Homegrown Horticulture

TIPS FOR SUCCESS IN YOUR OWN BACKYARD

Reducing Transplanting Stress

We often take a lot of time and effort to start plants that need a longer growing season indoors from seed (like tender and warm-season plants). We carefully nurture them, providing water, light, fertilizer, and protection from bugs, diseases, and other stresses. When the time comes to put the plants outside in the garden, it can be a stressful experience for the plants. Suddenly, they are exposed to all sorts of stresses, like wind, bright sunlight, highly variable temperatures, as well as limited access to water and nutrients. All of that stress can undo all of the advantage we gained by growing the plants indoors, as the plants either stall in their growth, or they die entirely.

There are a number of things that can be done to help make transplants more resistant to the harsh realities of garden life or that can reduce the impact of that stress on them.

The first, and most important, thing is to have plants that are **healthy and appropriately aged**. This means that they are not overgrown but are old enough to be actively growing when they get outside. They are sturdy enough to stand up to a bit of wind. Plants also need to have a **well-developed root system**, so that they will be able to take up nutrients and water. They need enough roots to hold the root ball together and support the plant, but they shouldn't be rootbound, with the roots wrapping around the pot.

A week or two before you are going to put out the plants, you can start to harden them off. This means that you stress them mildly, giving them a bit of a taste of what outdoors will be like. As a result, the shock won't be as extreme. Start by reducing fertilizer a bit. Occasionally allow the plants to dry out a little bit, not enough to hurt them, but just enough so that they have to start to work to pull in water. You can drop the temperature a little bit or bring it closer to what the outside temperature is. You can put the plants outside for two to three hours each day in direct sunlight (provided the temperatures are high enough).

When you are going to plant the plants, don't leave the plants sitting out in exposed conditions before planting. Try and shelter them while they wait their turn to be planted (if it is going to be a long while). Make sure that the plants are well watered before they are planted, with the root ball fully wetted. When you plant, try and plant on a calm, cool, overcast day, if you can, or plant in the morning or evening. This will keep them out of the heat of the day and extreme stresses, at least at the start.

When you plant, make sure that plants are properly placed in the soil, with **good soil-to-root contact**, and the entire root ball covered with soil. Water them in with a **high Phosphorus fertilizer water** after planting, and then give plants a good drink regularly until they start to settle in. After that, you can switch to watering as required.

