The Crosby Arboretum

Native Milkweed Species (Asclepias spp.) for Home Gardens in South Mississippi

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FORESTRY EXPERIMENT STATION



INTRODUCTION

In spring 2015, in response to a steep decline in eastern North American monarch butterfly populations which overwinter in Mexico, the Crosby Arboretum began receiving inquiries about native milkweed species suitable for the home garden, an attempt by gardeners to provide supplemental host plant material to potentially offset the population decline and additionally as an alternative to the commonly widely available but invasive, non-native tropical milkweed (*Asclepias curassavica*).

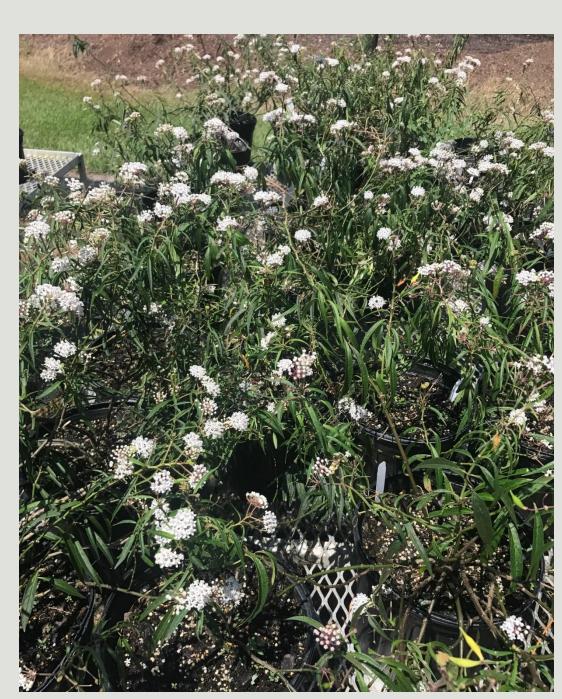
GARDEN TRIALS

Since early 2016, field trials have been conducted at the South MS Branch Experiment Station in Poplarville to determine the best native milkweed species for home garden use. Trials are also being conducted in the Crosby Arboretum's pollinator garden, the home gardens of Pearl River Master Gardeners, and in the gardens of persons who purchase native milkweed at Crosby Arboretum plant sales, and who are increasingly reporting highly positive results.

The Crosby Arboretum website (http://crosyarboretum.msstate.edu) contains information on the **Mississippi Milkweeds Project**, which includes photographs of the 15 most common native milkweed species and a table giving cultural information for each species, in addition to information on past garden trials. Native milkweed is being propagated at the Arboretum and is periodically available during the year, and at plant sales.



Swamp Milkweed (A. incarnata) can grow from seed to 4 to 5 feet in a year.



Aquatic Milkweed (A. perennis) does very well as a containerized specimen.

WHEN DO MONARCHS NEED MILKWEED?

<u>SPRING!</u> This is when migrating female butterflies lay their eggs on milkweed for the emerging caterpillars to feed on. According to monarch biologist Karen Oberhauser, female monarchs lay 300 to 400 eggs in the wild, usually one egg at a time, on leaf undersides. One caterpillar can consume **up to three milkweed plants** throughout its life cycle from egg to chrysalis.

Provide LARGE BEDS of milkweed that will be an abundant source of vegetative host material.

To track monarch migration, see https://journeynorth.org/monarch.

FALL is when monarch butterflies need NECTAR, <u>not</u> milkweed, to fuel their migration to Mexico.

NATIVE MILKWEEDS FOR SOUTH MISSISSIPPI HOME GARDENS:

The Crosby Arboretum in Picayune, Mississippi encourages the planting of native milkweed species in place of the commonly available tropical milkweed (*Asclepias curassavica*), which is non-native, invasive, disease-prone, and highly toxic. The two most suitable native species for average garden conditions in Mississippi are:

Swamp milkweed (Asclepias incarnata) is very easily established. It grows in full sun, and wet or dry soils

Aquatic milkweed (Asclepias perennis) prefers wet conditions and part shade. It performs well in containers.









