

Perilla Mint

Larry Steckel, Assistant Professor, Plant Sciences
Neil Rhodes, Professor and Department Head, Plant Sciences

Perilla Mint *Peri indicutescens* (L.) Britt.

Also known as: beefsteak plant, common perilla, purple perilla, purple mint, shiso, Chinese basil, wild basil, blueweed, Joseph's coat, wild coleus, rattlesnake weed

Classification and Description

Perilla mint is a member of the Lamiaceae or mint family. About 200 genera and 3200 species make up the mint plant family. Perilla mint is an erect, herbaceous annual that can grow to heights of 2 feet. It is native to East Asia. The cotyledons are longer than they are broad, with the broadest portion near the tip. The leaves are simple, opposite and can be purple or green tinged with purple, making it an attractive plant. Leaves have coarsely serrated (toothed) leaf margins pointed toward the tip and can be up to 5 inches wide and 7 inches long. Leaves are egg-shaped, with the largest part nearest the base. The stems of perilla mint are square in cross section, erect, hairy, somewhat branched and green or purple. Many small, white to purplish-white flowers with a ring of hairs in the throat are clustered in the terminals of these plants. Reproduction is by seed. Perilla mint has a shallow taproot and fibrous roots.

Weed Status and Injury

Perilla mint causes more cattle deaths in Tennessee than any other toxic plant. Perilla is very poisonous to cattle and other ruminants, as well as horses. All plant parts are toxic, especially the flowering structures. Dried plants in hay can be toxic, but the greatest risk is associated with consumption of fresh plant material, especially if flowers and fruit are present. Perilla mint contains ketones that cause acute respiratory distress syndrome in cattle (ARDS), also called panting disease. Treatment is often ineffective. Although these plants can occur anywhere in a pasture or feed lot, they typically favor semi-shaded environments, and are most frequently located around farm structures, edges of woods and along fence rows.

Cases of poisoning from these weeds are a concern during the late summer and early fall when other grasses and forages might be in short supply and the perilla mint is flowering. Cattle will normally not feed on these toxic weeds unless there is a shortage of other feed. Therefore, it is crucial to have a ready supply of quality feed available for farm animals during this time of the year.



Perilla mint



Perilla mint growing along fence line of a pasture

Interesting Facts

The Latin word *frutescens* means shrubby or bushy and refers to this plant's growth habit. Perilla mint is considered an ornamental plant and it is cultivated for its often variegated purple and green foliage. It is an escaped ornamental and that is how it has become a weed pest in Tennessee. These plants give off a distinctive, aromatic, minty odor when the stems and leaves are crushed. It is a



Flowering branches of perilla mint

cultivated crop in East Asia. The seed is used for cooking oil and fuel. It has a square stem that is characteristic of the plants in the mint family. Another interesting fact, though not recommended by the University of Tennessee, is that Native Americans of the Rappahannock tribe used perilla mint (as a drug) as an ingredient of a blood medicine.

Management Considerations

Control of perilla mint in pastures, barn lots and forage fields is very important. The best time to scout for and control perilla mint is late April to early June. It is very difficult to control in late summer and early fall when it also becomes the most dangerous to livestock. If control measures are not taken early, it becomes even more crucial in late summer to maintain an adequate supply of quality feed for cattle and other farm animals so they will not feed on these toxic weeds. Grazing in infested pastures should be limited during late summer when perilla mint is flowering. Avoid harvesting forages in areas infested with these weeds. Mowing perilla mint plants before seed is produced will help prevent further reproduction and spread. Please refer to the *Weed Control Manual for Tennessee Row Crops* (Extension PB 1580) for management recommendations. Another good resource for management of this weed is in the *Hay Crop and Pasture Weed Management Guide* (Extension PB 1521).

References

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