

Growing the 2230.5

By: Ron and Pap Wallace

As with any season I feel the groundwork for success actually started the previous year. We are currently set up on a three-year rest and rotation system for planting. When an area is not in use, it will go under a cover crop rotation, starting with mustard. We have been under high disease pressure for the past few years (more on that later). Planting mustard creates a process known as biofumigation. What is Biofumigation? The suppression of various soil-borne pests and diseases through naturally occurring compounds. Mustard contains glucosinolates, the higher the level of glucosinolates, the better the biofumigant effect. After the mustard has been tilled under for three weeks, we will follow up with Sudan & Sun Hemp, Zinnias or African Marigolds, followed by a fall planting of winter rye & hairy vetch.

This past season half of our plants were in an area that had been rested for three years, the other half were planted on the previous year (following a three year rest). The 2230.5 was grown almost in the same spot as the 1754 from last year. The 1975 was grown on the soil that was rested for three years.

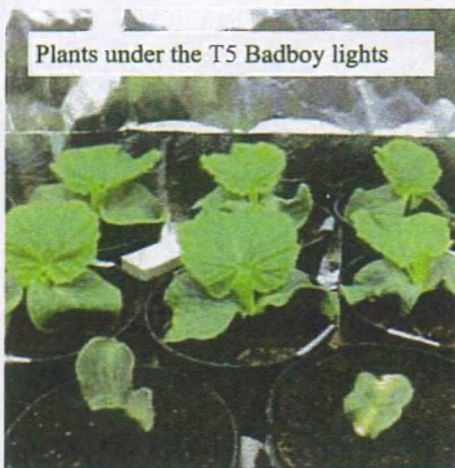
We started our seeds on April 9th this year and they were placed in the garden on April 26th. Soil heating cables were installed prior to plants going in ground. Inside our greenhouse we also fastened a "mini" Quonset hut made from cattle fence. Most nights under the hut we would have a spotlight pointed to the ground so no light was visible. The heat from the metal lamp and the blanket that would cover the cattle fence helped keep the plant at 55-60 degrees. On a few nights it got down to 34F inside the greenhouse, but maintained near 60F in the "mini hut". Last winter was long and very cold for us, with record setting snowfall. We knew we were going to get off to a slow start as our soil took a very long time to thaw and warm up. The big difference for us this year was we switched lighting systems to the T 5 Bad Boy (Thanks Gary the "Wiz" for this suggestion). Instead of our "usual" 4-inch peat pot plants, we put out a very "robust" one

Soil test results from 4/21/15

Soil pH	7.2
Organic Matter	8.4
Cation Exch Cap	22.5
Nutrient Levels: PPM	
Phosphorus	109
Potassium	279
Calcium	3639
Magnesium	443
Sulfur	12.5
Micronutrients	
Boron	1.8
Manganese	10.0
Zinc	10.3\
Copper	0.8
Iron	4.

Percent Base Saturation

Calcium=81	Magnesium=16
Potassium=3	



"Amendments" added to patch

May 25th Amendments added to 7,000 Sq Ft.
20 pounds Humic Acid (WOW)
150 Pounds Kelp Meal (WOW North American Kelp)
30 ounces Boron (Borax 20 Mule Team)
35 pounds K - Mag (Potassium, Magnesium Sulfur)
28 ounces Copper Sulfate
14 pounds Manganese Sulfate
70 pounds Pro Mag (Magnesium)

gallon size plant. All seedlings were inoculated with WOW Pumpkin Pro and Xtreme Gardening Liquid Mykos.

This year we also started feeding the plants with a new product called Root. The active ingredient in Root is Formononetin a naturally occurring compound found in Red Clover roots, which stimulates the natural growth of vesicular-arbuscular mycorrhizae.

When plants went in the ground, the only area tilled up was for our 5x7 greenhouses. The remaining garden was still covered in our inoculated cover crop of winter rye and hairy vetch. The subsequent cover crop was mowed several times and the amendments shown on the lower left were added to 7,000 sq ft on May 25th.



