

Monarch Butterflies and Native Mississippi Milkweed



A. tuberosa: at the southeast branch experiment station.

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Recently, there has been an explosion of information focusing on how to offset declining monarch butterfly populations by providing milkweed (*Asclepias*) for these migrating insects. Responses range from concerned gardeners planting this monarch host plant in their home landscapes, to large-scale community planting projects establishing native milkweed.

At the Crosby Arboretum in Picayune, we often receive questions from people asking why they are not seeing caterpillars on their milkweed. It's important to understand that in Mississippi, these caterpillars generally will feed on milkweed in springtime during their migration further northward, although some may be spotted during the summer months. (See maps illustrating when the butterflies will be in our area at: <https://www.learner.org/jnorth/maps/monarch.html>.)

To provide for monarchs, a spring garden needs to include both nectar plants and milkweed, their obligate host plant. However, during fall migration, adult monarchs are only seeking nectar to fuel their upcoming journey to Mexico. For the Crosby Arboretum, and coastal Mississippi, that period is usually around the third week in October. During this time, monarchs will not be laying eggs because their reproduction development is "on hold". Provide fall-blooming nectar species for the butterflies in your garden, such as Asters

(*Symphytotrichum* spp.), Wild Ageratum, AKA Blue Mistflower (*Conoclinium coelestinum*), and Frostweed (*Verbesina virginica*)

While gardeners are urged to plant native milkweed, few sources are available in garden centers. The most commonly available milkweed is an attractive tropical variety, *A. curassavica*, with deep orange and yellow blooms. Although tropical milkweed is easy to grow, it unfortunately can harbor a disease crippling to butterflies. Research also suggests tropical milkweed is having a detrimental effect on monarch migration patterns by causing the butterflies to remain in coastal areas during the fall months and laying eggs, rather than migrating to Mexico. The Arboretum receives calls from frantic gardeners reporting monarch chrysalises on their tropical milkweed, when freezing weather is forecast. Until native milkweeds are readily available, tropical milkweed will continue to be the "go to" monarch host plant. Gardeners are advised to simply cut back tropical milkweed to stubble in early October, ahead of the monarch's fall migration. But, always use caution when pruning milkweed. If the sap is wiped into the eyes, it can cause severe pain and temporary blindness.

To determine the species of Mississippi milkweed best suited to home gardens, seed trials are currently being conducted at the South Mississippi Branch Experiment Station. Results will be presented at the 44th Annual Ornamental Horticulture Field Day on Thursday,



MAFES research: Planting native milkweed at the southeast branch experiment station.

October 5, 2017 at the Experiment Station in Poplarville, Mississippi. So far, the species showing the most promise for the garden are: Swamp Milkweed (*A. incarnata*), Aquatic Milkweed (*A. perennis*), Butterfly Weed (*A. tuberosa*), Green Antelopehorn (*A. viridis*), and Whorled Milkweed (*A. verticillata*).

At the Crosby Arboretum, we've learned that seed obtained from sources within our own ecoregion (No. 232, the Outer Coastal Plain Mixed Forest Province, on the map compiled by Robert G. Bailey) is better suited than seed from sources outside our ecoregion. (See Bailey's "Ecoregions of the United States" map on the USDA



A.Verticilla: Monarch caterpillar feeding on leaves.

Forest Service website, along with information about these ecosystems, at <https://www.fs.fed.us/rm/ecoregions/products/map-ecoregions-united-states/#>.)

The Crosby Arboretum has recently established a Mississippi Milkweeds Facebook page to promote the public exchange of information about the state's native milkweed species. If you have a source of native milkweed seed from southern Mississippi, please consider submitting it for our 2018 trials. For more information on Mississippi State University's Crosby Arboretum in Picayune, see www.crosbyarboretum.msstate.edu.