

February Ask the Experts: Waking Up Tubers

This year for the monthly garden column we'll pick a topic that is related to that month's dahlia-growing activity. Three expert growers - Steve Meggos, Rusty Ritchie, and David Sales - have agreed to share their "secrets."

Let's meet our experts for February:



Steve Meggos: I live outside Carpentersville, IL. I have been growing dahlias since 1982 and breeding since 1994. Currently I have 19 dahlias on the market and 313 seedlings in the 1st, 2nd, 3rd, 4th and 5th year. I grow 1500 plants each year, 95% of which are my seedlings.



Rusty Ritchie: I'm a second-generation dahlia grower/exhibitor. My father exhibited at CSDS and SDC shows during the 60's and early 70's. I've grown a few dahlias since 1969. Last year we grew about 600 hills, consisting of about 200 varieties. We enjoy all sizes and types and try to bring a wide variety of blooms to the shows we attend. Most of my 'expertise' comes from the "School of Hard Knocks." Dahlias can make you humble.

Here's what our experts had to say about waking up their tuber stock.

How often do you check your stored tubers during the winter and what do you look for to ensure they remain viable? Do you make any adjustments to the storing process based on what you find?

Steve Meggos: I check the tubers every 5 weeks. I look to see if they are rotted or shriveling. If they are rotted, it means there is too much moisture, and if they are shriveled, they are not moist enough. If not moist enough, I turn the humidifier on for a couple of days. If they are too moist, I open the boxes for a few days. To store, I use large kitty litter containers, drill a few holes in the sides so the tubers can breathe. Then I put a layer of woodchips followed by tubers then more wood chips.



Steve's method of storing tubers using cat litter boxes

Rusty Ritchie: I check my tubers routinely because I have many opportunities. When I put the last of my dahlias to bed for the winter, some have been in storage for over a month, and in some cases the tubers have already shriveled or dried up. The tubers that are firm and dry usually remain dormant until warmth and moisture wake them up. Because I keep my hoop-house above freezing, if I find tubers wanting to grow, I can pot them up and give them an early start. Certain varieties just don't make great tubers, so when I harvest them, they don't go into storage. Instead, I try to keep them growing in the hoop house. Some varieties don't wake up as quickly as others, so patience is needed, and mindful watering. Until you have growth from a tuber, it's easy to over-water and that will lead to rot. Some tubers may wake up within a week, and others could take a month or more.

What approach and techniques do you use to get your tubers to start sprouting?

Steve: I use the method in the trays. The trays are 5 inches deep. I do use the mixture that is used for perennial flowers. I also add fertilizer 10-10-10. A pound and a half per 2 cubic bag. The mixture for the perennials is coarse and has 1/3 sand. The sand keeps the mixture warm and helps to drain. That way the tubers do not rot. I keep the temperature in the air and soil between 76-80. I never water the tubers, but I do mist a couple of times a day. And I do not cover them because they need light.

Rusty: Most of my tubers are stored in gallon-size zip-lock bags. I use plastic grocery bags for varieties that produce the huge tubers. I do not close the bags. I use vermiculite as my storage medium, and I have not noticed any difference in using fine, medium, or coarse vermiculite. I reuse the vermiculite for years. When I want to wake up my tubers, I switch the vermiculite for potting soil and apply some rooting hormone. I use a white powder, but I've heard good things about the gel, particularly with cuttings. I schmear it anywhere. I'll dip a fresh division like I would with any powder when I'm putting them away for the winter except now I am planning to pot it up.



Here you can see the bags Rusty uses

The bags leave my crawl space and find a warmer place to wake up. When roots appear on the side of the baggie, I'll pot them up individually, or bag them individually. My basement growing area is easier to keep warm than the hoop house, so they wake up a little faster there, but I prefer the natural lighting of the hoop house. I don't use trays to wake up tubers because they take up more space. Sometimes I will put 5-7 tubers in a one-gallon nursery pot, planted vertically, and this allows the new shoots to grow straight up. Of course, I re-pot them individually before they grow much. Usually, a tuber that is sprouting roots will have a visible eye as well. If not, you may have a dud. With rooting hormone, sometimes you get roots before the eye emerges. Don't consider it a dud too quickly.

**What ambient conditions do you consider to be ideal to encourage sprouting?
What changes, if any, do you make once a tuber starts to sprout?**

Steve: I store the tubers in temperatures between 38-40 degrees. The last 4 weeks before planting I increase the temperature to between 55-60 degrees. The increase in temperature helps the tubers to wake up faster and sprout sooner. Like I said before, I never water the tubers. I just mist a couple of times a day. As soon as they sprout, I give them water every 3 days. They must have light for 16 hours a day.

Rusty: If you want your tubers to wake up, warmth and moisture are key. Too much of either is asking for trouble. Once sprouting has begun, light becomes more important. Using indoor lighting, 14 hours on and 10 hours off is reasonable. Depending on the quality of indoor light, you can adjust the time in response to leaf color or leggy shoots. Sixteen hours on might improve pale green leaves. I prefer the sunlight of the hoop house, but I can't say that I've seen much sunlight since Christmas. I have three shop lights in the hoop house, and I turn them on early and keep them on late to make the tubers think it's a different season. With the perma-cloud we've had recently, the shoots are facing the shop lights more than the sun. There are propagators that are way more knowledgeable than me when it comes to the lighting needs of dahlias and dahlia cuttings. What I do know is that good lighting for indoor plants can get expensive.

Column edited by George Koons.