

Indian Bayou Source powdery thalia



NRCS

Natural Resources Conservation Service

**Jamie L. Whitten Plant Materials Center
Coffeeville, Mississippi**

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Indian Bayou Source powdery thalia, *Thalia dealbata* Fraser ex Roscoe, is a wetland plant that is recommended for use in backyard ponds and constructed wetlands for home septic systems. It is attractive and can be used as an aquatic ornamental. It may have some benefit as a waterfowl food because ducks will eat the seed.

It was released as source identified material in 1996 by the Natural Resources Conservation Service (NRCS), the Mississippi Agricultural and Forestry Experiment Station (MAFES), and the Department of Wildlife and Fisheries at Mississippi State University.

Description

Indian Bayou Source is a rhizomatous, herbaceous perennial with a bluish, glaucous coating on leaves, flower stalks, and flowers. The 3-4 foot tall leaves arise from the base of the plant and have a similar shape to those of a



Canna, with a stout petiole and a large, elongated leaf blade. The attractive purple to bluish flower clusters are produced at the top of a stalk extending 2-3 feet above the foliage. Each fruit consists of a bladder-like covering loosely surrounding a single seed. The seeds are round to oval and dark brown speckled with tan when mature. Flowers are produced from late May to September with fruit maturing throughout the summer. There are about 1275 seeds per pound.

Adaptation

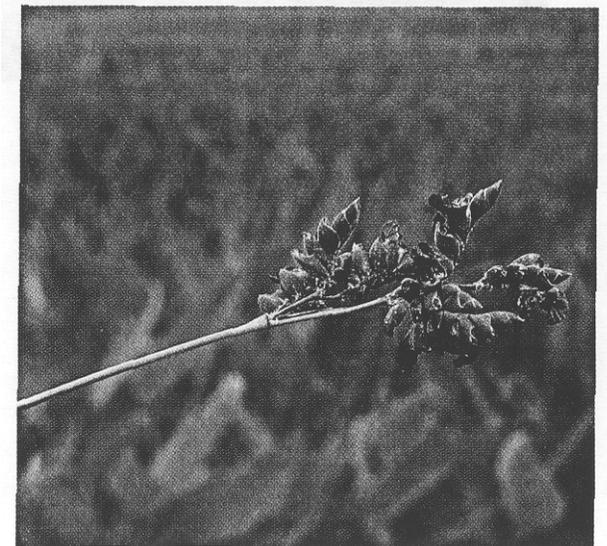
Indian Bayou Source was originally collected in the delta area of Mississippi and has not been tested at locations other than the NRCS Jamie L. Whitten Plant Materials Center (PMC) in Coffeeville, Mississippi. Its range of adaptation is therefore not known. The species occurs in the Coastal Plain from South Carolina to Texas and also in Oklahoma and Missouri.

Its soil tolerances are also not known, but it is usually found growing in wet ditches and along the margins of ponds on sites where the soil often contains a high level of organic matter. The nutrient loading capacity for sewage effluent has not been determined; however, it will tolerate those levels normally found in a single residence septic system.

It tolerates water depths up to 1.5 feet during the growing season with deeper flooding tolerated during the dormant season. Although muskrats do feed on the leaves, they do not appear to damage a healthy stand. Some minor, mainly aesthetic damage by leaf rolling insects has been noted at the PMC.

Establishment

To ensure survival in a wetland site, vegetative propagules are required. Planting can be done throughout the year in the southeastern states. Planting pieces should consist of a 4-6 inch section of rhizome with several growing points. If the plants are actively growing, the shoots should not be cut shorter than 6-8 inches. A two foot spacing will allow the plants to easily fill in the planting area in one growing season. The planting hole should allow for the length of the rhizome and should be deep enough for one inch of soil to cover the top of the rhizome. Water levels should be kept at about 1-2 inches until the plants become established and should never be allowed to cover the entire shoot of non-dormant plants. A light rate of complete fertilizer will improve growth, but care should be taken to prevent fertilizer movement into the ground water. In a constructed wetland, sewage effluent should not be introduced into the water until the plants become established.



Although seedlings rarely establish naturally in most wetland situations, seedlings can be produced easily indoors. Seed collection should be delayed until the majority of the fruit in the cluster has turned brown, because immature fruit will fall from the cluster along with ripe ones when the cluster is shaken to remove the fruit. It is not necessary to remove the fruit coverings before sowing, but this is easily done by rubbing. The seed can be stored dry, but should be placed in a moist medium and stored in the refrigerator for three months before sowing. The growing medium must be kept moist, but not saturated and air temperatures should be at least 75° F. The seedlings can be planted in the wetland when about one foot tall.

Management

During the dormant season, old flower stalks and dead foliage can be removed, but it is a good idea to leave a long enough section of the leaf petiole so the cut end remains above the water level. Fertilizer should be applied in light doses throughout the growing season rather than in large doses all at once, or if less frequent applications are desirable, a higher rate of a slow release fertilizer formulation can be used. High rates of phosphorus will encourage the unsightly growth of algae. In a constructed wetland, the levels of nutrients applied in the sewage effluent may be sufficient to maintain acceptable growth.

Availability

For additional information on availability, propagation and use of Indian Bayou Source powdery thalia, contact your local NRCS office. It is listed in the telephone directory under "U.S. Government, Department of Agriculture, Natural Resources Conservation Service."

**Natural Resources Conservation Service
U.S. Department of Agriculture**

**Cooperating with
Mississippi Agricultural and Forestry
Experiment Station
and
Department of Wildlife and Fisheries
Mississippi State University**

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