

All monarchs need milkweed to survive, but are some milkweeds better than others?

### EXCELLENT CHOICES Native Genotypes

Milkweed species native to and originating from your ecoregion and habitat type (and grown without pesticides).

A native species varies genetically in its adaptations to the particular localities and environmental conditions under which it grows. This results in variations between populations of the same species, known as local genotypes or ecotypes. Planting local genotypes helps to preserve genetic diversity within the species and support local species which depend upon on these plants for food, shelter, etc. Also, in general, the more closely you match the environmental conditions of the source of your plant material to that of the planting site, the better it will grow. Seeds may be locally and sustainably collected for propagation. Local genotypes may available from certain reputable native nurseries.

### **QUESTIONABLE CHOICES**

Non-native Species

# Milkweed species not native to your area, particularly tropical species.

Many of the invasive, exotic plant species present in the South's natural areas today were introduced as landscape plantings many decades ago. Non-native plants can disrupt natural ecosystems. Tropical milkweed species are of particular concern to some Monarch researchers due to their unknown impacts on migrating monarchs and the spread of the protozoan parasite, *Oe.* It is advised that gardeners in the South who choose to grow tropical species should mow it to the ground in the spring after the first generation has passed through and again in the fall.

Mexican Milkweed, Asclepias curassavica Balloon Plant, Gomphocarpus physocarpus (Also known as Gomphocarpus brasiliensis, Asclepias brasiliensis, or Asclepias physocarpa)

## GOOD CHOICES

Native Species

Milkweed species native to your area (and grown without pesticides).

Native is a term to describe plants endemic (indigenous) or naturalized to a given area. In North America, a plant is often deemed native if it was present before colonization. Planting species native to your area helps support local species which are adapted to depend upon on these plants for food, shelter, etc. When local genotypes/ecotypes are not available, planting native species of milkweeds are a good alternative for supporting monarchs and other native wildlife.

Butterflyweed, Asclepias tuberosa Swamp Milkweed, Asclepias incarnata Common Milkweed, Asclepias syriaca

#### AVOID AT ALL COSTS Pesticide-treated Milkweeds

Milkweed species grown using pesticides, particularly systemic insecticides.

Simply put, insecticides kill monarchs. Pesticides are frequently used in the horticultural industry to produce healthy-looking plants. Especially dangerous are systemic insecticides that persist in plant tissues, killing caterpillars and preventing butterfly eggs from hatching.

Some of the common systemic insecticides include:

Acephate (Orthene®)

**Imidacloprid** (Bayer's Tree & Shrub Insect Control<sup>™</sup>, Merit<sup>®</sup>)

Dinotefuran (Greenlight Tree and Shrub Insect Control<sup>™</sup>, Safari<sup>®</sup>)

"It is usually better to err on the side of safety, and whenever possible, native species growing in their normal places at the normal times are likely to be safest."

DR. KAREN OBERHAUSER UNIVERSITY OF MINNESOTA