American Dahlia Society Spring Planning Minutes April 21-22, 2018

The planning meeting was called to order Saturday morning at 9:00 am by President Don Dramstad.

### **Present**

Those present were: Don Dramstad, Brad Freeman, Mark Oldenkamp, Ken Jensen, Terry Schroeder, Wayne Shantz, Harry Rissetto, Ron Miner, John Morton, Linda DeRooy Holmes-Cook, Alan Fisher, Claudia Biggs, Bob Schroeder, Elva Sellens, Rosemary Freeman, Nick Weber, Jerry Landerholm, Sharon Swaney, Kristine Albrecht, Marian Landerholm, Rob Swaney, Eleanor Shantz, Linda Taylor, Marian Landerholm, Dr. Hanu Pappu. Several members of the Pacific Southwest Dahlia Conference were present: Steve Lamb, Sue Gregory, Joanna Hansen-Morton, Iris Wallace, Tricia Santana, Beverly Dahlstedt, Jeff Miner, Chris Buswell and Brian Spinstock.

#### **PLANNING**

### **Virus Project**

Ron Miner gave a summary of the virus testing to date. In 2017 the ADS and WSU formally established a relationship to have a chair, that will carry on in perpetuity, for dahlia research and development at WSU, made possible by the Sheetz-Chuey Foundation. This will strongly aid the ADS in getting some technical things done. It was noted that Bill McClaren had a key part of making the matching proposal work 25 plus years ago. In 2017, 1665 samples were analyzed from 27 gardens. They were tested for six viruses with an emphasis on G-1 dahlias (those without virus when tested in 2016). Among the G-1 samples, 38% showed virus. There were over 15% showing INSV (Impatiens Necrotic Spot Virus), which did not show in previous years. Of those not tested previously, 58% showed virus with a large incidence of INSV and TSV (Tobacco Streak Virus). There was no incidence of DMV (Dahlia Mosaic Virus) in 2017. Virtually 100% of those who showed virus in 2016 were positive for virus in 2017. The worst foliage virtually always shows virus. There was discussion regarding use of a control group and/or reporting those that appear to have virus separately from those that appear to be clean.

The percent of virus by form is:

Giant to Miniature 0-45%
Ball, Mini Ball, Pom 60-62%
Fully Double other type 70-76%
Open Centered 80-91%

All plants have virus pieces. All dahlias carry an integral part of their genome that includes a part of a virus, but it is not a virus; it has virus pieces. Virus research and testing will be an important beneficiary of the genome project.

The level of absence of virus by year:

- 2015 75% did not show virus
- 2016 50% did not show virus
- 2017 60% did not show virus

In 2018, the aim is to test 2000 plants. Some of the statistics from the virus testing in 2017:

- 41% of plants tested showed virus.
- This was the first time the INSV showed up.
- No DMV this year.
- > All plants from bad stock were found to have some virus.
- Less virus was detected in plants with excellent foliage.
- Almost 100% of plants with very poor foliage had some virus detected.
- There were more incidences of virus in plants from the western US than from the eastern US. There could be a variety of reasons for this.

### The plan for 2018:

- Encourage dahlia vendors to participate in testing. Will determine how many a vendor can apply for testing and be given a time frame in which to send in samples
  - Would be free due to Scheetz-Chuey Foundation
  - Results have been and would be confidential. Vendors would be encouraged to use the results to improve the quality of their stock, but it is totally up to them.
    - Results will be known by Dr. Pappu and committee
    - Results will be coded for Virus Team and ADS
- Ongoing tests for the public at 30 samples for \$300.
- Virus team projects targeting G-x samples, controlled environments and insect vector testing.
- They will do testing in the lab garden at WSU

Ron Miner, Brad Freeman, Nick Weber, Linda Taylor, and Jerry Moreno are the virus team.

