The St. Croix Grower's Association

www.stcroixgrowers.org



~~The Vine~~ December 2015

Editor's Rant

Giant pumpkin growers across the entire upper midwest have much to rejoice as we reflect upon one of the most ideal growing seasons in memory. Adequate, timely moisture, moderate temperatures, and an extended end of season run made for incredible growing conditions. Perhaps most notable was the relatively low incidence of stressful events- persistent drought, extreme storms, damaging winds, etc. All of this culminated in numerous personal bests and broken records across North central region.

The SCGA had set a goal of hosting the world's #1 weighoff by top-ten average. It is with much excitement to report that on the 10 year anniversary of HarvestFest, our group of top-ten pumpkins handily achieved the #1 slot with an average

of 1813lbs. We weighed 37 official entries totaling 48,296 lbs. Josiah Brandt's contest-winning 2185lb entry briefly held the North American record and solidly secured WI state record status. 7 of the top 10 entries were personal best accomplishments for their growers.

Other notable achievements this season: Scott Steil set the MN long gourd record with a 128.5" entry at Anamosa, IA. Bill Foss came within 1lb of breaking the MN watermelon record with not one, but two entries at 226.5lbs. So close! Dan MaCoy's 162lb field pumpkin was 2nd in the world this year and his 8lb carrot was an easy MN state record.

Thank you growers for helping us host a worldclass event in Stillwater and thank you volunteers for ensuring a successful day for all!



With such success in the patch this year, the SCGA will have a great selection of seeds to offer. Keep an eye on our website and check out our auction details inside the newsletter for info on how to get your hands on some great seeds!

Grower Profile: Brie Quanrud Houlton, Wisconsin

How many years have you been growing giants?

What is your personal best and any other notable records/accomplishments?

1565 is my personal best. I feel accomplished with the fact that all of my pumpkins have made it to the scale thus far...knock on wood!

Why do you grow pumpkins and what goal(s) do you seek to achieve?

I grow giants because it is absolutely amazing and exciting to watch something grow so fast. And, our pumpkins put smiles on so many faces. Just looking at one, a person can't help but smile! You'll never see more happy people than driving down the road with one! They are unique and special. I like being a part of that. I hope to beat my personal best! That is my goal.

How did you get into the hobby of giant pumpkins?

I can attribute this hobby to my mom. I used to have a vegetable

garden and my mom gave me a seed and said see if you can make this grow. She really gave me no choice. I thought, well how hard could this be? Pumpkins have lots of vines and are aggressive. I probably won't have to weed as much! Perfect. I really dove in and started researching as much as I could to make sure I grew a pumpkin. I read books, watched videos, talked to people and joined the SCGA. It was life changing. I can honestly say, my mom has never been so proud. Forget the fact that I graduated college, gave her a grandchild, conquered a terrible addiction...I grew a GIANT pumpkin. I've never seen her smile so big.

What is the biggest mistake you've made in this hobby and how has it changed your practices?

I believe my biggest mistake was vine placement during the first year. My patch was a mess of vines. I did not learn the christmas tree method or the S curve until after the fact. After one season of proper vine placement, my life had less stress. The plants were stronger, bigger and overall healthier.

BigStem

.....what is it and how does it work?

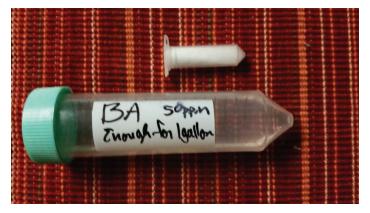
By Tanner Conway, Fall 2015

I will start this article by giving a little background about myself. My name is Tanner Conway, I am 21 years old. A 9 year grower from southern Minnesota and I have a personal best of 1170 lbs (hopefully next year will be much larger). I currently study horticulture at the University of Wisconsin, River Falls.

