Dahlia Testing – 2018 Plan

Free Virus Testing for Dahlia Vendors

We are delighted to announce that the American Dahlia Society will be sponsoring a program to test the plants of ADS-Member dahlia vendors at no cost to the vendor. The Scheetz-Chuey Foundation will provide the funding to the ADS to cover the testing and the tests will be performed in the laboratories of Professor Hanu Pappu at Washington State University. Professor Pappu is the Carl F. and James J. Chuey Professor of Dahlia Research at WSU.

The individual results of the tests will be known only by the vendor, the WSU lab, and the ADS research team chairmen. The ADS team will only release the results generically with no reference to the suppliers. It is our expectation that the individual suppliers will use their own results to cull out stock that tests positive for virus. We hope, as well, that the individual suppliers will use the information developed in the tests to improve their ability to provide healthy stock to their customers, our ADS members.

We encourage all ADS-member vendors to go to the ADS website and complete the application form. Please submit the forms as soon as possible but no later than June 30. When we have the applications in hand, we will know how many plants each supplier will be able to test and will provide to them a schedule for them to use in sending samples for testing.

The motivation for this offense follows from one of the relatively few clear conclusions in the test results. The simple fact is that plants grown from tubers taken from plants that tested positive for virus in 2016 and 2015 virtually always tested positive for virus in subsequent years. This figure summarizes all the results from 2017. It separates the results into 3 sets based on the condition of the tubers from the previous year. The parent tubers in the samples in the columns on the left were free of virus (Gx). The columns in the middle came from plants that were not tested in 2016 (?). The samples in the columns on the right came from plants that were positive for virus in 2016 (V). Clearly, the best results came from parent

plants that were free of virus. Even more clearly, parent plants that have virus will almost certainly produce offspring with virus. We hope that this free testing program will help our dahlia vendors



improve the quality of their dahlia stock.

Individual Grower Testing Will Continue

Professor Pappu will continue to provide testing services to individual growers at a cost of \$10 per sample with a minimum order of 30 samples. Instructions on how to take advantage of that program are also available on the website. Local societies may want to use this service to improve the quality of the stock they use in club sales. The Dahlia Society of Ohio, for example, found that plants grown from G1 tubers brought significantly higher prices at our Midwest auction.

Virus Team Experiments

The ADS Virus Team will continue to work on a group of projects. We hope, through controlled experiments, to better understand the disappointing portion of Gx plants that test positive for virus. We will continue to analyze the offspring of plants that test to be free of virus. We plan to study the of affect of thrips control strategies on the reinfection of clean stock, for example.

We appreciate and gratefully acknowledge the sponsorship of the Scheetz-Chuey Foundation for this work.

Ron Miner, Brad Freeman, Nick Weber, Jerry Moreno, and Linda Taylor