MILKWEED WILL ATTRACT INSECTS!

Grow aromatic plants, i.e. basil, marigold, chrysanthemums, mints, petunias, or rosemary near milkweed to reduce the presence of aphids and other insects.

Avoid using pesticides, especially systemic pesticides. These can harm monarch caterpillars and insects feeding on nectar.

Locate milkweed at a distance from other plants, or in the back of your garden bed, where the presence of insects will not be a visual deterrent.

OE DISEASE IN TROPICAL MILKWEED

In the southern U.S., monarch butterflies that feed on tropical milkweed often breed during the winter months, rather than completing their fall migration to Mexico. This increases the likelihood of the transmission of a protozoan parasite *Ophryocystis elektroscirrha* (OE), debilitating to monarchs.

If you already have tropical milkweed, cut back the plant to stubble before fall migration to deter the spread of OE disease.

Gradually replace tropical milkweed with native milkweed species.

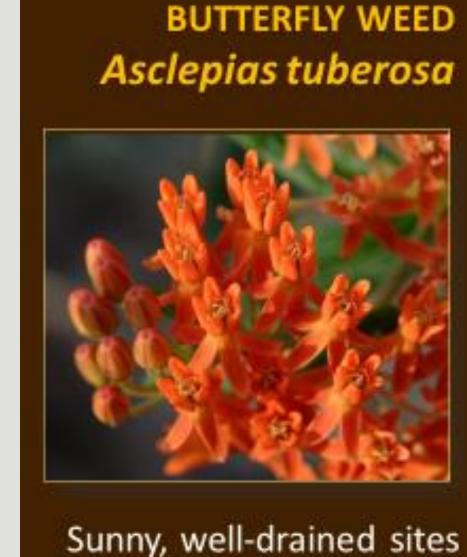
Use caution to avoid getting the highly toxic sap in the eyes, which can cause painful chemical burns.

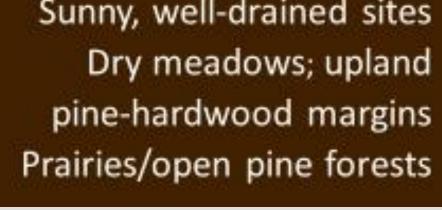
RECOMMENDATIONS

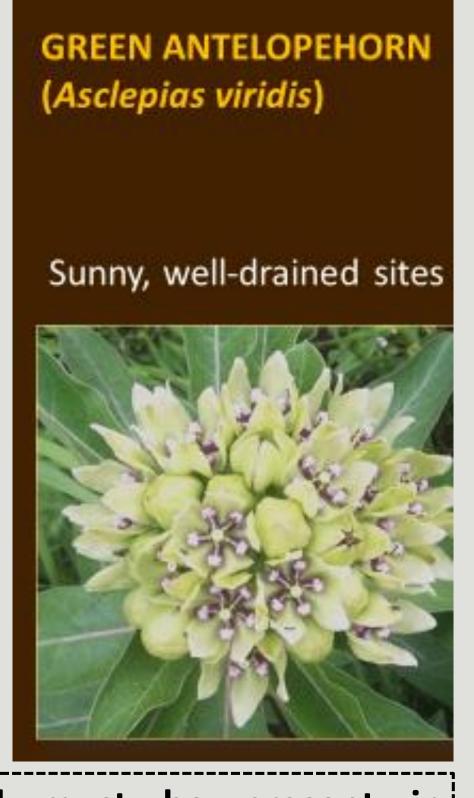
Propagate milkweed from cuttings or seed to establish large "mother beds" in a short period of time. Use species of native milkweed that will colonize rather than individual plants, to support feeding caterpillars.

Grow milkweed originating from coastal **Ecoregion 232**, which **is** adapted to the region's high heat and humidity. Seed from this ecoregion also usually germinates without cold stratification.

COLONIZING ASCLEPIAS SPECIES FOR NATURAL AREAS:







To be useful, milkweed must be present in abundance in order to provide an ample food source. Colonizing native milkweed species will offer dense vegetative masses for feeding caterpillars.