While doing my studies at the university I became very interested in tissue culture, where I learned and gained a vast amount of knowledge about plant growth regulators (PGRs). My professor Dr. David Zlesak really took me under his wing and taught me everything I wanted to know about how hormones affect different factors of the plant. I would like to thank him for all he has done to help me to come up with my product BigStem. While my professor and I were doing research on plants in tissue culture we became aware of a sugar naturally made in the plant called "trehalose". We learned about the effects it had from another university and started to look more into it. We discovered both through research and our own findings that adding trehalose to the growing media greatly reduces the stress factors of the plant. These factors include but are not limited to a higher tolerance of abiotic stress, improved growth performance under drought related conditions, better controlled uptake of both hormones and nutrients to the plants. Trehalose's biggest effect seems to be keeping the plant healthier by greatly reducing a lot of the common stress factors found in the plant. This lead to my idea of creating a product that contained trehalose that could help the people of the GPC grow bigger pumpkins. I started to brainstorm the idea with my professor and I came up with the product BigStem which has 250 ppm of trehalose and 50 ppm of cytokine added as well. The cytokine was something I added because light parts per million (ppm) is proven to help keep cells healthier and keep leaves from senescing which I believed to be another crucial factor to add on growth late session. While working on the product I talked with a few growers who suggested that people apply the product to the stem area. This is due to the stem being one of the most if not the most important parts of the plant. The stem acts as a pressure valve allowing growth to go into the pumpkin. Apply the product to the stem in hopes that it would help regulate the pressure of flow going into the pumpkin reducing the chances of getting a split from surges in the growth. This idea lead to the name of the product as BigStem. With the idea that applying it to the stem would help turgor pressure regulation it also seemed clear that applying it to the stump of the plant was also a

good idea. This way it helps regulate the growth to reduce chances of a foamy stump. The rest of the product after being applied to these two key areas would then be sprayed onto the leaves as well.

Now that you have a background of what BigStem is made out of and how it works, how do you go about applying it to the plant and how many times a session do you need to apply it? I will start off saying that I have not got all testing done on when to apply it but because this product is aimed at reducing stress the best predictions I can give to as when to apply it to have the best success would be. One



application at day two, the next application at day thirty, and the last application at day seventy. These to me seem to be key stages in the fruit development and applying BigStem at these stages will in theory greatly reduce stress factors of the plant and cause a better and longer growth cycle.

The testing on this product is still very new as only two people used it this past season, Josiah Brant and myself. We both seemed to have much success with it as he grew two large pumpkins one at 1965 and the other at 2185 using BigStem. I grew a new personal best using it of 1170 pounds with only one application. My test pumpkin split on me as I pushed too high of concentration of BigStem on it. This pumpkin was pollinated July 22nd and was still doing 24 pounds a day when it split going into the second week of September. Had it made it could have been a great pumpkin!

Thank you for reading about my product BigStem and it will be for sale this session at \$15 a set so \$45 to get the three applications. Each application needs to be stored in a refrigerator until ready to use. Each application is set up to be mixed with one gallon of water and needs to be used within 24 hours of being mixed for the hormone to take affect. If you have any further questions about BigStem or would like to order some for next year please feel free to contact me. tanner.n.conway@gmail.com



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Hello fellow growers, I would like to thank everyone for the tremendous amount of support I have received since opening up www.wallacewow.com. All of the products listed on my site are ones I approve of and apply in my growing program. You have my commitment to bring high quality products, prompt service, and reasonable prices to the growing community. Please email me with any questions. Be on the look out for WOW Lawn Food and WOW Compost Tea Brewers in the near future.

