### **SNGPG Q&A**

#### What was done for Fall/Spring prep? amendments, cover crop, tilling etc.

My fall prep for the last several years has been to clean the patch of vines, test the pH, apply lime as necessary to bring the pH up, plant a cover crop of rye grain and walk away. The last two years I have brought in roughly 1 ½ yards of a mint straw compost per 1000 square feet. Other than that, I have really backed off bringing in large amounts of amendments.

#### What was the pollination date of the 2469#?

The 2469# was pollinated on June 16<sup>th</sup>, the 2170# on June 16<sup>th</sup>, the 2157.5# on June 21<sup>st</sup> and the 2003# on June 15<sup>th</sup>. Our goal when we started the season was to pollinate roughly one week earlier than we had done in the past. This left us with smaller plants behind the pumpkin than we were use to so adjustments were made in the vine pruning to fill the allotted space for each plant.

#### Do you bury vines, if so, what do you add to your vine bury mix?

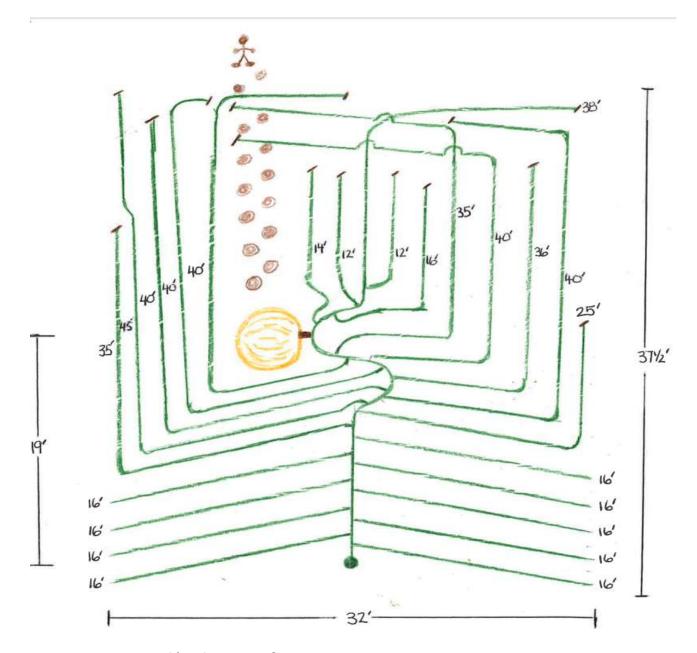
Yes, I bury both the main and the secondaries. I use 4 parts WOW Mycos, 2 parts Rootshield, 1 part ActinoIron, 1 part Kelp meal, and ½ part WOW Azos.

#### Any problems with Powdery Mildew?

We are fortunate in the North West to not deal with many foliar diseases. With that said, powdery mildew is one that we can count on every year. It will always be present by September. If we do much overhead misting or the weather patterns are ripe for the disease its not uncommon to see it appear early to mid-August. I have been very successful preventing the disease by beginning a proactive spray program the 1<sup>st</sup> of August. I use three sprays with different modes of action on a two-week rotation through the last week of September.

#### Could you possibly share a vine pattern sketch?

See attachment. Like I said earlier, the plant size at pollination was smaller than I was use to. We had 2-6 less secondaries before the pumpkin than normal so we let several secondaries run much longer than I have in the past to fill the empty space. Several grew until late September before they were terminated.



#### Do you use Xmas or Spider vine pattern?

I would say it's a combination of both.

#### Did you have to reposition the 2469# as it grew to relieve vine/stem stress?

Funny you should ask. Every pumpkin in the patch got moved August 1<sup>st</sup> to relieve stem stress. As luck would have it the last pumpkin we moved, which happened to be the largest in the patch refused to move until our fourth try. The sound of a pumpkin stem snapping off the vine is one I won't forget for a while. So...... I probably needed to make a few more adjustments in August/September but decided to just reposition and support the main vines instead.

#### Do you have a growth chart for the 2469#

See attached chart. I don't measure on a 10-day schedule due to my varied work schedule so I interpolated to get 10-day numbers. The 2469# never did much over 35# per day. Factor in the fact that it went 20% heavy and the numbers would still be barely reach 40# per day at its peak.