Fertilizers used

WOW Wonder Brew:	Every 2-weeks June to September
Liquid Mykos:	Every 2 weeks.
WOW Seaweed:	Three times per week
WOW Humic Acid:	Three times per week
Liquid Azos:	Every 2 - weeks
Harpin Proteins:	Every 14 days from seedling - early August
Essential:	Every 10 - 14 days
Calcarb:	Every 7-10 days
Seacom:	Every 7-10 days
TKO Phosphite:	Every 7 days (August 1 st till end of season)

The months of May and June were very cool for us. We actually never recorded a day of 80F degrees or greater till July 3rd. Any thoughts of reaching certain goals were fading fast! But then on July 5th, the weather changed and went "lights out" till the end of September. Most days were 80-85 degrees with nights in the low 60's, with no rain. Perfect weather for giant pumpkins. We can water all we want so I would rather not have much rain, so we can control the amount of irrigation the plants will receive.

Plant size: Over the last few years we have increased our plant size from 850 to 1,000 sq ft. Side vines were 17 ft long and buried with a mixture of WOW Pumpkin Pro and Azos. (See chart on next page for vine pattern)

Watering: Watering was done in the beginning of the season by hand with the water warmed in poly tanks. As the season progressed we entered a severe drought and watering was done twice a day by overhead-automated sprinklers. One of the best things we have entered into the "program" over the last few seasons was soil moisture probes. After hearing Steve Daletas talk in 2013 on his watering system, Joe Jutras and I decided in 2014 to purchase 2 probes each, for our gardens and the hand held meter to register soil moisture. 2014 was an experimental season for both of us with the probes. It took the better part of the season to get "dialed in" on what our field capacity of water is, what the correct % of moisture we are looking for, and how much water will it take to achieve that. I can tell you for "us" in our sandy loam soil 45 - 48% moisture was the number we were looking for. To maintain that level during a drought in the heat of the summer, each plant was receiving water twice a day for a total of about 150 gallons of water per plant per day. More water than we have ever applied. We managed to go "heavy" on all 5 pumpkins weighed this year, we feel the watering contributed a lot to that. We also "spoon" feed fertilizer mostly every time we watered. (From the chart above). This was a change from years past when we would fertilize only once or twice per week.

Tissue testing: The best advise we could give any grower is get to 9

know your soil and what works in your area. How we fertilize in our sandy loam soil may be totally different than what will work for you. Having said that, tissue testing is a way to get "dialed" in on your plants. We have tissue tested for so many years we have come up with a fertilizer "plan" to be proactive instead of reactive. We were very pleased with our results this year only falling a bit short on Zinc, and Copper. We are not concerned with the low level of nitrogen reported as our plants are supplied plenty of organic nitrogen that will not show on a tissue test. To maintain certain levels, over the course of a week each plant would receive 16 ounces of Epsom Salts (magnesium and sulfur), and 2 ounces of Borax (boron). On July, August and September 1st a mixture of copper, zinc and manganese sulfate was mixed with 3 pounds of K Mag and garden soil and tossed under each plant.

The 2230.5 Tissue Test from:
WESTERN LABS (8/14/2015)

Plant Nutrients	Sufficiency Range	Your Test Results
Nitrate	3200	2298
Phosphorus	.81 - 1.2	0.85
Potassium	7.5 - 12.0	11.31
Sulfur	.23 -.5	0.26
Calcium	.5 - 2.25	0.60
Magnesium	.25 -.48	0.33
Zinc	42 - 75	40 deficient
Manganese	25 - 75	49
Copper	13 - 45	11 deficient
Iron	75 - 500	127
Boron	24 - 70	26

The 2230.5 was pollinated on June 24th and was set 15 ft from the base of the plant. Like all our pumpkins the first 3 measurements were almost 175 pounds behind our best stuff ever and then they caught "lighting" in a bottle and took off. The 2230.5 averaged 41 pounds per day for 3 weeks! It was still growing when harvested and put on almost 300 pounds for the month of September. That's well above average for this area.