— Ron Wallace



- **WOW Mycorrhizal Inoculant**: The "freshest" inoculant, tested and proven at over 300 propagules per gram. Mykos Strain: Root Promoter. This strain has helped create 7 Giant Pumpkin World Records!
- Soluble Seaweed Powder: Who wants to feed their plants more than 70 minerals, vitamins, and enzymes? WOW Seaweed is extracted from Norwegian seaweed (Ascophyllum nodosum) 10.7 ounces of powder will make approximately 65 gallons.
- Soluble Humic and Fulvic Acid: WOW DS-80 (Soluble Humic and Fulvic Acid) is a dry, soluble humate powder that dissolves readily in water. It contains both humic and fulvic acids, as well as added nutrients N and K. Unlike fertilizers, it works not only to benefit the plant now, but also improves soil conditions for the future.
- Wonder Brew: Compost Teas are an easy to use, easy to brew blend of organic matter that is packed full of healthy soil microbes. With the beneficial microorganisms present in Wonder Brews, organic fertilizers can be fully-harnessed and delivered to plants with unparalleled "natural-efficiency". 80 gram tea brew packs make 3 gallons of brew. The 500 gram tea brew packs make 25 gal. of brew.
- Kelp Meal: Ascophyllum nodosum, harvested from coastal Maine waters. WOW Kelp Meal contains 60 trace minerals and an assortment
 of amino acids, enzymes, and alginates that feed and stimulate the necessary microorganisms in your soil.
- Harpin Proteins: Harpin Proteins are a Plant Health Promoter and Plant Growth Stimulator that activates a plant's growth and defense genes resulting in improved plant growth. Yield increases of 10 30% in vegetable crops.
- Liquid Mykos: The "game" changer coming soon...

Please visit my website for a complete product listing, or send an email to: Ron@wallacewow.com

www.wallacewow.com
Grow Like a Champion



The Mighty Tendril By Steve Connolly

For millions of years the Cucurbita Maxima and many varieties of vine growth fruits have evolved and survived. They adapted and enhanced their genetic design to provide us with what we see to-day, via a process called Natural Selection, as once described by Charles Darwin.

Amongst the many fruit that extreme gardeners like to produce, Giant Pumpkins are arguably the most interesting. Tens of thousands of growers world wide, have given this species, now called Atlantic Giants, a try in their gardens or Pumpkin Patch. Howard Dill in the 1950's through 1980's, and a few others, like William Warnock back in the late 1800's, tweaked the evolutionary pattern slightly by carefully inbreeding these fruit for weight and color. Then, we the growers of today, continued this selective breeding, fertilizing and symbiotic host plant relationships today, to take the weights to astronomical levels.

But the majority of the plants growth tendencies are natural, like the vines, root growth, leaf design, pollination characteristics and last but not least the tendrils.

To some they might seem like the appendix of your plant. An unnecessary growth, that should be removed. But if that was the case, why are there so many of them. And why have they survived the millennia. They show up at every leaf node. Surely something growing as frequently as this must have a purpose...or multiple purposes.

Let's take a look at what the mighty tendril can do to positively impact the growth of your plant.

First as the vine shoots forward it sometimes reaches up into the air and has a long way to fall before reaching the ground. The vine could break if the fall is too great. The Tendrils seem to know this, and will reach down to the ground, which can cushion the fall, thus saving the vine.



Young vines are always sprouting new shoots daily. This can be problematic. especially on a windy day. And if the grower is not there, the wind will have its way with the Pumpkin plant vine, sometimes snapping it off, or severely cracking it as it twists and rolls in the wind. The growers are training the vines and probably doing a good job of weeding. But the tendrils don't know this and will spend there early life looking for a way to anchor the vine down. They will find that rogue weed, or bamboo stick that's nearby and hold on tight. It's a great insurance on a windy day. A good source in the GPC has studied this knotting effect and reported that when enough tendrils



knot up, that they signal the plant that it is time to produce fruit and a safely pollinate them. This is good to know in late June. Tendrils will also fan out and settle to the ground with your pumpkin vine, which provides another effect. By doing this they can actually stabilize the Leaf and Vine. And these stabilizers will stay in place when the vine is buried. A stabilized vine give the young roots a better chance to tap into the soil too.



