

## **You Ain't from Around here! Exotic invasive of the Quarter: Wine raspberry (*Rubus phoenicolasius*)**

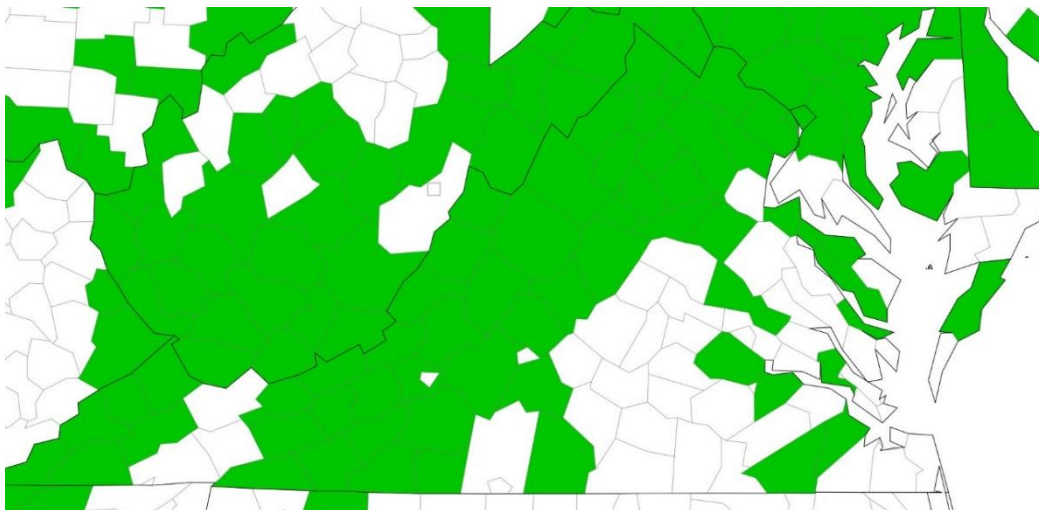
**By: Jennifer Gagnon, Virginia Tech**

Funny how sometimes the most obvious things get overlooked. One obvious exotic invasive that I have overlooked, at least in terms of education and outreach, is the wine raspberry. Perhaps I subconsciously avoided calling it out because I truly believe it is the most delicious of the exotic invasives. Nothing says summertime more loudly than a bowl full of freshly picked blackberries and wine raspberries. The brilliant red raspberries contrast beautifully with the dark blackberries. And baked into muffins - yum-o! They are also pleasant to pick – their canes are more flexible and have small slender prickles instead of the woodier more rose-like thorns found on other members in the *Rubus* genus. Unfortunately, the Virginia Department of Conservation and Recreation has this member of the rose family listed as a highly invasive species.



***Wine raspberries are delicious freshly picked or in baked goods. Picking and eating these can help prevent wildlife from further distribution of this exotic invasive. Photo by: Jennifer Gagnon, Virginia Tech.***

Native to China, Japan, and Korea, the wine raspberry was introduced to the United States in 1890 as an ornamental and as breeding stock for new raspberry cultivars. However, it escaped cultivation and can now be found from Vermont to Georgia, and west to Michigan and Arkansas. In Virginia, it is most commonly found along the Blue Ridge and into



***Map of counties in Virginia where wine raspberry has been reported. Map by EDDMaps.***

northern Virginia; however, it is also found on the Northern Neck and in a few counties in SE Virginia.

Wine raspberries grow vigorously and form extensive, dense thickets, displacing native species. They are also very good at reproducing. They produce copious amounts of fruits annually – fruits that are then eaten and widely distributed by birds and mammals. New wine raspberries grow from these seeds. Additionally, if a cane bends over and touches the ground, it can create a new plant at the point of contact.

The root systems of wine raspberry are perennial; however, the individual canes only live for two years. The first year a cane emerges, it is called a primocane. The primocane grows straight, up to 9 feet tall, and has large compound leaves with three leaflets and white hairy undersides. The primocanes do not typically produce flowers. The second-year cane is called a florican. The florican does not grow taller, but produces several side shoots that bear smaller leaves. The flowers, and eventually fruits, are produced on these side shoots.

Wine raspberry grows well in disturbed areas, such as along roadsides, field edges, and in old fields. It prefers moist soil and grows near wooded areas. Native look-alikes include many species of blackberry and raspberry and occupy these same habitats.

### **How to identify wine raspberry:**

**Form:** Small, multi-stemmed shrub.

**Canes:** Up to 9 feet tall; covered in small slender prickles and tiny red hairs.

**Leaves:** Alternate, compound with three toothed leaflets. Undersides covered in dense, silvery-white hair. Approximately 4 inches long.

**Flowers:** Produced in the spring on short, very bristly racemes on the tips of the side shoots of the florican. Full bloom is in late May to early June. The white-petaled flowers are 0.2 - 0.4 inches in diameter with 5 purplish red to pink petals and a bristly calyx. Sepals, which surround and resemble petals, are hairy and longer than the petals.

**Fruit:** An aggregate of drupelets (not a true berry). Fruits are juicy (delicious!), bright shiny red, and 0.4 inches in diameter. They ripen in June to July (here in the New River Valley, they overlap with blackberries and last year blueberries as well). As the fruit develops, it is surrounded by a protective calyx covered in hairs that exude tiny drops of sticky fluid, reminiscent of a sundew and other carnivorous plants. However, wine raspberry is not a carnivorous plant. It does not get nutrients from insects caught in the sap, the sticky mucilage contains no digestive enzymes, and the surrounding tissues cannot absorb nutrients.



### How to control wine raspberry:

**Manual:** Hand pull plants or use a 4-prong spading fork if the soil is moist. Branches with berries should be bagged (or eaten) and the remaining plant material can be left to compost. Sites can be burned or mowed several years in a row. Mowing several times a year will reduce vigor.

**Chemical:** Wine raspberry can be controlled chemically using a systemic herbicide, such as glyphosate (a general herbicide that will kill all vegetation it contacts), or triclopyr or metsulfuron-methyl, both of which are broadleaf-specific. Concentrations mixed to the manufacturer's specifications can be applied to the leaves. Additionally, a cut stump application of glyphosate or triclopyr in the fall can be effective.



*Wine raspberry leaves are alternately arranged, compound, with three toothed leaflets (top). Unopened (center) and opened (bottom) wine raspberry flowers. The flower itself is comprised of 5 white petals. These are surrounded by five hairy sepals that help protect and support the flower. Photos (left to right) by: John M. Randall, The Nature Conservancy, Troy Evans, Great Smoky Mountains National Park and Leslie J. Mehrhoff, University of Connecticut.*

I have wine raspberry along a road on my property. My control efforts thus far have involved trying to consume as many berries as humanly possible. I fear I am losing the battle - but at least it is a delicious one.

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