

Natural Heritage Resources Fact Sheet

Sensitive Joint-Vetch (*Aeschynomene virginica*)

Description

Sensitive joint-vetch gets its name from its leaves, which fold slightly when touched. Sensitive joint-vetch is a large annual herb in the pea family, averaging from 3 to 6 feet in height. Its compound leaves alternate along the stem. Each leaf consists of from 30 to 56 leaflets. The flower resembles those of other pea-family species, with partially united petals about one-half inch long, yellow, with prominent red veins. Flowering begins in late July and continues into October. The fruits are pods about 3 inches long. These break into one-seeded segments capable of floating, which is thought to help disperse the seed.

Sensitive joint-vetch is easily confused with marsh senna (*Chamaecrista fasciculata* var. *macrosperma*) a wetland variety of partridge pea. Marsh senna is slightly smaller than sensitive joint-vetch, reaching a maximum height of 5 feet. Its leaves have fewer leaflets, from 10 to 36 per leaf. Its flower is solid yellow with red at the base and lacks the red veins found on the flower of sensitive joint-vetch.

Two non-native joint-vetch species grow in the south as far north as North Carolina, but are not presently reported in Virginia.

Habitat

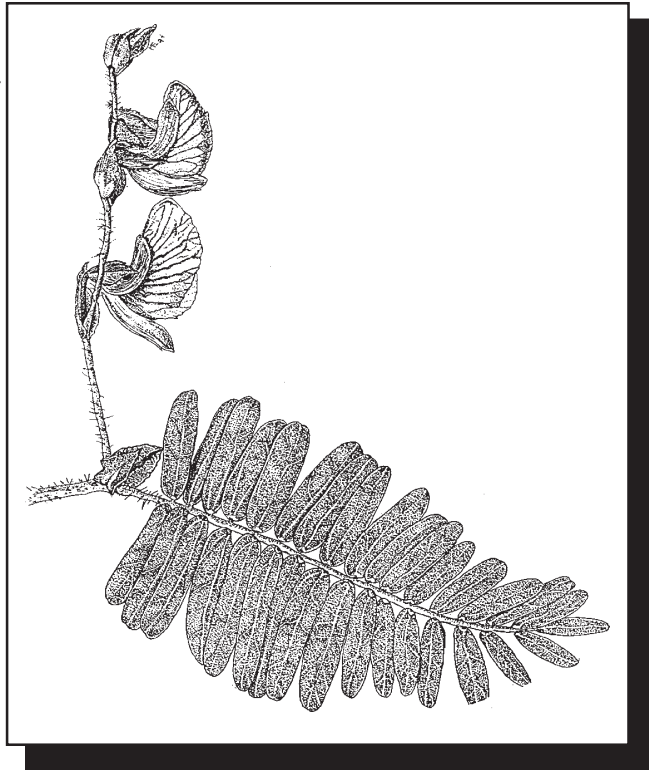
Sensitive joint-vetch is native in freshwater to slightly brackish tidal

marshes of the Mid-Atlantic states. It prefers the lower edge of the inter-tidal marsh zone, receiving daily inundations. The soil may be mucky, sandy or gravelly.

These marshes support a diversity of plant species. Wild rice, arrow arum and pickerelweed are common associates. Sensitive joint-vetch does best in areas with less plant competition, such as accreting point bars or low swales within a marsh. Muskrats eat tall perennial vegetation and create openings in which sensitive joint-vetch can sometimes become established.

Distribution

Historically, sensitive joint-vetch was known from New Jersey, Delaware, Pennsylvania, Maryland, Virginia and North Carolina. It is no longer found in Delaware or Pennsylvania. Current North Carolina populations are in small, unstable habitats. In Virginia, sensitive joint-vetch populations occur on the Potomac, Rappahanock, Mattaponi, Pamunkey, Chickahominy and James rivers.



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Life History

Germination of sensitive joint-vetch takes place from late May to early June. Flowering begins in mid-July and continues into October. Fruits appear from early August into October. As stated, seed pods break into segments which readily float on water. It is estimated that an average plant produces more than 300 seeds.

Populations of sensitive joint-vetch fluctuate widely from year to year. One population varied from 50 to 2,000 plants in a three year period. Stands of this species tend to appear at the same location year after year.



Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL AND RECREATIONAL RESOURCES

For more information, contact
Department of Conservation and Recreation
203 Governor Street, Richmond, VA 23219
(804) 786-7951; <http://www.state.va.us/~dcr/vaher.html>

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Conservation

Sensitive joint-vetch is listed as threatened by the United States Fish and Wildlife Service and is a candidate for state listing in Virginia by the Department of Agriculture and Consumer Services. It is a priority for research, protection, and recovery programs. Studies are underway to determine what level of impact certain human activities are having on the plant. The results will be used to help direct protection efforts and to better inform landowners, regional planners and policy-makers about making land use decisions.

Three factors are key to conservation of sensitive joint-vetch: conservation of marsh sites in which it grows, protection of water quality and water levels, and upland buffer zones bordering these marshes. Landowners and managers can minimize impacts to sensitive joint-

vetch habitat by implementing *best management practices*

Habitat alteration resulting from activities such as dredging, filling, riprapping and construction of bulkheads or piers on sensitive joint-vetch sites can degrade a population. Another threat is the aggressive invasive plant species known as common reed (*Phragmites australis*). This tall, fast growing member of the grass family often becomes established in disturbed habitat. Once it invades a habitat, it can quickly overrun native vegetation and create thick, homogenous stands with little value to wildlife.

DCR's Division of Natural Heritage maintains a database on the presence of our state's natural heritage occurrences. Natural Heritage biologists, stewardship and protection staff can assist landowners with questions regarding rare

species and sensitive habitats. The staff also provides information and expertise concerning conservation and management practices which help to insure that we preserve and pass on to future Virginians our rich natural heritage.

To learn more about Virginia's rare plant and animal species and rich biological communities write to the following: *Plant and Insect Species* - Virginia Department of Agriculture and Consumer Services, Office of Plant Protection, P.O. Box 1163, Richmond, Virginia 23209; *Animal Species* - Virginia Department of Game and Inland Fisheries, P.O. Box 11104, Richmond, Virginia 23230; *Plants, Animals, or Biological Communities* - Virginia Department of Conservation and Recreation, Division of Natural Heritage, Main Street Station, 1500 East Main Street, Suite 312, Richmond, Virginia 23219.