#### How was the seed count on the 2469#

As luck would have it, the 2469# count was the lowest of all the pumpkins we grew this year. With that said, we should have enough seeds to support the OAF, Club auctions and hopefully most seed request.

#### How many side vines on the 2469# before the pumpkin?

9 on one side and 10 on the other. I did let 2 secondaries on each side of the main vine grow past the pumpkin.

#### What was the total Square feet of the 2469# Plant?

The 2469#, 2170# and 2003# pumpkins were all grown on 1200 square foot plants. The 2157.5 was grown on a 1500 square foot plant.

#### How long were the side vines before the pumpkin?

See the vine pattern attachment. I grew the 2469# in a 32-foot-wide area so early side vines were allowed to grow 16 feet then get terminated. After that, there is no real reason why one vine may be 25 feet long and another is 45 feet long as each plant is different. I typically terminate two secondaries per week. My plan for the last few years has been to terminate the last two secondaries before the pumpkin the first week of September. I look at how many secondaries I have to work with, then simple math tells me when each vine gets terminated to allow the plant growth until early September. With that said.... if I see a pumpkin start to slow down more than I would like, I may bump up the termination schedule a bit.

# When you pollinated the pumpkin, how many side vines before the pumpkin were already terminated, and approximately what date was every vine before the pumpkin dead ended?

If I recall correctly, I had three secondaries each side of the main vine terminated by June 16<sup>th</sup>. The entire plant was fully terminated by September 7<sup>th</sup> with the exception of three secondaries I let grow until we picked the pumpkin mid-October.

#### What date was the entire plant ended?

October 19<sup>th</sup>. I did not bury the three secondaries I continued to let grow after early September as I didn't feel they had time to send beneficial roots down but I do believe the fresh foliage made up for some of the deteriorated leaves on the back side of the plant.

#### Do you max out Boron?

I did amend the soil preseason to 3ppm. But I say that with a word of caution. I dissolve boron in 4 gallons of hot water, constantly agitate it and use my mist blower to evenly spray a light mist over the entire patch. Trying to spread boron any other way, especially at the high end, I would be worried about some areas receiving to much boron and creating a toxicity problem that could take out your plant.

#### How do you shield your pumpkin from the sun and do you do anything special to keep the stem dry?

Fortunately for us, come about July 4<sup>th</sup>, the rain stops and doesn't return until late September/early October. I use a bed sheet day and night from pollination date on. Comforters placed over the sheets become the norm by mid-August through the end of the season as our nights are rarely above the low to mid 50's. If I'm on the road the comforters are left on day and night. If I'm home I will remove the comforters during the day.

The stems get treated once a week with a light Zero Tol spray starting mid-July through the end of the season. I also bungie cord a small fan to each stem mid-July. The fan runs 24 hours a day until we pick the pumpkin in October. I do use 10 by 10 tarps that I zip tie to two pvc pipes which are place over each pumpkin if there is a forecast of rain.

#### Can you share a Spring soil test?

See attachment.... I do my main nutrient amendments in the Spring. My Spring soil test is taken before amendments have been applied so I have a base line to adjust from. The test is meaningless without showing what I've calculated the

soil ppm to be after amendments have been made. I have included what the test and ratios should look like after my nutrient adjustments were incorporated into the soil.

#### Do you water overhead, Drip or by hand?

Great question! I use drip tape as my primary means of watering with overhead sprinklers on standby as an archaic misting system. I did learn via my moisture probes this year that the plant needs water at varying rates depending on the age of the growth. I found that if I watered to the correct moisture level on the older growth mid to late season that I was severely underwatering the newer growth. I will correct this next year by watering the older growth possibly every other day and greatly increasing the amount of water applied to the newer end of the plant daily.

During peak season, how many gallons of H20 per plant per day. How often per day do you water? I water once per day. This year I watered everyday early June through mid-September. For the better part of August, I was using up to 210 gallons per plant or 185 gallons per 1000 square feet. I grow in what's classified as a Silty Loam. Get to know YOUR dirt and water accordingly.

