

Portland Dahlia Society Bulletin

Meets second Tuesday of the month at Rose City Park United Methodist Church, 5830 N.E. Alameda

Website: portlanddahlia.com

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Next meeting Tuesday, June 12th, 2018 @ 7:30 PM

SOCIETY NEWS

Thanks to all the volunteers who worked so hard on all of our tuber and plant sale fundraisers. Thanks to all the growers that generously donated their tubers, plants, time, packaging, printing and labeling materials. Special thanks to the Gitts Family and Swan Island Dahlias for use of their facilities for the two tuber packing work parties. We hope to have a financial report available at the meeting so we can see exactly where we stand. Preliminary estimates put us ahead of last year.

COOKIES FOR JUNE

Treat hosts for June are Doris Olsen and Mike Riordan.

PROGRAM FOR JUNE

For the June 12 meeting of the Portland Dahlia Society we will welcome Wayne Lobaugh who will speak about watering. Another experienced grower will speak about mulching and shading too, all timely topics.

Additionally, a panel made up of Teresa Bergman, Mark Oldenkamp and Linda Taylor will cover the subjects of pests, weeds and diseases. At this meeting will be the last opportunity of the growing season to bid on started plants at the silent auction. Just what you need to fill in.

It has come to our attention that the signup about opening your dahlia garden to the dahlia society did not make it all the way around the room at the May meeting. Several people want to welcome us, but maybe YOU do too. Please look for the signup sheet at the June 12 meeting, or contact a board member so your name can be added.

Also, if you would like to speak briefly for a program at any of our meetings, please let Laura Oldenkamp or Nan Hage know. We try to tap a variety of members to learn of their techniques and have learned so much since there is quite a diversity of methods within our society. It is refreshing to know so many ideas can work.

TOPPING OUT

Sometime this month growers generally pinch out, top out or 'stop out' their dahlia plants. This tends to create a bushier plant with more blooms at their prime simultaneously. Most publish materials suggest allowing 2 to 4 laterals to develop for AA and A's, 4 to 6 laterals for B's, 6 to 8 laterals for BB's and 8 or more for Miniatures. By directing the plant's energy through stopping, disbranching and disbudding, growers are rewarded with superior blooms in every respect. You most likely won't allow all laterals which form to continue growing. By way of example, if you have a plant of *Clearview Edie*, with four sets of developed leaves, one has the possibility of eight laterals developing after pinching out the growth tip. Far better to allow the top four laterals to develop and remove those developing lower on the plant. By removing the lower laterals you have less chance of mildew and hard to reach insects becoming an issue.

DOS AND DON'TS

Do try to manage healthy plant growth by allowing only one sprout to grow from each tuber. If multiple sprouts are allowed to grow, they tend to compete with each other resulting in smaller flowers and generally weaker growth. Don't remove the unwanted sprouts by pulling on them. I did this at one time, until I managed to break the neck of the only tuber of a new and expensive variety. Pinching or cutting works fine. Pulling, a definite no-no.



Chamicum Troy

Do water green plants (cuttings) to keep them growing vigorously. A liquid fertilizer at half strength administered weekly (weakly and weekly) will also keep them growing strong. During periods of hot weather, this could make all the difference in healthy plants vs. throwing them into a stalled, shocked state where they are apt to express viral symptoms. If you have tubers and green plants growing together, hand watering the green plants is the preferred option. If during the middle of June the ground begins to dry out a bit, one can start overhead watering. Using an oscillating sprinkler, the gardener can simulate a refreshing spring shower.

Morning showers as opposed to evening showers would be less conducive to powdery mildew. When the plants reach about a foot high, I usually put out the drip tape and begin watering in the normal manner. At this point all overhead watering is discontinued.

Every year it seems that some varieties begin looking virused that have never shown symptoms previously. Tell-tale oak leaf or mosaic patterns in lighter yellow on the foliage or yellowing along the foliage mid-rib may indicate stock that should be culled. Some yellow spotting of the leaves can be caused by insect damage (e.g., thrips) and is not to be confused with disease. If you look on the undersides of the leaves you can see where the insects entered to cause their damage. If you are not sure if a plant is diseased, you might want to ask the opinion of a more experienced grower or bring a leaf sample to our meeting.

Dahlia smut is a curable fungus disease that at first symptom looks like dahlia ring spot virus. If left unchecked, the spots will rot all the way through the foliage giving a “shot hole” appearance. The smut is likely to occur in the same areas of the garden each season as the fungus winters over in the soil. It seems to be most prevalent in June in our area. *Daconil* is an effective fungicide against dahlia smut available to the home gardener.

The rotting mother tuber phenomenon usually happens this month. You may have a strong healthy plant that suddenly, inexplicably begins to wilt. Usually, this means the mother tuber is decomposing. Don't dig up the plant to investigate. The plant will attempt to survive by growing new side roots, but this takes a little time. To help Mother Nature along, try shading the plant on the South and West sides with a piece of cardboard about a foot square held in place by three stakes per side.