### **Genome Project**

Dr. Walbot, Professor in the Department of Biology at Stanford University and has devoted much of her career to corn research. She also worked extensively studying the morphology and chemistry of dahlias and responsible for the Stanford Dahlia Project. She has had a dream for many years to sequence the dahlia. The good news is the price of sequencing has fallen again. The motivation is figuring out, through genome sequencing what the wild progenitor or possibly two different species led to the modern horticultural dahlias. It is unknown whether all modern dahlias have the same parentage. Dr. Walbot thanked ADS for funding three expeditions to Mexico, with nine collecting days. She only found dahlias on four of those days, however. Wild dahlias are found in rural, undeveloped Mexico at 1000 to 2000 meters. Dahlias are rare and can be difficult to find and when you do find some, it's just a couple and then you need

to drive farther to find more. She went to three states, as different species are found in different states. Although tree dahlias were included as they are not the progenitor of modern dahlia. But to organize the genome information you need an "out group". This is a group of plants that is related, but not too closely related. They will be distinct from the other species.

The steps Dr. Walbot is taking are:

- Collect seed
- Germinate seed. Numbers on the numbered envelope refers to a specific flower from a specific plant. Sampled only about 5%. Germination viability has been 20% to 100%.
- Transfer germinated seeds to small pots.
- Transplant to larger pots as they grow.
- Once they are growing vigorously, cover growing tip for about fourteen days to get albino tissue from the part that has never seen light. This gets rid of excess chloroplast DNA in sequence sample. Up to 40% of the DNA will be from the chloroplast if you don't use albino tissue; using albino tissue you get only about 5% chloroplast DNA.
- Collect albino tissue and flash freeze.
- Negotiate final DNA sequencing contract with Novogen and others.

Ten samples will be sequenced, one to a high standard

- Two d coccinea
- Two d sorenseii
- Two modern cultivars, Edna C and Comet
- One d brevis
- One d pugana
- One d trenicallis (tree dahlia)
- One d rudis (tree dahlia)

There is enough money to do one species for de novo assembly (gold standard) and nine samples at reasonable coverage to compare to the reference genome. She will likely use d coccinea for the de novo assembly because it grows robustly and is the national flower of Mexico. Post Doc Alex Harkness from St. Louis, MO volunteered to do the genome analysis in exchange for authorship on genome in a scientific publication.

There was discussion about the distribution of excess seed to ADS members for people who like germinating and recording through photography and perhaps sending materials to make urbarium specimens. These seeds were mystery seeds and will be used to determine if there are any new species, to confirm the assigned species name and to identify unknown species from Queretaro. This would be an opportunity for ADS members to contribute to the project directly. She would send packets of 5 to 10 seeds from one flower and up to 5 or 10 packets, for a total of 50 to 100 seeds. Must promise to take pictures of vegetative growth and of the flowers and if possible, send flowers back to Stanford. Biggest mystery is seed from Queretaro; most are likely d coccinea but hidden in there are probably some additional species. Dr. Dayle Saar, Dahlia Taxonomist in Murray State, Kentucky has expressed interest in restoring her collection

that was almost totally lost due to a greenhouse disaster and she is an expert in keying the dahlia. Another taxonomist, Tim Culbertson, is a friend of Dr. Walbot's who may be able to help key the dahlia, although he hasn't worked with dahlias.

When initial DNA sequencing has been analyzed, they will resubmit the National Science Foundation grant to acquire funds for sufficient sequencing for a de novo assembly of D sorensensii and other wild species deemed similar to modern cultivars, additional field trips to Mexico to obtain more species samples, and answer questions raised by initial genome sequencing. When we have more data and something close to a publication, we can write to some of the taxonomy centers in Mexico. Question was asked, "How long would it take once sequencing is complete that it would tie together with virus research?" One of the original objective of the NSF grant was to ask whether these natural species have integrated copies of DNA viruses in the genome. This information would naturally fall out. Dr. Walbot is not sure how it would be used, but it would exist.

Dr. Walbot has been in contact with the leaders of the sunflower genome project. They have done about 25 species. They are interested in dahlias because it would be a good out group for the sunflower. A required component of the NSF grant is an outreach project, which demonstrates your project is beneficial to the public or beneficial to the training of students. Dr. Walbot felt the outreach component of our grant was strong. If we resubmit the NSF grant, we will reactivate the educational outreach program with the participation of ADS members.

