalayan blackberries with different *Rubus* species or earlier hybrids. As a result, Chehalem blackberries, Marionberries, and Silvanberries all share Himalayan blackberry lineage. These crosses are artificial, but studies suggest that some hybridization—and genetic contamination—is happening in the wild, too.

The Himalayan blackberry escaped cultivation and spread rapidly due to birds and mammals eating the fruits and then depositing the viable seeds elsewhere. While invasive plants often prefer germinating in recently churned soil (e.g., cleared or tilled within several years), Himalayan blackberry seeds sprout and grow anywhere from fields and gardens to mature, undisturbed forests. Once established at a spot, the plant sends rhizomes from which other new shoots emerge. Their spiny branches reach up to 10 feet long, making it the largest *Rubus* member growing in Northern Virginia. These branches have five sides; looking down a perpendicular cut, one sees a pentagon. Some of the branches die back in the winter and the shrub generates lengthy branches from mature roots within a growing season. Unable to support their







Figure 2. Himalayan blackberries five-petaled blossoms (A) are white. Their flowers are similar to other *Rubus* and <u>multiflora rose</u>, which also bloom in May. Himalayan blackberry fruits (B) ripen in July and have larger fruits than their relatives. Thin, vicious spines (C) may pierce leather gloves. These thorns are at a nearly 90° angle to the flat-sided stem.





Figure 3. In June, a cluster of native black raspberries (A) offers a tempting snack for wildlife while a daddy longlegs rests on a leaf to the right. Black raspberry leaves have three leaflets (B). Their powdered branches start off green but turn purplish by winter. The slightly hooked thorns are smaller than those of Himalayan blackberries.

own weight, the branches arch down and send roots anywhere they have prolonged soil contact. Whereas the berries nourish some wildlife during the short fruiting season, an insufficient number of other organisms, including pathogenic microbes, eat the roots, stalks, or foliage throughout the rest of the year. The result is sprawling tangles of thorny, ecologically worthless weeds that displace valuable native flora.

The best way to eradicate Himalayan blackberry is by pulling it out and extracting all of the roots. Those rhizomes are shallow and have a simple, cable-like structure yet they extend quite a distance from the mature plant. Since the root can break and a new plant may grow from the remaining fragment, getting all of the rhizome is imperative. Routinely cutting and digging eventually kills this weed, though it may take several months to a year or so. Depending on the type and time of year, herbicide treatments have varying results and should not be used if people are still nibbling on the berries. When applying herbicides, always follow the product labels and wear appropriate personal protection equipment, including chemical-proof gloves and safety glasses.

For each invasive weed, there are native alternatives. In this case, black raspberries or blackcaps (*R. occidentalis*) fit the bill! Compared to Himalayan blackberries, the black raspberries have slightly smaller branches with circular bisects and a whitish powder coating. They have three (occasionally five) leaflets filling each leaf and the foliage with a blue patina. Cultivars, such as "Munger" and "Jewel," are available; purchasing wild types helps preserve genetic diversity. Common dewberries (*R. flagellaris*) and swamp dewberries (*R. hispidus*) are native blackberries with vinelike stems trailing close to the ground.

The next edition discusses another invasive *Rubus* member, Japanese wineberries (*R. phoenicolasius*). Access the article by clicking <u>here</u>.

For more information on Himalayan blackberry:

https://www.invasiveplantatlas.org/subject.html?sub=6338

https://www.invasive.org/gist/moredocs/rubarm01.pdf

https://www.cal-ipc.org/wp-content/uploads/2017/12/posterClark.pdf

https://www.cabi.org/isc/datasheet/116780#tosummaryOfInvasiveness

https://kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/weed-identification/blackberry.aspx#:~:text=Himalayan%20blackberry%20is%20a%20Eurasian%20species%20introduced%20for,impacts%20to%20native%20plants%2C%20wildlife%2C%20recreation%20and%20livestock

https://www.nwcb.wa.gov/images/weeds/Rubu_armeniacus.pdf#:~:text=Rubus%20armeniacus%20was%20introduced%20intentionally%20into%20North%20America,Caucasus%20region%20in%20Eurasia%20%28Caplan%20and%20Yeakley%202006%29

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