And as we steadily become more involved with the daily life of our plants, we look for beneficial means of succeeding with what

we got. One thing nature didn't plan on was selective breeding. That means that amongst other thing we want assurance that only a unique and predetermined pollen comes into play on pollination day. And with hundreds of bees, bugs, wind or other means of pollination possible, we must act quickly and decisively when the pollen is applied to the female flower, So closing the flower is very important. So in a pinch, you can cut off a Tendril and tie the flower shut and keep out undesired pollen from a lesser plant.. Who knew, that the simple tendril was so important!





The Elite AG Ancestors of 2015

This article is to help answer the question: Where did these amazing Atlantic Giants come from this year? To start with I choose the top 40 official GPC specimens as listed on BP.com, this goes down to the "1749 Johnson 15". Next, for each of these 40, I looked at the mothers' parents and the 2 + 4 + 8 = 14 AGs going back 4 generations from the 2015 specimen. So for 40 AGs x 14 slots there could be potentially 560 ancestors. This of course, in reality, is not the case due to the many repeat situations.

For convenience I have dropped any decimal pounds and the few "dmg" designations. The number after the growers name is for the number of occurrences. This figure shows the AGs relative importance versus the other survivors in each year. Note that this list goes back to the year 2003 and 4 generations. Thus, an AG may show up in generation 4,3 or 2. The single occurrences are noted but not identified.

2013	2012	2011
Swiz2328 Meier 10	RI 2009 Wallace 54	RI 1789 Wallace 10
CT 220 DeBacco- 6	RI 1872 Wallace 3	CA - 1554 Mathison - 7
CA1985 Miller 4	PA 1730 Werner 3	CA 1494 Bordsen - 4
WI 1057 Howell4	OR 1676 Daletas 2	PA 1807 Stelts 3
WI 1338 Martin 2	MA - 1756 Lancaster - 2	4 repeats,3 singles
CA - 2032 Mathison 2	5 repeats, 3 singles	-
6 repeats, 9 singles		2008
		RI 1288 Wallace 12
2010	2009	IA 1026 Young 4
CA 1409 Miller 61	OH 1725 Harp 74	2 repeats,2 singles
PA 1495 Stelts 9	IA 1658 Young - 23	
WI 1810 Stevens 8	IA 1622 Young - 23	2007
PA 1381 Checkon 6	PA 1421 Stelts 7	RI 1385 Jutras 69
SD 1674 Marsh 6	MN - 1544 Revier 4	NH - 1161 Rodonis 18
PA 1596 Werner4	SD 1488 Marsh 4	IA 1207 Young 4
OH 1622 Liggett4	OR 1462 Starr 4	3 repeats, 0 singles
OH 1554 Rose 2	MI 1303 Sweet 4	
8 repeats,3 singles	8 repeats, 1 single	2004 none
2006	2005	2003
PA 904 Stelts 3	NY 998 Pukos 8	1068 Wallace 9
1 repeat,1 single	1 repeat,1 single	1 repeat,2 singles

There are only 39 AGs (and 25 singles) in this elite group.

Top growers of the 39 AGs -- Wallace 5, Stelts 4, Young 4, Mathison 2, Miller 2, Werner 2, Marsh 2

Top States of the 39 AGs -- PA-7, RI-6, CA-5, IA-4, WI-3, OH-3, OR-2, SD-2

To appreciate the success of the above survivors, let's take a look at just one year,2010. The GPC list shows 1850 AGs and 450 above 1000 pounds. Of all those, only 8 have passed on their genes to the 2015 top 40, in any significant number.

As growers are looking ahead this winter and carefully choosing what to plant, this little study is looking back to see where the recent best came from. The top growers of 2016 will be standing on the shoulders of the growers of the top 39 AGs listed above.

Here's to another great AG year ---- Al Eaton, Ontario. Dec/2015



continued from page 1

What' the single most important piece of advice you have for growers seeking to increase their success in the patch? Join a club, such as SCGA. I learned a lot on my own, but the most valuable information I received was from other growers.