# Virus Project

Dr. Pappu talked about insects in relation to virus. There are a lot of chemicals that are no longer useful in killing insects, as they have lost their efficacy. There are more than 5,000 species of thrips, but only some will transmit virus. He wrote an article for the June *Bulletin* on ways to keep thrips under control. Keeping thrips numbers down would help limit the spread of virus between plants. There is no evidence of seed transmission of virus. There are more than 1,500 different plant viruses.

One outcome from the genome project is to determine where these vital pieces of virus are located on dahlias. Virus is spread by thrips and aphids. The life span of thrips is two weeks and they survive in low temperatures. Some can be transmitted by mere contamination, so it is important to clean implements between working on different plants. Dr. Pappu said he will look into whether there are beneficial pests that can be used to get rid of thrips. Thrips move all over and only land on plants. They can be very transitory but can also take a long time. Three viruses are spread by thrips: Impatiens Necrotic Spot virus, Tomato Spotted Wilt virus and Tobacco Streak virus. By reducing numbers, we are potentially reducing three viruses.

There is no evidence that leaf miners transmit virus on dahlias, but do cause physical wounds, which may then make it easier for virus to infect a plant. They will move from plant to plant; transmission can be very quick. There are carriers and non-carriers with thrips. If you decrease the number of thrips in your garden, you still may not see a large decrease in virus as many of them may be non-carriers. After feeding on a plant with virus, the non-carriers still can release the virus to their larvae and the thrips from that

larvae can infect a plant if they are a carrier. The symptoms associated with virus varies. A given virus can give a range of symptoms and symptoms can be associated with more than one virus.

Some of the are research projects they are just getting started working on:

- Tobacco Streak Investigate biology and genetic diversity of the virus. Use the information to refine the detection tools.
- Dahlia Mosaic Develop a faster DNA-based test.
- Producing dahlias through tissue culture on artificial medium and see if we can eliminate some of the viruses.
- Through genome sequencing technology, detect how dahlia plants respond to virus infection. Long term this may potentially lead to disease resistance.

Dr. Pappu plans to resubmit the proposal to the National Science Foundation after getting the preliminary data from the genome sequencing.

He is working on a pictorial showing viruses and symptoms in the following ways:

- Post cards
- Bulletin articles
- Web site

# **Judging Distinction**

Harry Rissetto and Ron Miner led a discussion about judging distinction in trial gardens and seedling bench evaluation. We are at a crossroads as to what to do with distinction as it can affect the score of a dahlia and the medals that may be won. Three questions were asked:

- 1. How do you like the dahlia? What is the WOW factor? Does it knock your socks off? (subjective criteria)
- 2. How well will this dahlia perform against its competition? Is it unique and/or visually appealing? (competitive criteria)
- 3. Is it likely to win a blue ribbon, a best of type, a section champ or Honor Table? Suggestion was 1 point if it's likely to win a blue, 2 if it's likely to win best of type, 3 for a section and 4 or 5 for Honor Table.

These are the three general approaches. Looked at some pictures and discussed if they were "stand-out dahlias" \*wow factor) or is it likely to win. There was discussion of what is provided in both the CHD and the Guide to Judging Dahlias. If it scores 85 in the other characteristics, should it receive about 4 points in distinction, with 4.25 being the score for 85% in distinction. One thought was to do without distinction, use it as bonus points or use it as the first criteria (what do you think when you look at the dahlia). Are some using distinction to adjust their scores so that a particular bloom either scores or doesn't score. The wow factor is very subjective, but those who don't exhibit are looking for dahlias with that wow factor.

It was pointed out that most, if not all other floral groups use distinction in scorecard and it is felt to be important to let the public know that we have distinct flowers. Possibly we need to go back to the 3-point rule, where the team's scores should be within 3 points, not far apart in the scoring.

