

The JUDGE's Corner

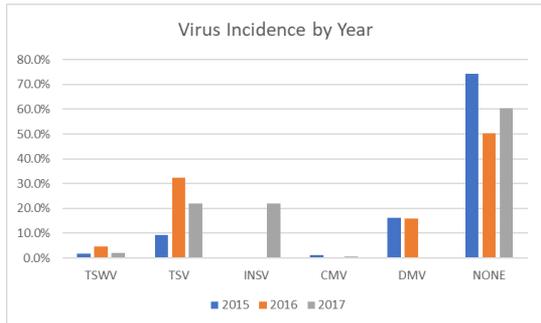
Ron Miner - baronminer@aol.com

Virus Analyses 2017

2017 was a watershed year in developing the knowledge that will allow us to begin to control virus in our dahlia gardens. Jim Chuey and the Scheetz-Chuey Foundation provided the wherewithal to create the Carl F. and James J. Chuey Chair for Dahlia Research and Development at Washington State University in Pullman, Washington. Professor Hanu Pappu holds that Chair and has led the way again this year in identifying virus in samples sent to WSU for analysis. The Midwest Conference is clearly in a leadership role in the virus control offensive! Thanks, Jim!

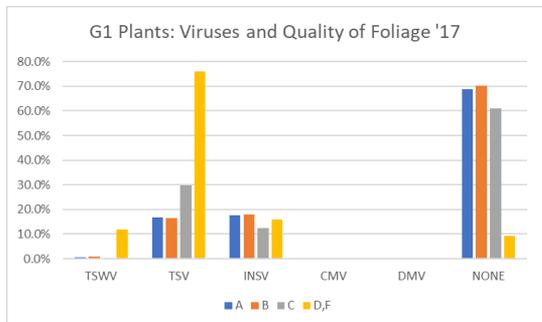
There were a number of surprises in the '17 data. The chart on the right compares the incidence of the various viruses over the '15, '16, and '17 seasons.

Perhaps most remarkable was the "arrival" of Impatiens Necrotic Spot Virus (INSV) and the "departure" of Dahlia Mosaic Virus (DMV). We continue to work with Professor Pappu to understand the results.



A key objective in '17 was to study the performance of tubers from plants that were found to be free of virus in 2016 tests; they came to be known as G1 plants in 2017. We were, frankly, disappointed to find that ~38% of the G1 plants tested positive for virus. By comparison, however, 53% of the plants not previously tested had virus and virtually all plants from stock known to have virus in 2016 exhibited virus in 2017.

In the context of show judging, the columns at the far right in this chart illustrate a key point. Almost no plants



With poor foliage are free of virus. When we detect virus symptoms in dahlia foliage (D and F ratings), the entry is almost certainly virused. It still too early for each judging team to unequivocally and independently “eliminate” (Guide to Judging Dahlias (GJD), p. 28) an entry with virus symptoms from competition. Nevertheless, your teams should discuss the observations and request guidance from the judging chair and/or the show chair on the proper handling of such an entry. While the GJD still says “Judges must exercise careful judgement since nutrient deficiencies may convey leaf appearances that resemble disease,” (GJD, p. 28) we are very much more knowledgeable about the appearance of virus now than we were in 2002, when the guide was published. While it is an oversimplification, chlorosis (yellowing) along the veins of foliage is generally caused by virus; interveinal chlorosis is generally associated with nutritional issues.

See the ADS March Bulletin for more information.

Evaluation of Form in Fully Double Dahlias

There are five characteristics that need to be considered in judging the quality of the Form of fully double dahlias: Symmetry, Contour, Development, Trueness to Form, and Depth. Those characteristics are largely independent of each other, although substantial faults in one can show up in the others. The GJD, p. 40, informs us that, in evaluating a seedling, the first four characteristics are of equal value (5 points each) and that Depth, or size proportion, is of somewhat greater importance (8 points).

Symmetry

In my view, symmetry can be easiest to evaluate in a ball or a formal decorative dahlia where the ray florets are tightly arranged around the diameter of the bloom.