List of products used for:

- Insect Control:** Warrior T and Merit
- Biological Controls:** Companion
- Disease control:** Manzate, Eagle, Clearys, Subdue, TKO Phosphite, Abound, Previcur Flex, Medallion, Terrazole, plus a Clearys and Chipco 26GT Combo.

Weed Control: Weeding was done by hand in the beginning, and then 2 applications of 48% Glyphosate at a rate of 1/2 an oz per gallon of water sprayed "carefully" under the plants did the trick.

Could have been much more: We have battled Fusarium Oxy-sporum since 2007. There is NO chemical control for this type of disease. Even with resting and cover cropping for three years it "nipped" us again! The resting and cover cropping has helped to some degree as we used to get it so bad it would totally wilt or halt all growth to the plant and pumpkin. This year we started losing side vines on the 2009 plant that produced the 1975 in mid-July. Eventually fusarium made its way to the main vine and stopped all fruit growth on August 23rd. The previous week it was averaging 18 pounds per day. This pumpkin missed 5 weeks of growth and would have made a run at a number I did not think possible at this time. The 2230.5 did not start showing signs of fusarium till late August, we eventually lost 6 side vines and many leaves but luckily it did not enter the vascular system of the main vine. This is the reason we went to bigger plants and an earlier start to try and get a big plant established, in case we lost vines because of fusarium. Starting in 2016 we will be experimenting with soil solarization in conjunction with mustard and hot composting in an attempt to lower levels of fusarium.

2230.5 Growth Chart

Pollinated 6/24/15

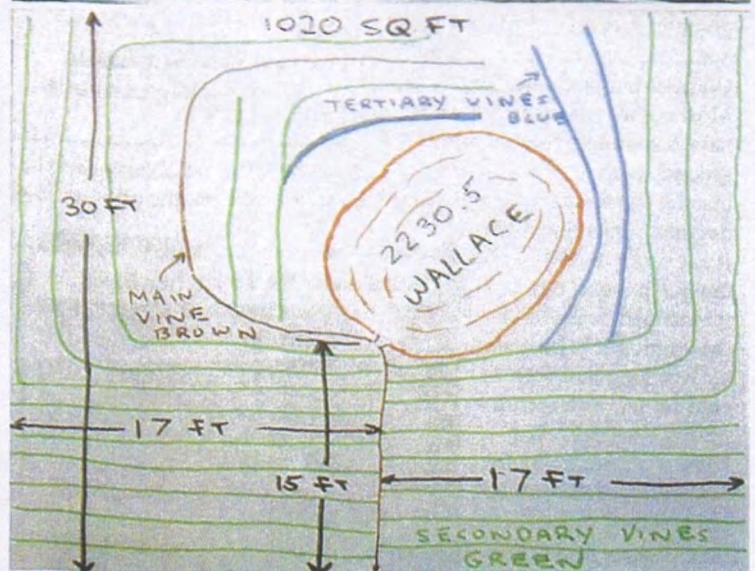
Date	Pounds	Avg/day
7/19	268	
7/26	576	44
8/2	888	44
8/9	1146	37
8/16	1364	31
8/23	1562	29
8/30	1693	19
9/6	1762	10
9/13	1899	9
9/27	1975	5

patch has been a 27 year work in progress to get to this point based on our soil and test results. If you try to apply some of the amounts we mention, you may cause damage to your plants. Over time getting to know your soil and a history of tissue testing will help you establish what's best for your patch.

2015 was a year we will never forget, from a horrible start to a fantastic finish it was everything in between. To capture a third world championship, Grower Of The Year Award along with a new North American record is something we never thought was possible this year. Thank you to all who have sent us so many touching emails of support and congratulations. We wish everyone a safe and happy holiday season, and best of luck in 2016!



2230.5 loaded up and ready to go.



Enjoying the moment!... with some good friends.