It was suggested to take a vote of whether you think distinction should be judged subjectively (WOW factor), based on competition or working toward a score of 85%. On Sunday, the results of the voting were 6 votes for competitive criteria, 4 votes for the wow factor and 7 votes for a combination.

The meeting was resumed on Sunday April 22, called to order at 9:14 am by President Don Dramstad.

### **ADS Help Local Societies**

Mark Oldenkamp discussed the new organizational chart and bylaw changes to allow us to implement it. He reminded all that it is a big shift and is an ongoing learning process.

After sending an email to ADS Reps and Society Presidents, Mark received the following topic areas they felt the ADS could provide assistance to local societies:

- National Shows provide seed money, more information available about prior events, provide a how-to manual. After discussion, it was agreed that the ADS could financially support about \$5,000. A working group to include the Finance Committee, Vice President, and National Show Chair, was organized to further discuss and develop a specific recommendation. Ken Jensen agreed to work with the National Show Chair and any others to develop a How-To manual.
- Planning Meeting there was a proposal that ADS offer up to \$750 to a society interested in hosting the Spring Planning meeting. There also should be a booklet giving the guidelines for what is expected. Bob Schroeder and Ken Jensen agreed to work on the guidelines and involve any regional vice-presidents. Harry Rissetto moved, and Brad Freeman seconded to authorize the payment of \$750 to a society sponsoring a Spring Planning Meeting. The President sets the agenda which generally includes, scientific, education, and business. Other items are local tours, no-host meals.
- Membership providing information on best practices in recruitment, programs, outreach, attract new, younger members, short seminar topics, and knowledge of what ADS offers to local societies.
  - Recruitment Offer free membership or free tuber purchase of a new origination with membership, invite new members to meetings, mentor new members, use buddy system, use of internet/social media. Maximize the strengths of your new and existing members, provide classes, make new members (all members) feel important.
  - Outreach when you join, you receive a \$20 gift certificate for tubers, membership chair sends out email welcoming new member to club, develop a relationship with a nursery/garden center and have information/cards at check-out area
  - Programs make an annual plan of programs, think outside the box (other than dahlias), have a greeter at the door, use name tags, keep the business meeting short, be sure to have financial transparency.

- Use the "This Worked for Us" section of the website to post information on what works well for your society regarding membership. Read the Society reports in the *Bulletin* to glean information about activities that are being done.
- Split Officer positions into tasks and have members sign up for specific tasks. People are more likely to take on one small task as opposed to a position that has several tasks. Use of Co-chair also helps fill positions.
- Communication ADS Board to visit other parts of the country and help with training providing an ADS visibility to clubs. Have a pool of persons who are willing to help with judges training, use of power point templates, use of tri-folds with room for local society information. Use regional vice president to be involved in planning, ADS intervention with clubs that are struggling as it is easier to help a struggling club than start a new society. Remember, ADS is not only about shows. Brad Freeman with assistance from Mark Oldenkamp agreed to take the lead.
- Image Library Develop educational programs to be distributed through the Image Library.
- Trial Garden/Seedling Bench Both programs are running well, and trial gardens tend to fill up quickly. Discussion regarding changing the requirement to introduce a seedling from a minimum of four years to a minimum of three years, including listing the pros and cons. Discussion regarding light blends being put in the CHD without the full color description. Trial Garden and Seedling Bench folks will have that information for the 2019 cycle. Ron Miner presented information about changing the requirement for introduction of a new origination from 4 years back to 3 years. This would mean that in the third year of growing, the originator can send it to Trial Gardens and/or place on the Seedling Bench. Pros and cons were discussed:

# Pros

Hybridizers know when a bloom is ready Gets new originations out sooner

### **Cons**

Limited space in trial gardens In the first year, there may be many entries.