What are 3-4 seeds/plants on your shortlist for next season? I'd love to get my hands on another Zywiec 1781 but I hear they are near extinction. It was such a strong plant with very few concerns. By far, my favorite to date. Other seeds I'm looking at this year are from the local growers. The Zywiec 2109 is on the top of my list. If you saw the care that goes into these plants, you would understand my passion for this grower's seeds. I'd also like to try the 1710 Stevens/Hopkins. It was orange and won the prettiest pumpkin!! One for weight, one for beauty! Of course the Quanrud 1565 will be in my line up also! All of these seeds have such great genetics, a person can't go wrong.

Name three products/tools/practices that most significantly contribute to your success in the patch: My hot houses were a big deal this year. They allowed me to plant earlier which is huge when your days are limited! I believe my new patch also helped greatly. I had disease in my old one and it had been worked over for many years. It was time for some new dirt. Lastly, don't under estimate the help of another human being. My husband helped my entire second season with vine burial (what seems like an endless task). As much as I love growing, burnout does happen. Another pair of hands keeps you strong!

What is the "secret" to growing a record breaking pumpkin? WATER!! All your efforts are nothing without water.

Community Education

"How to grow a giant pumpkin" Class Schedule Osceola: Monday, March 14th, 6:00-8:00pm Stillwater: Tuesday, March 29th, 6:00-8:00pm River Falls: Saturday, April 2nd, 9:00-11:00am Hudson: Saturday, April 2nd, 1:00-3:00pm Redwing: Saturday, April 9th, 9:00-11:00am New Richmond: Sat., April 16th, 10:00-12:00 noon

These classes cover the basics on how to grow a giant. All participants will receive free seeds. Please pass this info on to friends, neighbors, & relatives to help the SCGA get more growers involved in our hobby! For registration and location details, contact the respective community's comm ed webpage or reach out to us.

Classifieds

Have a piece of garden equipment to sell? Looking for something to ramp up your giant pumpkin operation? drop us an email with your item for sale or wanted item along with your contact information and we'll get it in the newsletter.



Renew your SCGA membership!

For continued access to SCGA member benefits, including this newsletter and our upcoming bulk supply purchase offers, renew your SCGA membership today!
Online renewal at www.stcroixgrowers.org http://www.stcroixgrowers.org or mail a check for \$25 to SCGA, 2226 Cty Rd T, Deer Park, WI 54007



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SCGA Auction

Friday, February 26th 7:00 pm BigPumpkins.com Chat room











The SCGA is looking to expand our reach. Do you know someone who would like to be a part of our organization? Refer a new member and save \$5 on your membership dues.

Notable Milestones at Stillwater Harvestfest

Year	Grower	Entry	Milestone
2006	Bill Foss	1213 lbs	MN State Record Pumpkin
2006	Jerold Johnson	1028 lbs	MN State Record Squash
2007	Kevin Marsh	1445 lbs	SD State Record Pumpkin
2008	Chad Revier	1428 lbs	MN State Record Pumpkin
2009	Kevin Marsh	1399 lbs	SD State Record Pumpkin
2010	Kevin Marsh	1548 lbs	SD State Record Pumpkin
2010	Taran Marsh	223 lbs	SD State Record Watermelon
2010	Chris Stevens	1810 lbs	World Record Pumpkin,
			WI State Record Pumpkin
2011	Chad Revier	1630 lbs	MN State Record Pumpkin
2013	Joe Werner	1779 lbs	MN State Record Pumpkin
2014	Scott Steil	1873 lbs	MN State Record Pumpkin
2014	Scott Steil	197.5 lbs	MN State Record Field Pumpkin
2015	Iosiah Brandt	2185 lbs	WI State Record Pumpkin

Stillwater Harvestfest Historical Data

Year	Top 10 Ave.	GPC Site Rank
2005	n/a	n/a
2006	873	n/a
2007	834	32
2008	1002	19
2009	1297	5
2010	1390	3
2011	1351	7
2012	1291	8
2013	1499	2
2014	1663	2
2015	1813	1