Replanting is a seldom discussed subject. But nothing ever works out perfectly. And some plants don't grow and others need to be culled because they are diseased. If the dahlia grower has a few extra green plants, they come in handy for this purpose. A few extra tubers growing individually in pots for this specific purpose work out equally well. Having extra stock for the express purpose of replanting also makes one more apt to cull the plants you know deep down you need to cull.

Recently there has been some discussion among experienced growers about the use of Epsom Salts (Magnesium Sulfate). The consensus seems to be that the magnesium helps unlock other nutrients and make these nutrients more available to the plants. Another grower reports that using Epsom Salts greatly improved the keeping quality of his tubers over winter. I'd be a bit cautious with the application rate initially, starting with maybe a teaspoon per plant around the drip line. You can always add a little more later, but it is difficult for plants to recover from too much of just about anything.

PEARLS FROM THE PAST

Cultivation and the manner in which it is done spell the difference between success and failure in growing dahlias. Cultivation is placed ahead of watering as with proper preparation and cultivation of the soil, moisture can be conserved but watering without cultivation is worse than no watering at all. There is no truer adage than “the hoe is mightier than the hose”. *Editor's note: A garden rake works even better than a hoe to cultivate and loosen the soil. The soil is raked around the plants and the paths themselves between the rows are also raked.*

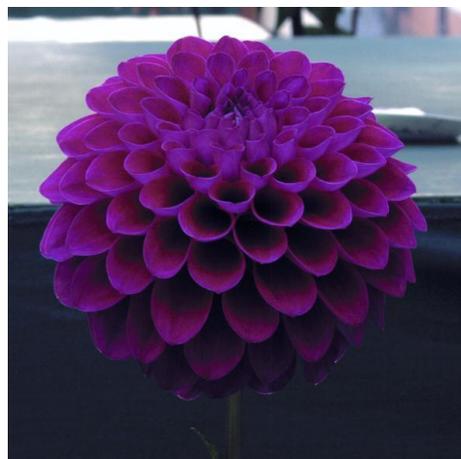


Photo: Hollyhill Purely Purple

Cultivation should be started as soon as the shoots are far enough out of the ground to mark the rows. The object is three fold, to break the crust and conserve moisture, to allow aeration of the soil and to destroy the weeds which take food and moisture from the plants. Cultivation should be shallow until the plants are up a few inches after which it should be worked several inches deep until the plants are a couple of feet high or until the buds start to show. Cultivation should always be shallow close to the plants to avoid injury to the feeder roots. By the time the buds start to show the fine feeder roots will fill most of the space between the rows and deep cultivation should cease. From then on cultivation should only be deep enough to keep a dust mulch on top. Many growers make it a practice to always float the ground after cultivating as it helps to prevent evaporation of the moisture. A crust should never be allowed to form as this will permit the soil to dry out in a very short time. The ground should be stirred at least once every two

weeks and should always be worked as soon after a rain as the top surface dries out sufficiently. The hoe is the implement most used in the small garden for cultivation and is always needed to remove weeds from around the plants in any planting. After the plants get well started, a rake may be substituted for the hoe for close work as it is not so apt to injure the fine roots.

From *Practical Dahlia Culture* published by the Portland Dahlia Society in 1946

THE CURSE OF THE PURPLE DAHLIA

by Ted J. Kennedy

Let me summarize this article by saying that most dahlias that are purple have tubers that do not store well due to rot. I could stop there and you could file this somewhat insignificant fact into your brain and if you grow a purple dahlia, you may take some special precautions to ensure that you are able to grow it again the next year.

The reason I bring up this somewhat obscure fact is that people who do grow dahlias for fun or show generally are not aware that there is a problem with purple dahlias. It is indeed a very real problem and people who admire dahlias have known about it for many years. I first read about it in a book on dahlias published in the 1950s. I had been reading this rather outdated book to see how people grew dahlias back when and to look at some of the pictures of their old-fashioned flowers. In the book under the part talking about storing tubers they stated that purple dahlias have a propensity to rot in storage.



England's Glory

Here we are in 2017 and the fact that purple dahlias have poor keeping tubers must be common knowledge. I complimented a grower on his very nice purple seedling and said basically, "too bad your flower is purple as the tubers may not store well." He looked at me and was

very puzzled he had never heard that purple dahlias often have storage problems. He had been growing dahlias for many years too. As it turned out, the flower does have some storage issues.

I mentioned the purple curse casually to several of our dahlia club members and got equally puzzled looks on their faces. Could it be that most people who grow dahlias are unaware of the purple curse?

