(Figure 1- The broad green leaves of ramps. Photo: Eric Burkhart, Penn State)

Plant Atlas: Ramps (*Allium tricoccum*)

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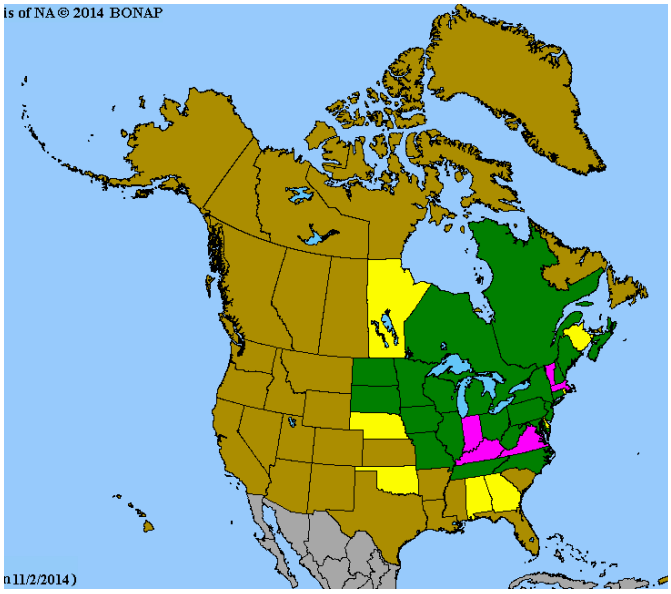
Description:



(Figure 2- Ramp dispersion map, green=native, magenta=Noxious. BONAP North America Plant Atlas)

Known regionally as ramps, wild leek, spring onion, or ramson, *Allium tricoccum* is a member of the onion family (Alliaceae). Ramps geographic distribution follows the Appalachian mountains and into the midwest (as seen in figure 2) preferring to grow in cool, moisture rich forests.

They are herbaceous perennial plants, sprouting from a bulb. The leaves of a ramp are basal, with lanceolate green blades that sprout from a reddish stem that sprout early into the spring. This early emergence is to compete with the forest canopy for sunlight. Into summer, the leaves will die away, a small white and yellow flower will then emerge with umbel arrangement, later fruiting post pollination. (Fg.3) (Fg.4). Ramps will not flower until after a 5 year gestation period. Post pollination, ramps will grow 3 berries, where it gets its scientific name *tricoccum,* meaning three-berries.

(Figure 3- Ramp flower. Photo: Eric Burkhart, Penn State)

(Figure 4- Ramp berries. Photo: Eric Burkhart, Penn State)

Ramps can be confused with poisonous/ deadly plants such as lily-of-the-valley (*Convallaria majalis*) and false hellebore (*Veratrum viride*); to tell if the plant is a ramp, crush it between your fingers and search for a garlic or onion-like scent.

Biological and Ecological Significance:

BONAP (Biota of North America Program) lists ramps as a noxious weed in certain states including Virginia. According to "Plant Database: *Allium tricoccum"* (2023) by the Lady Bird Johnson Wildflower Center (a derivative of The University of Texas: Austin), ramps contain trace amounts of toxic sulfides. These compounds only pose a risk when eaten in large quantities, hence why they pose a threat to livestock like cattle.

Ramps are colonial, covering large patches of understory. Due to their early sprouting and flowering in comparison to other plants, ramps play an important role as an early food source and an early pollinator. Many types of native bees and syrphid flies will visit the flowers to obtain nectar and/or pollen(Susan Mahr, 2022). This not only assists the fauna in its native range find food and nectar in the early months of spring when not many plants are growing yet, but assists ramps reproduce before other plants work to outcompete them. Ramps also have a short season where they produce leaves, only sustaining them to photosynthesis for 3 months out of the year (Cathryn Pugh, 2023)

Although ramps are considered noxious, in many places they see threat from over harvesting. Susan Mahr, University of Wisconsin – Madison (2022) states that "The intensive harvesting … is seriously damaging the wild populations of ramps in some areas as they are being harvested in unsustainable quantities." Being that ramps take 5 years of growth before they can reproduce, over harvesting can severely damage populations of wild ramps.

Cultural importance:

Being used as a food source, medicinal uses, and cultural festivals, ramps are a staple of Appalachian and Indigenous culture. The influence of ramps extends past Appalachia, according to the University of Illinois Chicago, the city of Chicago is named after the Myami Peoples word for ramps as well as the region: *Shikaakwa.*

A multitude of indigenous groups across eastern North America have many uses for ramps. According to the Native American Ethnobotany Database, the Cherokee, Iroquois, Menominee, Ojibwa, and Potawatomi peoples use ramps as a major source of food. The Menominee would dry out ramps to preserve for winter, whereas the Cherokee would cook, boil, or fry up ramps with proteins like eggs.

Ramps also served a medicinal use. The Cherokee people found multiple uses for ramps including but not limited to: Antihemorrhagic in the form of a tonic, cold remedy, warmed juices for an earache, and a croup treatment. Other nations and tribes used ramps to treat worms, nausea, and as an overall cleanser. (Native American Ethnobotany Database)

Ramps are a major part of Appalachian culture. Communities in Virginia and West Virginia hold yearly festivals for ramps. For example, the town of Richwood, West Va considers itself the “Ramp Capital of the World.” Yearly, volunteers come together to feed around one thousand patrons in the "Feast of the Ramson," where ramps are served with beans, bacon, ham, potato wedges, cornbread, and ramps fried in bacon fat. Other products include ramp salsa, ramp jelly, and pickled ramps. (Jess Schreibstein, NPR, 2013). When commenting on this community's commitment to the festival, a volunteer stated "Well, it's simple, we just love ramps!" (Register Herald, 2019)

(Figure 5- Tim Kaine Visiting Whitetop Va Ramp Festival. Photo: Tim Kaine, Facebook)

Local to Emory and Henry, the town of Whitetop, Va celebrates its ramp festival every year to support the Mount Rogers Fire Department. The festival includes a BBQ serving ramps as its main course, a ramp eating contest, vendors, and live music (Whitetopva.org). Senator Tim Kaine (Fg.5) remarks “I had a blast talking to good folks and eating good food at this year’s Ramp Festival in Whitetop yesterday!” (Tim Kaine, 2024)

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Photo Citations:

Figure 1, 3, 4

Norman, C., & Pugh, C. (2023, March 20). *Ramps (allium tricoccum)*. Penn State Extension. https://extension.psu.edu/ramps-allium-tricoccum

Figure 2

Bonap maps by states and provinces. 2014 BONAP Maps by States. (n.d.). https://bonap.net/FieldMaps/Home/SingleMap?taxonId=357&mapType=County

Figure 5

Tim Kaine. Facebook. (n.d.). https://www.facebook.com/timkaine/posts/pfbid0t8b2HBATzNxJBMdm7kpfaHugyy6PPSf21ddFi3emWpKAHWL1KjQMEkrAm9tNAr3Hl