#### Do you let the water warm up in tanks or barrels?

I have a 1500-gallon storage tank that I plumbed 4 old fashion 4x8 PVC tube solar panels into. I use a small pool pump wired through a cycle timer to circulate the water when the sun is up. I don't know if this helps but I do know the beneficial soil microbes like a soil temperature much warmer than the water I apply. With the amount of water I use I would be constantly lowering the soil temperature. By applying warm (70-75 degree) water to the soil, logic says the soil biology and roots should be happier.

#### Do you rotate patches or was this a new patch?

My patch rotations typically consist of taking the year off.

The top two pumpkins in the world had M or F Urena seeds in them. Anything special about that selection? That would be a great question for the genetics experts to debate. I am not one of them. With that said, I couldn't be happier for Leonardo, he is a great grower and an even better friend. And I would imagine his mailbox is quite full these days.

#### Can you think of any special reason the 2469# went 18% (or over 440#) over chart?

That's the million-dollar question. We had a great summer, lots of sun, fairly consistent day time highs (approx. 30 days low to mid 90's but we never hit 100), nights seemed cooler than average but once again were very consistent. If I were to put my finger on one thing, I would have to say aside from the weather, I felt I was as dialed in on my watering as I have ever been. I did find some areas I can still improve on but I pushed the water harder and was more consistent than previous years.

#### Do you use fungicide drenches? If so what?

Early to mid-season I push the Biologicals hard. I use Rootshield, Actinovate, Companion and Cease. Mid-season I start alternating in a chemical drench every other week, then mid to late season I stop the biological drenches completely.

#### What separates you from the crowd? This is not the first time you have been so highly ranked in our sport.

I don't know if anything separates me from the crowd. We all are part of the crowd. I just have been fortunate to have had a couple of dream seasons. I approach each year with the same attitude, that every seed I plant has the possibility of growing a new world record. Regardless of what gets thrown at me, just keep your head down, stay focused and keep grinding. The season isn't over until the last weigh off posts its final weight. When I was asked early August how my

season was shaping up my honest answer was "I have nothing in my patch that comes close to my better pumpkins from years past". Never give up!

#### What will you change in 2019.

This is probably not the answer your looking for but I plan to do a little more fly fishing with my Son in Alaska, spend more time with our daughter and grandkids and if my body still allows it, spend a few more days out on the lake waterskiing.

Pumpkin related....... I don't try very many new things each year, but I do try to improve on everything that I have done in the past. If I was to narrow it down to one thing that I would change in 2019', it would be to perfect or at least better micro manage the application of water to the various zones of the plant. I do feel this is many grower's weakest area and one many of us just take for granted. For myself, I know that has been the case in the past.