Good symmetry includes a circular outline of the tips of the ray florets, centering of the bloom over the stem, a round and tight center, and a center whose size is in good proportion to the size of the bloom. (See GJD, p.17, for more details.)

Which characteristics of symmetry would lead you to choose the bloom on the left, above, over the one on the right if you were to find them in a MB DB class at one of our shows? I generally start the evaluation of all entries in a class with a check on the quality of the centers. In this example, you would agree, I’m sure, that the center of the CV Royal on the left is a lot better than the one on the right. Since Form is so important in show judging, you can probably set the bloom on the right



Two Clearview Royal blooms

Since Form is so important in show judging, you can probably set the bloom on the right back on the table and move on to examine the other entries in that class.

The quality of the center of a dahlia is an important element of the evaluation of Symmetry. “A bloom ... where pollen bearing disc flowers are ... evident should be eliminated from further competition.” (GJD, p. 17) Another aspect of the center of a dahlia that can be controversial is the presence of a small hole in the center of the bloom where the ray florets do not quite meet. This condition should be considered a “minor fault,” not “the same as a blown or green center.” Other center faults include centers without color (hard and green), oblong, depressed, protruding, or presenting a flat face.” (GJD, p. 17.) The Hollyhill Miss Whites, right, illustrate the presence and absence of the depressed center fault.



Hollyhill Miss White, MB W

Contour

I find Contour to be more difficult

than Symmetry to describe and evaluate. Our GJD indicates that “the arrangement, placement, and uniformity of ray florets” are important in evaluating Contour. Faults include “gaps” in the arrangement of the ray florets, “an irregular placement,” or an “irregular formation” of the ray florets. (GJD, p. 17)



Anthony Amrelihn, ST R

What Contour faults do you see in these two Anthony Armelins? It is a tougher question than the previous one, isn't it. A key difference between the two “entries” is the gap at about 9 o'clock in the bloom on the left. There is another gap, or irregular placement of the florets at about 5 o'clock. On the other side of the coin, the “irregular formation” of the ray florets around 6 o'clock in the bloom on the right should be considered a contour fault, too. In this example, I suggest that all the other characteristics of the two entries (color, etc.) should determine the winner.

Development

An exhibitor's objective is to get blooms onto the show table that are at their peak of development. The nature of the center of the bloom is one good indication of the state of maturity. An immature bloom tends to have a large center, out of proportion to the rest of the

Bloom. It may have excellent color but is likely also to lack depth. Perhaps the most important comment on maturity in the GJD (p. 18) is that “the mature bloom at the peak of development with some faults merits first choice over an immature “clean” bloom.”

Take a look at the two Hollyhill Jitterbugs on the right here. Which is more mature? It is clear, I hope, that the bloom on the left is much closer to the peak of development than the bloom on the right. In a show, unless you were to find a very substantial fault in the ‘entry’ on the left, you should set back the ‘entry’ on the right.



Hollyhill Jitterbug, BB SC OR

Trueness to Form

The evaluation of Trueness to Form basically involves determining how high on the “Form mountain” a certain cultivar, or a certain entry, lies. How closely does the flower match the ideal definition provided in the *ADS Classification and Handbook of Dahlias* (CHD)? The definitions have evolved since the writing of the GJD; the CHD definitions are the correct, current ones to use. Please get out your CHD and check the SC definition. Then, please recall that Form is determined by the ray florets near the equator of the bloom. (GJD, p. 25)



Crazy 4 David, B SC P

Would you rate one of the two Crazy 4 Davids as higher up on the Form mountain? Probably not by much, but the bloom on the right seems to have more ID/FD florets near the center of the bloom. Right?

Now take another look at the H Jitterbugs above. That bloom on the right doesn’t look much like an SC at all?! That observation tells us that the clean, immature bloom on the right really hasn’t gotten mature enough to properly exhibit its Form!

I didn’t get to Depth. Next month! “Read ahead” on p. 36 in the GJD, if you wish! :-)

Ron