

GROWERTALKS

Columns

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Bring Back the Monarchs

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Growing up on the outskirts of Des Moines, Iowa, we had a field across the street where all the neighborhood kids played. We spent our summers building forts by digging deep holes and sheltering them with sticks and brush. It was also the perfect place to play hide-and-seek among the tall weeds.

Many of those weeds were milkweed (*Asclepias syriaca*), the favorite food of Monarch caterpillars. We would take the leaves, put them in a screened aquarium with caterpillars and watch in eager anticipation as they went through their life cycle, culminating in releasing butterflies back into the field. That's what I loved most about that field—it was full of Monarchs!

Well, those milkweed and Monarchs are long gone now. And as I look around today, I don't see much of either anywhere. I owned a home in the country for 10 years with a field behind our house, but there were no milkweed. I was fortunate to have one appear in my rock garden and, sure enough, there were the caterpillars. I was thrilled to share that experience and memories with my kids.

This year more than ever we're hearing "bring back the Monarchs." I see this as a vast marketing opportunity. To bring them back we need to bring back their food source. Since the native milkweed can be challenging to propagate, *Asclepias tuberosa* (the orange milkweed) is a great alternative. I know first-hand it's just as attractive to the Monarchs and more attractive in the garden.

A. tuberosa seed is inexpensive and germinates readily, which makes the marketing possibilities extensive—especially if you get the kids involved.

Asclepias can be a difficult crop in the greenhouse and I struggled with it for years. However, I've learned a great deal and compiled the information into a crop manual. This spring, we're producing more than 35,000 4-in. pots, in addition to hundreds of trays of 288s, nearly trouble free.

The primary lesson I've learned is that *asclepias* don't like to have their tubers disturbed. Mature plugs like

50s work well into finished containers, but if seedling plugs are transplanted into the finished container, extreme care must be taken to not disturb the developing tuber. Planting at the perfect depth is critical or heavy losses can be expected.

This is why I prefer to sow the seeds directly into the finished container. Being a first-year flowering perennial, it works perfectly. I sow six seeds into a 4-in. or up to eight in a gallon (yes, they do great directly into gallons!). With a light vermiculite cover and kept moist but not wet, seeds germinate uniformly in four to seven days at 65 to 80F (18 to 26C).

Another lesson I learned is don't baby them! They prefer poor soils and dry conditions. The tuber begins to develop quickly like a taproot, so if I keep the surface dry and let the roots dig deep, they don't need any drenches.

But they do need heat. I don't let them get below 65F (18C) early or 60F (15C) to finish. Asclepias are also the most photoperiodic-sensitive crop I know. Not only do they need long-day/night interruption lighting before April 15 in the northern latitudes, they need it from an incandescent bulb or one of the new LED flowering lamps. Standard grow lamps or CFLs don't provide proper light to keep them happy.

Once established, asclepias are fairly easy to grow. Liquid feed at 100 to 150 ppm N works well and they respond nicely to PGRs. I apply a B-Nine/Cycocel combo as necessary, beginning at the first or second true leaf stage, then switch to 5 to 10 ppm Sumagic as they reach saleable size. Weeks to finish is about 10 early in the season and eight later.

The biggest issue to be aware of with asclepias is that not only do Monarch caterpillars love to feed on them, but so do mites and thrips. However, with a good biocontrol program in place, that's not an issue.

What a fantastic way to get kids into gardening and conservation! A simple marketing campaign like giving kids a Dixie cup, a little growing media and a few asclepias seeds could help us all bring back the Monarchs.

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