People love purple dahlias. When the internet was just getting going, one site kept track of color preference by asking people what was their favorite color for a dahlia. Purple won easily. I love purple and not just any purple as there are many pretenders out there. Purple as everybody knows occurs when you mix red and blue pigments. Since there are no blue dahlias, purple dahlias are as close to blue as we can get. Yes, some lavenders have a blueish tint but lavender may well just be a less saturated version of purple. So, I want my purple dahlias to have some blue pigment and the more the better. I call the worst version of purple "maroon" (French word for chestnut). I dislike maroon and in one definition of that color they say: "Purple and dark red are mixed to create Maroon." That to me means too much dark red and not enough blue. So I guess you know what color I like: a deep, fully saturated, blue purple.

And as long as we are talking about purple dahlias, what dahlia variety is the most perfect shade of purple? There are many contenders over the years but one that originated in about 1929 gets my vote for the best purple: **Thomas Edison**. It has the blue purple color in a deep vibrant shade. And another amazing fact is that Thomas Edison is one of the few purple dahlias that does not have the curse of the purple dahlia. Its tubers are numerous and store well.

There are lots of beautiful purple dahlias that have the curse, some more than others and I will try to list some of them that have impressed me with their wonderful purple color. An old timer that is still around but barely is **Purple Joy** B FD Purple. It is a very nice shade of purple and the flowers have good form. The tubers will occasionally store and with persistence you may find a tuber for sale.

Another classic purple dahlia with abysmal storage qualities is **Hillcrest Royal** B C PR. I have seen glorious examples of it in shows and currently it is not for sale at any purveyor in the USA but I understand it is still grown in the UK.

One of the best purple dahlias of all time has to be **Formby Kaitlyn** A FD PR. A well shown example of this exquisitely formed dahlia in an excellent shade of purple is a sight to behold. It not only makes poor storing tubers but they are also rather small. It is sold by a few vendors but order early or you will miss out.

Hollyhill Purely Purple M FD PR is a dahlia that my

wife and I bred some years ago. It is an excellent shade of blue purple and has precise formal decorative form. I grow it every year and have not had a tuber survive in storage for several years now. I make several pot tubers and take cuttings each year.

England's Glory A SC Bicolor Purple/White was grown by many dahlia enthusiasts for several years. It had deep purple florets tipped in white. Very poor tuber keeper. In recent years, AC Dahlias has introduced a very similar dahlia called **AC Inara**. It too has storage issues.

Sellwood Glory B ID DB PR/W is a legendary dahlia that you can seldom find anymore. Our Portland Dahlia Society used to have a challenge trophy for the best flower of it. Very poor tuber maker/keeper.

Chimicum Troy MB PR is one of the top miniature ball dahlias but has always had considerable tuber storage issues.



Thomas Edison

The list could go on and on. There are many really nice purple dahlias that have been released and are occasionally sold and it is certainly worth growing them. There also have been numerous purple dahlias that were not released because of the curse. One that we want to try is **Seabeck's Hilda**, a vibrant stellar shaped flower in scintillating shade of purple. I understand that there are other purple flowers that may be released also.

There are a few other questions: (1) What causes the purple dahlia tuber rot problems?

For some reason, tuber storage abilities are linked to color pigments in these dahlias. Purple dahlias are a result of two pigments that must be present to make purple. In dahlias there are two classes of pigments that combine to create most dahlia colors. A purple dahlia is the result of a flower that has a white version of the carotenoid pigment (not yellow or other shades of yellowish orange) and anthocyanin, the pigment that makes dahlias red or pink. So in order to get a purple dahlia, you need a specific but common version of a carotenoid (the white version) combined with any one of the versions of anthocyanins. Now wait a second, if anthocyanin pigment makes dahlias red or pink, how does purple come into the equation? When anthocyanin pigment is isolated from flowers it is a purple pigment. It seems that most versions of the carotenoids pigments interact with the anthocyanins and convert them to red pigments. But some versions of the carotenoid (the white ones) do not have this effect. If a flower has no anthocyanin and only this version of the carotenoid, the flower is white and there are lots of white dahlias. So purple dahlias are white dahlias that have some anthocyanin pigment. That is long explanation of purple but what does that have to do with tuber storage abilities?

I have only speculation at this point. It has been said that the conversion of anthocyanin to be red occurs at a high pH and the original color of purple is retained at a lower pH. It could be that purple dahlias have a higher pH and that cause them to be more vulnerable to fungus diseases that cause tuber rot

How can I successfully store my purple dahlia that has the curse?

It is a fact that some people grow these varieties and the tubers store well. What do they do that is different from the rest of us? You got me. Some say digging the plants early before the fall rains may help. I have given up on them and instead take cuttings and then retain several of the rooted cuttings as pot tubers that I use in the spring to take more cuttings. I have noticed too that pot tubers are not immune from rot and a percentage of the pot tubers will rot. So only doing one or two is not sufficient and three to five would be much better.