



Alamosa Landscapes

Plant Stretch, Lower Nighttime Temperatures, and Marigolds to the Rescue

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It's the time of the year when I start thinking of planting seeds. Right now I'm thinking of starting some indoors. I do have the luxury of a small indoor greenhouse and a couple of heating mats designed for plants. I want to start tomatoes, winter squash, thyme, Italian parsley, and marigolds.

You don't need a greenhouse to start seeds indoors, but you do need to have at least one window sill with good light and moderate temperatures. There are a few things to consider.

One item is plant stretch -- After hearing from Amy Price of the North River Greenhouse about temperature effects on seedlings planted in greenhouses I did a bit of research. According to 420magazine.com, "Stretch is a term for the natural vertical growth spurt in early flowering." Many sources refer to growing marijuana, but I'm not addressing that here! I would have used the term 'leggy' before hearing from greenhouse nursery growers. The idea is that more compact plants transplant more easily and don't topple over as easily.

The North River Greenhouse folks find that cooler night temperatures actually reduce stretch in their plants while many other places report having cooler night temperatures actually adds to stretch. I wonder how much depends on the local environment? The difference between day and night temperatures is referred to as DIF in the nursery business. DIFs are positive when the daytime temperatures are higher than nighttime temperatures.

Positive DIFs significantly promote root growth and nutrient uptake in plants such as tomatoes according to the Journal of Soil Science and Plant Nutrition. They report a DIF of about 11 degrees F increased tomato yield by about 50% over keeping the temperature consistent. This is good news for greenhouse owners in colder regions since lowering night time temperatures significantly lowers energy costs.

Erik Runkle of Greenhouse Product News reports, "Growing crops at lower temperatures can produce higher-quality plants when light is limited. Crops grown cooler often have more branches and flower buds than crops grown warmer. Thus, during the winter and early spring, growers in Northern climates may want to avoid growing at high temperatures to avoid compromising plant quality."

The New England Vegetable Organization says vegetables vary in their response to DIF. For example, tomatoes, eggplant and melons are very responsive, while squash, cucumber and peppers are much less responsive.

I'm planning to start my tomatoes indoors and transplant to the garden in May. In the garden, I use walls of water to protect them from possibly freezing night temperatures.

Something else I'm planning on doing this year is to plant marigolds with my tomatoes and basil. I recently read on the Science Daily website that researchers have proven what gardeners around the world have maintained for generations -- marigolds repel tomato whiteflies. "Since limonene repels the whitefly without killing them, using the chemical shouldn't lead to resistance," report researchers from Newcastle University's School of Natural and Environmental Sciences. The study has shown that it doesn't affect the quality of the produce. They say, "All it takes to deter the whiteflies is interspersing marigolds in tomato plots, or hang little pots of limonene in among the tomato plants so that the smell can disperse out into the tomato foliage."

While I've known folks who plant marigolds in their vegetable gardens, I never got around to it. In the fall, I used to bring basil plants in from garden to continue growing during the winter. However, I stopped a couple of years ago as clouds of white flies appeared after a couple of weeks no matter how hard I tried to discourage them. Perhaps marigolds will help me out this year!

Spring is on the way. Don't forget to set your clocks forward this weekend.

"It's difficult to think anything but pleasant thoughts while eating a homegrown tomato." Lewis Grizzard