Delay Starting Transplants By: Kelly Feehan, Extension Educator Release: Week of January 29, 2024

With garden catalog browsing and garden planning underway, some gardeners might think about growing their own garden transplants.

While its easy to start plants, it's not as easy to grow sturdy transplants that do well once planted outdoors. Without the right conditions, many end up being lanky and weak. Another issue is starting transplants too early.

Research shows vegetables planted in the garden as transplants, rather than direct seeded, grow well and yield best when transplants are strong, sturdy and of a certain age when planted outdoors.

If transplants are too old or large at planting they experience greater transplant shock. This stunts plants and leads to problems like delayed production, bolting or flowering too soon, and lower quality vegetables.

For those who wish to harvest vegetables as early as possible, this is best achieved when we use younger, smaller transplants and we plant when soil temperatures are ideal for the crop being planted. Most vegetables are best direct seeded.

Vegetables commonly planted in the garden as transplants include cool season crops like cabbage, broccoli and cauliflower, and warm season crops like tomatoes, peppers and eggplants.

The reason transplants are used, in place of direct seeding, is different for each. Cool season crops develop the best flavor when they reach harvest maturity during cooler weather. Starting with young, quality transplants gives plants a head start and they're more likely to reach harvest maturity during cooler temperatures.

Tomatoes, peppers and eggplants can be slow to grow and mature when started from seed. This is the main reason transplants are used in the garden over direct seeding for these crops.

On transplant age cabbage, broccoli and cauliflower do well if transplants are no older than five weeks with four weeks being best. Tomato and pepper transplants should be five to eight weeks old, with six to seven weeks being ideal.

To decide when to start seed indoors, know what the average outdoor planting date is and count back. Cool season vegetables are usually planted outdoors sometime in April. Early to mid-March would be the time to start these transplants.

Warm season vegetables are planted in May after the soil warms and the risk of a freeze is past. These vegetables are usually seeded indoors around mid-March when growing transplants.

Along with timing, it is important to know growing requirements needed for strong, sturdy transplants. First, know a south window alone will not cut it. And most homes are too warm and too dry to grow sturdy transplants.

Seedlings require 14 hours of intense light to develop into sturdy transplants. While a south window may have the intensity needed for a few hours a day, it will not supply it for 14 hours. Use artificial grow lights for at least 12 hours a day and keep the light no more than six to eight inches above seedlings.

Seedlings need steady grow. Provide consistent moisture and fertilizer without overwatering or burning seedlings. Temperatures in the 70s are fine, but for the strongest transplants, night temperatures should be ten degrees cooler than day temperatures.