BALL TECH ON DEMAND™

TECH TIP: Success with Fall Pansy

Plant immediately. *Do not hold plugs longer than THREE days.*

Upon receiving plugs:

- ➔ *Avoid stressing the plants with temperature or light extremes.* Place plug trays on a bench with good air circulation, partial shade and air and soil temperature as cool as possible.
- ➔ *Water thoroughly with clear, cool, good quality water*. Avoid water stress (wilting) as this will promote tip malformation problems.

IMPORTANT: DO NOT WATER PLUGS WITH HOT WATER.
Use water that is cool to the touch to prevent tip abortion issues. Water pH should be 5.5 to 7.0. Water alkalinity should be below 100 ppm $CaCO_3$. Water alkalinity above 100 ppm will cause soil pH of plug trays to rise quickly, thereby damaging the roots. Use acid injection if higher than 100 ppm.

Transplant into new soil using new packs, pots and trays. Reusing soil or trays can lead to disease problems.

***Never* transplant dry plugs**. Make sure that the plugs are thoroughly watered with fertilizer (20-10-20 @ 200 ppm) using cool water before planting, as it is difficult to adequately water the plug once it has been transplanted.

Apply fungicides to the plug prior to planting. Use a Thielaviopsis control fungicide [Thiophanate methyl – Cleary 3336F] plus a pythium control fungicide to the plugs prior to planting to protect the root system. This treatment is critical during early season when plants are stressed. *Refer to Ball Tech on Demand Thielaviopsis document for more information.*

***Never* water plugs with hot water.** Check the temperature of the water in the irrigation line. Hot water (>70F) may increase pansy mottle and tip abortion.

Thoroughly water plugs. To ensure good contact between soil and the plugs, apply sufficient water (cool to the touch) to force the soil around the plug and prevent air gaps between the plug and surrounding soil. Drying out the plug can lead to tip malformation problems.

After transplanting:

- ➔ Soil pH should be 5.5 to 5.8. Soil above a pH of 6.2 can lead to disease problems
- ➔ Soluble salts of growing mix should be less than 1.5 mmohOS/CM3 (using 2:1 extraction method).
- ➔ Fertilize after rooting out with 100-150 ppm Nitrogen from 20-10-20 to encourage initial leaf expansion and branching
- ➔ Use a nitrate fertilizer *with low rates of phosphorus* to maintain compact plant growth.
- ➔ Water thoroughly, but do not allow the plants to dry out excessively during early establishment. Make sure the plug root ball stays wet during the first week or until the plug roots out into the surrounding soil. Avoid hot water during early growth.
- ➔ Use recommended fungicides and growth regulators as needed after plugs are rooted out.