A 2015 Long Gourd Story

The origin of the genes that we use in our hobby of growing specialized competitive plants has always been a special interest of mine. When I started growing Long Gourds in 2003 I started recording the ancestors of the seeds that I was using and in 2015 I was fortunate enough to grow a new world record. Since I have kept "parentage" records of the top LGs over those years I can now trace my 149.50 inch WR back to as far as it is possible to go. Over those 13 seasons there has been a huge evolution in the LG gene pool due to the work of many top growers and I hope other growers will enjoy seeing their contributions that are behind the new WR.

Below are listed the ancestors of the WR going back 6 generations and since the male pollinator genes are in the seeds of the WR, those ancestors are included. The LG identity is "149.50 Eaton '15 -- 139.25 Ansems '13 x 122.88 Eaton '12". In 6 generations there are a possible 126 ancestors but since there are many repeated there are only 25 individual LGs involved, as shown below. The number after the name shows the occurrences.

2014 - none	2007-125.75 Urena-24--#2 world -106.13 Jutras-5
2013 -139.25 Ansems -1 WR	2006-126.50 Jutras-29-----WR
2012- 122.88 Eaton-1----- #1 Canada - 123.00 Rumancik-1 - 120.00 Kline-1-----#2 Canada	2005- 82 El-Kassis-8 - 104 Eaton-8 - 107 Timm-5-- #4 Ottawa
2011- 116.62 Martin-3-----sib to WR - 127.50 Kline-2-----#3 world - 110.13 Mailey-1	2004- 94 Corteso-1- Italy-Toronto - 114 Wallis-1---- #2 world - 106 Eaton-1
2010- 135.00 Jacobus-4----WR - 121.25 Lyons-2----#4 (tie) world - 94 Eaton-2	2003- 88.5 Eaton-4--#1 Ottawa - 87 Eaton-1
2009- 134.25 Johnson/Butler-14--WR - 127.25 Jutras-3-----#6 world	2002- 83.9 Berenji- 2 - Serbia
2008- none	2001- 91.5 Barlow-2 - WI record



Our Long Gourds (*Lagenaria Siceraria*) originated in Africa and were spread to Europe, Asia and the Americas over many thousands of years. Evolution and selection by humans have evolved many variations and uses. The reader can find lots more interesting information about them on the internet.

My part in this historic adventure started when I crossed the "83.9 Berenji 02" with the "91.5 Barlow 01", this produced my 87 and 88.5 of 2003.

The 83.9 (213 cm) seed came from Dr. Janos Berenji of Novi Sad, Serbia, on the Danube River. He is a noted plant scientist who ran a gourd competition near the city of Novi Sad. The 91.5 was produced by John Barlow of Wisconsin. It can be traced back to the "80 Carlson 99". Dan Carlson, Iowa, tells me his seed was from the P & P Seed Co. and sold as the Collins Long Gourd.

From the above crosses, things began to happen. My friend here, Ron Wallis, grew the "114 Wallis 04" from the 88.5, we took it to the big Toronto Italian competition where he won a one year free lease on a new car. We estimate there were 100 growers at that competition. It was very exciting with TV cameras, a band, Italian language singers, etc. In a few of the following years I twice won the car too. The 114 also beat the world record "110.63 P. Waterman 94". While there, an Italian-Canadian grower, Mr. Corteso, wanted to trade seeds and I got the "94 Corteso 04" seed. Growers there told me all their seed came directly from Sicily and Italy, where they are known as Sicilian Zucchini and/or Cucuzza. On Google check out **Cucuzza** as well as **Serbia Bottle Gourds**.

Next I got another friend here, Tony El-Kassis, to grow some plants including the Corteso seed, which he crossed with my "87 Eaton 03".

This set us up with good genes from the 3 different "gene pools" and the 3 LGs that are solely behind the 2015 world record. I want to emphasize that Ron Wallis, Tony El-Kassis and Brant Timm were 3 local friends that grew the seed that helped produce some of this good offspring. As far as I know these 3 LGs were unrelated for years, maybe even centuries.

