Sensitive joint-vetch

Aeschynomene virginica (Northern joint-vetch) Threatened (June 19, 1992)



Description: Sensitive joint-vetch is a robust, bushybranched annual legume, usually between 20-39 inches (0.5-1 m) tall, but can grow to be taller. It is sensitive to light and usually to touch. Stems are single and branch near the top. Leaves are compound, divided pinnately into 30-56 leaflets. The leaves are 0.8-5 inches (2-12 cm) long, the leaflets are usually no longer than 0.4 inch (1 cm) long, and 0.08-0.12 inch (2-3 mm) wide, with toothed edges. Flowers grow in a long cluster with each flower on its own short lateral stem and accompanied by reduced leaves. Petals are vellowish- to reddish-purple, about 0.4-0.6 inch (1-1.5 cm) long and irregular, legume-like. The dry fruit are legumes, 1.2-2.4 inches (3-6 cm) long, made up of about 6-10 segments that turn dark brown when ripe. Indian joint-vetch (A. indica) has leaflets longer than 0.4 inch (1 cm) and flowers usually less than 0.4 inch (1 cm) long.

Life History: Flowering occurs July-September, fruiting occurs July-October. Seedlings may germinate in "flotsam" of plant material that has been deposited on the riverbank.

Habitat: River banks, swamps, tidal marshes. The N.C. Natural Heritage Program has records from moist to wet roadside ditches and moist fields. Usually grows within 2 ft (60 cm) of low water. In New Jersey it grows in mildly brackish, tidally influenced waters.

Distribution: Coastal plain in Beaufort, Craven*, Hyde, and Lenoir* counties.

Threats: Habitat alteration is the primary threat. Historic sites have been dredged, filled, or bulkheaded. New threats include highway construction and expansion, residential and commercial development, water pollution and bank erosion from motorboat traffic (backwash), and piers. Sedimentation inhibits seed germination, smothers seedlings, and promotes invasion of competing weedy species. Herbicides, pesticides, and fertilizers from golf courses, lawns, and gardens degrade water quality. In NC, seed predation by tobacco budworms and corn earworms is severe.

Management Recommendations: Protection of extant populations and habitat against pollution and destruction.

* No record has been reported in this county in the past 20 years.

Sources: Davidson and Bruderle 1985, N.C. Natural Heritage Program files, Radford et al. 1964, USFWS 1992a.