GROWERTALKS

Culture Notes

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Pansies: Hot Tips for Warm Regions

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Fall is right around the corner, and with it will come fall pansy crops. Growers in the South and West typically deal with warm temperatures and associated culture issues just as this cool-season crop gets started, and they need to plan their fall and winter pansy crops accordingly. We consulted with pansy culture specialists to provide you with tips appropriate for southern and western conditions.

For southern growers

Heat & Humidity. The South's extremes of temperature and humidity make early-season pansy production especially challenging. Many southern growers start with plugs grown in a cooler region or avoid early sowings in July and August when night temperatures are out of the range needed for cost-effective production of top-quality pansy plugs.

Heat and humidity also put newly transplanted plugs under additional stress. Shade newly planted pansy crops where possible or mist plants to cool leaves. Acidify mist water and only apply enough mist to moisten the plants' leaves, not enough to wet the potting media; this avoids raising the pH in the pot while still cooling the plant.

For early-September sales, choose varieties specifically bred for production in hot climates. For instance, Colossus pansies are bred and tested in hot climates and designed to tolerate the hot, stressful conditions of early-season Southern pansy production.

Water Quality. Water quality in southern regions is generally less than optimal, often having high pH, alkalinity and soluble salts levels. Test water prior to pansy plugs arriving, and adjust its pH using sulfuric acid to achieve a pH in the range of 5.5 to 6.0. Test the pH of your water at its source on a periodic basis, as pH of water sources can change through the season. Pansies are more vulnerable to micronutrient deficiencies and some diseases when growing media pH rises above 6.0. Carefully monitor your irrigation solution pH, as well.

Fertilizer. Many pansies grown in southern regions are produced outdoors. This may provide the plants with high light for best plant growth, but it also makes potting media vulnerable to nutrient leaching during rainfall events. Southern growers need to closely monitor nutrient levels in outdoor production, maintaining feed levels at 100 to 150 ppm with each watering and doubling those levels after heavy rainfall to replenish nutrient

levels in the pot. EC in the potting media should remain at a constant level of 1.0 to 1.5 SME through production.

Potting Media. Consider using a high-quality, premixed growing media specially formulated for pansy production. This especially applies to growers in southern regions where water quality can affect fertility and growing media pH throughout the production cycle. Media suppliers such as Fafard work with growers to customize their popular 4P and 3B growing mixes for pansy production by reducing the amount of lime in the mix and by reducing the starter charge in the mix.

PGRs & Fungicides. Growers need to use growth regulators for control of their summer and fall pansy production. With careful variety selection, southern growers can minimize the amount and frequency of growth regulator they need to apply. Most southern growers must also supply a fungicide drench of Medallion/Subdue as part of their preventative maintenance fall pansy program.
Heidi Doering, Product Development Manager, Syngenta Flowers, Inc.

For western growers
The western states are one of the easiest and best places to grow pansies due to the naturally cooler nights. Still, there are a few elements of fall pansy production that western growers should bear in mind.

Some western growers, especially those inland in California, need to worry about starting pansy crops during months with higher heat levels. Transplant plugs when they're actively growing young plants. They'll flower more quickly on shorter, better branching plants.

Depending on your region and your water source, many western growers have higher calcium levels, leading to alkaline soil and water conditions. You'll need to acidify the water. Optimum pH for pansy production is 5.5 to 6.0.

Boron deficiency can be an issue with high pH (over 6.0) and excess amounts of calcium in the water and media. Aim for a boron level of 0.25 ppm at each irrigation.

Select pansy varieties that are day neutral, such as Majestic Giants II, Dynamite and Supreme. Day-neutral varieties will flower in the dead of winter under lower light and shorter photoperiod conditions.

Retractable roof structures are excellent for pansy growers everywhere. They allow you to have higher morning and late-afternoon light levels, which helps lessen stretching. They also allow for increased airflow, giving you higher transpiration rates. This leads to better nutrient uptake, especially that of calcium and boron.
Bob Croft, technical manager—product development, Sakata Seed America—Flower Division.