The next big step was the WR "126.5 Juras 06 -- 104 Eaton 05 x 82 El-Kassis 05". This started a string of world records through the "127.56 Urena 07", the "134.25 Johnston-Butler 09", the "135 Jacobus 10" and the "135.94 Martin 11".

The world of genes can work in mysterious ways due partly to the fact that seeds in a LG are somewhat different from each other. The most awesome recent crosses were by Fred Ansems, Nova Scotia, when he crossed 2 seeds from Dave Rumancik, Ohio, with a seed from Todd Kline, Quebec. Fred produced the WR "139.25 Ansems 13" and #2 in the world "137.50 Ansems 13", on different mothers.. These Kline and Rumancik seeds are entirely descended from the three seeds highlighted above. The Ansem seeds are outstanding mothers and are now dominating the modern LG gene pool as can readily be seen in the GPC listing at bigpumpkins.com.

To sum up, this is just a hobby, but a fascinating one that brings a lot of satisfaction. Take note that the LG record has increased on average about 4"/year over the time of this report and it will continue to rise, but at a lesser rate over the coming years. It would not be the same without good records, good friends to trade seeds with and the listings that show the results on BP.com, where the worlds' best LG growers can compare their creations each year.



Al Eaton, Richmond, Ontario--Nov/2015

GROWING THE 6.83 LB. PA STATE RECORD TOMATO

By: Paul & Cheryl Fulk

Seeds were started April 15th indoors and, after sprouting, transferred to six-inch plastic pots with Pro-Mix Potting Soil. Added to the wheel-barrow full of Pro-Mix Potting Soil was a mixture of 2 cups of WOW Pumpkin Pro Mycorrhizae and ¼ cup of Extreme AZOS.

The patch is 250 square feet and had a fall cover crop of winter rye that was sub-soiled before adding spring amendments. The amendments were: 1 cubic yard of composted mushroom soil, 50 lbs. of MicroStart60 (pelletized chicken manure), 50 lbs. of kelp meal, and 50 lbs. of humic acid. After the amendments were added, the patch was tilled.

The tomato plants were transplanted outside in the patch on May 17th. The planting hole and root ball were dusted with the same mixture of Pumpkin Pro and the AZOS, and planted roughly three feet apart. There were 16 tomato plants in the 250 square foot patch.

Plant pruning consisted of removing all suckers and topping the plants after the chosen tomato. The state record tomato was grown on a plant about 4 feet tall.

Disease pressure was high in 2015, and we basically followed the OVGPG spray schedule used for pumpkins. We added three new fungicides to our program this year - InspireSuper, Fontelis, and Toledo. Plants were supported by tying them to either half-inch rebar or half-inch metal electrical conduit with old t-shirts and the tomato itself was supported by pantyhose.

QUINN WERNER
Great Pumpkin Commonwealth- "Hall of Fame"

Quinn Werner of Saegertown, Pennsylvania was inducted into the Great Pumpkin Commonwealth's "Hall of Fame" on March 21, 2015 at Wilkes-Barre, Pennsylvania.

Quinn, a director of the Ohio Valley Giant Pumpkin Growers, was elected for his many years of excellence as one of the world's top giant pumpkin growers.

He has been a champion grower at our prestigious weigh-off a record seven times. This past year he grew his personal best at 2020.5 pounds (12th in the world all-time).

As of his induction last March, Quinn had grown 90 pumpkins over 1000 pounds. He had won 27 weigh-off titles at regional shows. He grew the world record Connecticut Field pumpkin at 209 pounds. Quinn placed in the top three at 51 of the 58 weigh-offs (88%) between 2001- 2014. He has also produced many tomatoes in the 4-6 pound range.

Quinn was featured in the October, 2011 edition of "Smithsonian Magazine". He was "Grower of the Year" in 2008 with a three pumpkin total weight of 4477.5 pounds.