Insufficient stock for introduction

Limited life span of varieties

More inclination to use Trial Garden instead of putting in the show to get two blue ribbons

Trial Garden Directors/Committee agree with proposal

- Website Need more pictures of dahlias on website classification guide as there
  are only about 20% of the dahlias that have pictures. Detailed instructions about
  submitting pictures is on the website. Each month send out a list of the 10 most
  wanted to ADS Reps and see if we can get more pictures that way. Guidance on
  an archive policy; what do we want to archive and how to go about it. Executive
  Group would provide guidance on archiving.
- Social Media This is the marketing of today. We feel we should do more with social media including YouTube, Instagram and Pinterest. It falls under communication and will likely become a separate area that will need someone who has the skill set, the interest and time to manage. The Executive Committee

- can gather information, find someone who can help in that area and make recommendations.
- Getting Stock to Canada Put material on the website giving specific instructions for sending entries to the trial garden in Canada. Is there a way for the ADS to find a conduit to help make this happen? There is one Northwest grower who is willing to collect pieces of orders from hybridizers not willing to ship directly and ship orders collectively under a certificate. There should be detailed instructions on how to ship tubers to Canada. Ken Jensen will take the lead on getting information posted about shipping tubers to Canada. Need to be a little careful on what we put on the site.
- Insurance What we have accomplished, has likely satisfied the issues there.
- Bulletin The editor appreciates people submitting information on time. If
  anyone has ideas for articles that will be relevant, feel free to contact the editor.
  There is a desire for more color. Cost of postage to Canada is a concern. Other
  organizations send items in a clear plastic folder and is less expensive and no
  label showing it is going through customs. In a clear plastic cover, the postal
  service can see it is just printed material.
- Judging The suggestions were updated tests, web tools for basic judges training, online training. There is an online video. The test does need to be redone. More research into having senior judges go to areas that need training and have a fund to subsidize those who travel. There may be judges who are willing to assist with training, but it needs to be coordinated, with or without a subsidy. There is likely to be more people who are willing to assist if there was a curriculum available to provide the basics that should be covered.
- A couple of comments that were provided by posts in social media regarding membership. Dave Brown, from the UK encourage people who just grow dahlias for their garden, cut flowers, color designs to join their dahlia society. Don't concentrate just on exhibitors, but invite others who enjoy the dahlia overall. Max Ollieu invites families with children to their annual "Kids Day in the Dahlia Patch" after the last show of the year. Kids get to pick their own bouquets and enjoy the whole experience along with their parents. Bob is to develop a test and run it back through the second vice-president.

### **Judging Distinction**

Before getting into distinction, it was brought up that the judging tests need to be updated. Bob will take the lead on getting those updated. Bob would also like to encourage members to use the web tools for online basic judging training. It was also suggested to develop a fund for judging instructors to help with training outside of their region so that some areas that have difficulty getting training could get some assistance from outside judging instructors.

On Sunday, Harry Rissetto gave feedback from those who voted on distinction:

- How well will this dahlia perform against its competition? Is it unique and/or visually appealing? (competitive criteria) 6 votes
- How do you like the dahlia? What is the WOW factor? Does it knock your socks off? (subjective criteria) 4 votes
- It is scoring 85% in the other criteria, especially form and color so should get 3 to 5 points for distinction. **1 vote**
- All three criteria. 7 votes

It was felt that we should stay as we are, without any more definitive definition of judging distinction.

Don Dramstad led a short discussion about Mac's retirement. Currently the Treasurer handles the checks, investments, vase orders and a basement full of books. It is felt the ADS should get out of the vase business. If persons want to purchase the vases the ADS has been selling, they can order directly from the manufacturer. The finance committee should operate the investments, with the treasurer being on the finance committee. We need to deal with the books that are in his basement. It needs to have an inventory done to determine exactly what is needed. It is felt that we need to take some of the responsibilities off the new treasurer.

There was discussion about the quality of some of the color photos in the *Bulletin*. Harry Rissetto stated photos from the photo contest are included as there is no other photos available. It is felt we should have some criteria for the photos on the cover and in the *Bulletin*. Ken Jensen, as third vice-president, should establish some guidelines and policy about photos in the *Bulletin* to the next conference call. Anyone who has suggestions should send them to Ken.

Alan Fisher moved, and Elva Sellens seconded to adjourn the meeting at 11:45 am.

Respectively Submitted,

Terry Schroeder

ADS General Secretary