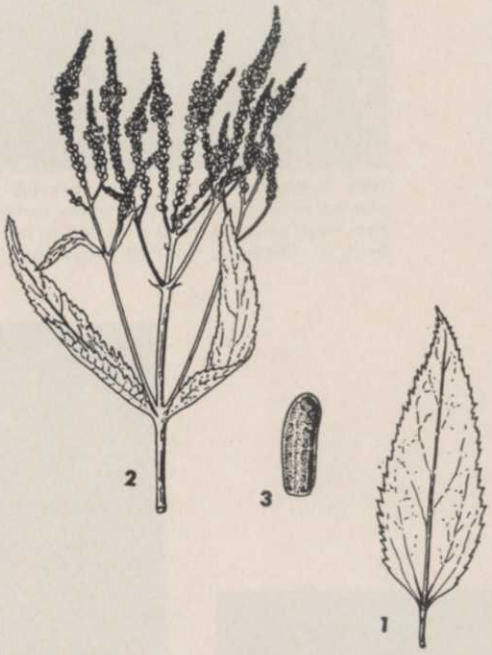
Know Your Species

BLUE VERVAIN

(Verbena hastata)



Blue vervain, also called wild hyssop and purvain, is a perennial plant that reproduces by seed and short rootstocks (rhizomes).

Native to the United States, blue vervain is found throughout the Mississippi Valley and eastern states. The plant grows in pastures and meadows, along roadsides and fence rows, and in waste places. It is most commonly found on low, moist ground with gravelly or heavy loam soils.

Leaves (1) are opposite, 3 to 6 inches long. They are pointed, saw-toothed, rough textured, and prominently veined. Dark green above, leaves are a grayish-green below.

Blue vervain grows 2 to 4 feet tall. Upright stems are 4-sided and slightly hairy. Branches occur near the top of the plant (2).

Small, blue flowers appear in compact spikes that are 2 to 6 inches long. Flowers begin to bloom and mature from the base of the spike. They are less than ¼ inch across.

Reddish-brown seeds (3) are borne four in a pod. Seeds are about 3/32 in. long. They are oblong with an oval side and two flat sides, and have a white scar at the base. Oval seed surface is ridged.

Blue vervain is a shallow-rooted plant that becomes hard and coarse as it matures. Annual mowing will help to control the plant. Application of 2,4-D at 1 pound per acre will usually provide good control.

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water to maintain a healthy tree condition," John Z. Duling, Muncie, Ind., tree expert indicated. "When we find a fill or grade exceeding 6 in. over most of the root area of established trees, we recommend that plans be made to allow air and water to reach the roots in the original grade."

Where 6 in. to 18 in. of fill is in place, holes are drilled through the fill, which is then loosened with air pressure before blowing in fertilizer and sand and filling with pea gravel. "In places where the fill will be of greater depth, we recommend that an aeration system be installed," the Indiana arborist said. If the fill is already in place, it must be removed in the tree area to the original grade. "A system of field tile is laid on the grade in the pattern of a wheel with the spokes running into the base of the tree, where a tapered base of stone is laid around the tree trunk." The area is vented to the surface, filled with 6 in. to 12 in. of stones, covered with burlap or straw, and then soil fill installed. After installation, fertilizer can be applied through the vent pipes.

Duling added that there may be a lesson to be learned from trees that have survived soil fills by developing a second root system for the new conditions. Charles Schmaltz of Rochester, N. Y., has successfully induced new root growth "by wounding the trunk or major roots just prior to applying the fill. Exposing the cambium by a notch or cut and then covering the wound with a moist medium, such as sand or moss, results in root growth from the wound." The treeman described this as an interesting new possibility for arborists.

How To Plant Curbside Trees

"The trend toward planting in curbside excavations in business areas is obviously on the increase," Edward J. Brarmann, Jr., Supervisor of Forestry for the Jersey Central Power & Light Co., Morristown, N. J., commented. "I believe the underlying motive is a desire for added color afforded by fruit, green foliage, and attractive blooms, rather than shade."

Underlying the new concept of street tree planting, he termed creation of the typical old tree-shaded thoroughfare "neither desirable nor practical." Business area conditions are not suitable