## AFTER AMENDMENTS

#### Western Laboratories.com

211 Highway 95 • Parma, ID 83660 800-658-3858

ATLANTIC GIANT PUMPKIN



Date: 4/6/2018

Client: PAID

Gardner: Steve Daletas Garden ID: West Patch

Lab Number 4517

SOIL REPORT								PARTS PER MILLION-PPM						
pH WATER pH SMP pH CaCI SOLUBLE SALTS (EC)			LIM	E % OM	% OM NITRA		MONIUM	PHOSPHORUS						
LATIOUT	P BOTTER		5A	LIS (EC)			NO3-N (PPM) NH		14-N (PPM)	P(PPM)	P BRAY			
7.0		6.3	6.3 0.11		0.0	13.2	48		5	120				
EVALU/	TION					100	100			A 155				
	Neutral			lormal	Goo	od Very High	ADEQU	MIE		Very High				
POUND	S PER AC	RE					- 1							
200-200							9		15	306				
GIO.T.				F	PAR	TS PER MI	LLION-PP	M						
POTASSIU	M SULFU	R CA	LCIUM Ca	M MAGNESIUI		SODIUM Na	ZINC Zn	COPPER	MANGANESE Mn	IRON Fe	BORON B			
891	885	3	3547 379			121	12	7.9	35	68	3			
EVALUA	TION							18			915			
Very High	VERYNA	M	High	gh High		ок	Very High	High	Adequate	Adequate	UERY HIL			
POUNDS	PER ACE	RE												
2637	31	7	419	19 1065		363	24.6 23.7		48	204	5.7			
Meq/100	GRAMS S	OIL			M		m. e.	The state of	CEC by	sum of	cation			
2.3		1.	12.4	3.0		0.5				18.1	V.			
Texture		L	oam			Balance	Ideal	Yours	Evaluati	on V	Vatch			
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oution attendings cupumy out				101	70	Ca:Mg	6-20:1	9:1	ok					
TBS%			1		a:K pH >7	15:1	4:	Low	wa	tch Ca				
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		10.5001000			Ca:P pH >7	100:1	29:1	Low	Wa					
Calcium-% of CEC		65-80	77	10	a:P pH <7	40:1	:1							
Magnesium-% of CEC		10-20	12	F	P:Zn	15:1	15							
Potassium-% of CEC		2-6	8.8	-	P:Mn	4:1	3:1			MARKO VIII OLI INTERNA				
				2 5	P:Cu	25:1	15:			atch P				
Sodium-% of CEC		< 5		_4	Zn:Cu	3:1	2:							
Hydrogen-% of CEC < 15			8%	1	Vin:Zn	3:1	3:							
					-	Mn:Cu	7:1	4.1		wa	tch Mn			
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the laws of Agronomy."			•	IN	Mg:K	2:1	4:	I Low	Wa	atch Mg				

MNSFE 1:1.5-2.5 1:1.9

1:8:1

P: FE 2:1

## BEFORE AMENDMENTS

#### Western Laboratories.com

211 Highway 95 • Parma, ID 83660 800-658-3858



Date: 4/6/2018

Lab Number 4517

Client: PAID

Gardner: Steve Daletas Garden ID: West Patch

A	TLANT	C GIANT PUM	PKIN	
	S	<b>SOIL REPORT</b>		
WATER	SMP	SOLUBLE	LIME	9/ 014

SOIL REPORT								PARTS PER MILLION-PPM					
WATER LU SMP LU COCI SOL			LTS (EC) LIME		E %OM	NITRATE AN		AM	MONIUM	PHOSPHOR		ORUS	
	1 DOTTER		UA.	LISIEU					NH	4-N (PPM)	P(PPM) 102		P BRAY
7.0		6.	.3	0.11	0.0	13.2	3			5			
EVALUA	TION												
	Neutral		N	lormal	Good	d Very High	Very Low			122	Very H	igh	
POUND	S PER AC	RE											
							9			15	300	ô	
				- 1	PAR	TS PER MI	LLION-PP	M					
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EVALUA	TION											15	
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POUNDS	PER ACR	E											
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Meq/100	GRAMS S	OIL		responding					(	CEC by	sum	of (	cation
2.3			12.4	3.0		0.5					11	3.1	
Texture		L	.oam			Balance	Ideal	You	urs	Evaluati	on	on Watch	
Cation Exchange Capacity-CEC			24	N	:S	10:1	0.	8:1	Low		wa	tch N	
Perce	ent Base S	Satur	ation	101	C	a:Mg	6-20:1	7:1		ok			
TBS%			1	C	a:K pH >7	15:1		3:1	Low		wa	tch Ca	
В	ASES		IDEAL	YOUR	SC	a:K pH <7	10:1	:1					
- 1000	NAME AND DESCRIPTIONS		(Oliver Contained	-	-1c	a:P pH >7	100:1	24:1		Low		wa	tch Ca
Calcium-% of CEC		65-80		C	a:P pH <7		:1						
Magnesi	um-% of	CEC	10-20	_		:Zn	15:1	12:1		Low			atch P
Potassium-% of CEC		EC	2-6	10	<i>u</i> –	:Mn	4:1		4:1	High	_	2500	
Sodium-% of CEC		< 5	1	2 P:0		25:1	13:1					watch P	
			-	.14	n:Cu	3:1	1.0:1					tch Zn	
Hydrogen-% of CEC < 15		23		In:Zn	3:1		2:1		_				
						In:Cu	7:1			Low		watch Mn watch B	
"Always practice						:B	200:1			-		_	tch Mg
the laws of Agronomy."  John P. Taberna, Soil Scientist					-	lg:K ∴A≎ B	80-1000%		4:1			_	TCH CP