Some highlights:

- #1 ranked grower in the world for 9 consecutive years (2006- 2014) using the old AGGC 5 year average for biggest pumpkin in each year.
- In 2010, his personal top 10 average would have beaten any site in the world,
- Participated in 17 different GPC weigh-off sites in 6 states
- Won first place at 27 of 58 GPC weigh-offs (46%).
- Innovated how seeds are selected by focusing on size of the male pumpkin. First grower to prove out future world record producing seeds (998 Pukos- 1385 Jutras- 1161 Rodonis).
- Been a stop on the OVGPG tour six times.
- Donated seeds to 47 different clubs and organizations worldwide to help with fund raising.

If you would like to read more about Quinn Werner, please go to our website: www.ovgpg.com
Under "Articles":

December, 2011 "Smithsonian Magazine" (October, 2011)- Giant Pumpkins
February, 2009 "Quinn Werner- GPC Grower of the Year"- Alan Gibson

Field Pumpkin Ancestors 2015

This is the story of the origin of the top GPC field pumpkins of 2015. The category is special because it started from common FP varieties sold by seed companies and now after seven years of GPC competition it is possible to trace the pedigrees and see what has happened over that time. Field pumpkins became an official GPC category in 2009. Before that Windsor NS, Canfield OH, the PGVG in Oregon and maybe other sites held local competitions.

To see what has happened up to now I started with the top 30 official FPs on the 2015 GPC list and made pedigrees going back 4 generations. Then starting with the mothers "parents" I counted the occurrences of individual specimens, those of 2 or more are shown below. In each year the relative number of occurrences indicates the importance of that pumpkin in the modern gene pool.

Note that in 2011 John MacKinnon amazingly grew two 162s, both world records, from identical parents, but now it is impossible to separate them in the records so they are treated here as one. John beat his own WR in 2012, while Quinn Werner set a new WR of 209 pounds. Then in 2014 Johns' 211 pounder set a new WR that stands to this date.

2013	2011	2009
OH --146 Razo -- 4	NS -- 162 MacKinnon --15	NY -- 81 Wolf -- 50
ON --121 MacKenzie--2	NS -- 103 MacKinnon -- 10	OR -- 88 Sherwood -- 6
NS -- 120 Ansems --2	OH -- 150 Razo -- 9	OH -- 137 Orr -- 4
	ON -- 85 Eaton -- 7	OH -- 154 Orr -- 2
	WA --80 LaRue -- 3	
	PE -- 142 Aten -- 2	2008 OH -- 101 Meier -- 13
	OR --114 Starr -- 2	
		2007 NS -- 145 McInnis -- 50
2012	2010	
PA -- 151 Snyder -- 10	NS -- 142 McInnis -- 4	2006 NS -- 87 McInnis -- 42
PA -- 209 Werner -- 8	OR -- 111 Sherwood -- 4	OR -- 88 Leland -- 29
NS -- 181 MacKinnon -- 6	ON -- 99 Lyons -- 4	
OR -- 125 Treece -- 3		2005 NS -- 100 Keel -- 8
OR -- 152 J.Daletas -- 2		NS -- 93 McInnis 8
NB -- 137 Ebbett -- 2		
NS -- 97 Dill -- 2		

The genes of these 30 field pumpkins are the survivors in a very competitive field. For example in 2012 there were 247 taken to competition but only the 7 shown above survive in any significant number.

Where were these 30 grown? NS-10, OR-6, OH-5, ON-3, PA-2, NB-1, WA-1, PE-1, NY-1 total=30

Which original seed company varieties have survived? Well, here are the interesting facts as told to me. Doug Keel -- started with **Gold Rush** Fenton McInnis -- **Howden** Neal Leland and Chuck Meier added **Phat Jack** to the mix Glenn Orr -- added **Conestoga Special** genes

The seed companies claim these varieties will grow up to about 40 pounds. Great growers and careful seed selection have taken that weight up 5 times. Will 6 and 7 times be possible? I think in due course growers will do it. No matter what, I find it rewarding to keep track and share with other growers, the history of where they came from.

Al Eaton, Richmond, Ontario Feb/2016