

GROWERTALKS

Culture Notes

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Echinacea: Surviving Old Man Winter

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We're in business to make a profit. As growers, we need to arm ourselves with the tools and knowledge to grow plants that not only survive the winter, but also explode into vigorous new growth, producing a plant that the consumer can't resist. Too many echinacea have been lost by a poor understanding of the plant's botanical background, as well as some important cultural information presented below.

Plants of the straight Echinacea purpurea type (pinks and whites) have strong taproots that store food, making them much easier to overwinter. The popular new varieties introduce Echinacea paradoxa into the breeding stream. In nature, the fibrous-rooted E. paradoxa rarely blooms the first year, allowing it to build an overwintering crown. The hybrids can and do bloom the first year, flower until frost and in an "I could have had a V-8!" moment, realize, "I forgot to build a decent crown!" The result is poor winter survival.

Winter survival tips for hybrids

As a general rule, the northern tier states should plant echinacea by July. It's important to discourage flowering on the 72-cell starts, allowing a decent crown to develop. If this is not done, the consumer should at least be told to enjoy the flowers as cut flowers and allow the plant to build the crown necessary for ensuing years.

Plants started in the fall in the southern tier states in September to October from a 72-cell size need to be bulked up for overwintering in a 2.5- to 3-in. size container or equivalent cell pack. This step will significantly cut losses due to overpotting in the fall.

Northern tier growers bringing plants in after July need to keep echinacea heated at 58F (14.4C) in order to keep them growing during winter. They will need light interruption during the night from 1:00 a.m. until 2:00 a.m. and daylight extension from 5:00 a.m. until natural daylight occurs during the day.

Avoid fertilizing over 50 ppm nitrogen. Regular testing of the EC is advised to ensure that limited watering schedules during the winter months are not causing the build up of dangerous levels of salts in the soil. This can be a critical issue if slow-release fertilizers are incorporated into the soil and are not monitored carefully for EC buildup. Echinacea like a wide range of soil-types, but all soil must have good porosity and a pH over 5.0. Watering needs to be on the dry side during the winter months.

We recommend weekly scouting in the winter for Botrytis in the crown and on the foliage. A winter drench of a broad spectrum fungicide is required at the start of the dark season, taking place no later than the end of September. This is for controlling and preventing disease caused by high humidity. Air ventilation and good circulation are a must to keep the humidity low.

Don't shear the plants during the winter months. This will defeat the purpose of heating the plants and keeping them actively growing.

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