

# Powdery Mildew Tolerant Pumpkin Variety Trials

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For the summer of 2007, six powdery mildew tolerant pumpkin (PMT) variety trails were put out in grower's fields in eastern NY. The trials were set up primarily as demonstrations of the newer disease tolerant varieties available. It is one thing to read the descriptions in a seed catalog but it is better for growers to see a pumpkin variety grown under actual field conditions. A few years ago, there were only a few PMT varieties and those were limited to a certain size category. Now, PMT varieties are available in all the various marketing sizes. Growers are able to choose from 5oz. miniatures to 35lb. giant pumpkins and have the advantage of powdery mildew tolerance.

We tried to find as many PMT varieties as available from the various seed companies. We were able to locate 16 PMT varieties. The trial consisted of 30 varieties planted 6' between row and 5' in row spacing. Two seeds were planted in each hill with no thinning. Fertilizer, herbicide and fungicide applications were made by the host growers. Actual yield data was taken from one location but remarks and observations were taken from all locations. The Schoharie Valley location, where the data was collected, received limited fungicide applications. The Fonda location received more fungicide applications and pumpkins were larger at that location.

Four twilight meetings were held for growers to come out and look at the pumpkins. Meetings were held at the Jim Barber farm in Schoharie, NY, the Darren Blower farm in Fonda, NY, the David Mesick farm, in Middleburgh, NY and the Mat Bell farm in Chazy, NY. A total of one hundred and ten growers attended the four meetings. For what it is worth, representative pumpkin samples from the 30 varieties were displayed at the Norwich Pumpkin Festival held on October 27. We asked the public for their pumpkin preference based on appearance. We obtained 109 votes. Merlin was voted the most appealing, receiving 42 votes.

Average stem diameter and overall stem quality for the 2007 pumpkin variety trial, Barber Farm, Middleburgh, NY, Schoharie County.

Variety	Average Fruit Size (lbs)	Average Stem Diameter (inches)	Overall Stem Quality
<b>Pie Types</b>			
Baby Pam	2.6	0.89	4.5
Cannon Ball	5.0	1.41	5
Gold Dust*	0.53	0.30	4.0
Gold Speck*	0.47	0.33	4.0
Iron Man	3.7	1.18	5

<b>Mystic Plus</b>	5.6	1.32	5.0
<b>Neon</b>	7.9	1.12	4.0-4.5
<b>Pik-A-Pie</b>	4.0	1.16	4.0
<b>Prankster*</b>	2.3	1.11	3.5-4.0
<b>Touch of Autumn*</b>	2.4	0.60	4.0-4.5
<b>Trickster*</b>	2.1	0.80	2.5
<b>Jack-O-Lanterns</b>			
<b>18 Karat Gold</b>	17.2	1.40	4.0-4.5
<b>20 Karat Gold</b>	14.1	1.39	3.5-4.0
<b>Aladdin</b>	16.2	1.12	2.0-2.5
<b>Big Rock</b>	18.4	1.25	4.0
<b>Charisma</b>	10.7	0.98	3.5
<b>Expert</b>	15.2	1.16	3.5
<b>Gladiator</b>	14.2	1.30	3.5-4.0
<b>Gold Challenger</b>	9.0	1.21	2.5-3.0
<b>Gold Medal</b>	15.9	1.58	4.0
<b>Howden</b>	12.4	1.26	2.5-3.0
<b>Howdy Doody</b>	13.5	1.42	4.0-4.5
<b>Magic Lantern</b>	11.0	0.95	3.5
<b>Magician</b>	12.3	1.31	4
<b>Merlin</b>	13.4	1.17	3.5-4.0
<b>Oi Zeb's</b>	16.3	0.88	1.5
<b>Racer*</b>	9.4	1.13	4.0
<b>Rock Star</b>	19.3	1.15	3.0
<b>Super Herc</b>	19.5	1.37	4.0
<b>Wolf</b>	21.5	2.42	4.5-5.0

\*These varieties were planted on the outside of the field and fruit quality and yields were reduced due to heavy weed pressure.

Pumpkin Variety Name – Company - PMT or not – Days - Observations and comments

\* Touch of Autumn – Rupp, PMT, 105 days, 3-5 lbs nice pie, unique shape – tall pie, restricted vine - bush type

Gold Dust – Rupp, PMT, 95 days, 9 oz. color break down from virus, small curly stem, not unattractive to consumers with color specks

\*\* Gold Speck – Rupp, PMT, 95 days, 5 oz. straight thicker stem, both locations larger than Gold Dust, less color break down from virus

\* Prankster – Rupp, PMT, 85 days, 3-5 lbs consistent size, thick handle, dark orange color, short and squat

\*\* Racer – Johnny's, 85 days (70-75 days), 12-16 lbs, thick handle, good set, consistent size, early-70 day good for replant if needed, restricted vine, nice orange color

Trickster – 85 days, 3-4 lbs thicker handle than TOA, range in size

Aladdin – Harris, PMT, 115 days, 25-35 lbs rubbery, thin handle, restricted vine, heavy/dense for size, sets and yields well, handle too thin for the weight of the fruit? Very dark orange color

Mystic Plus – Harris, PMT, 105 days, 7-8 lbs thick skin and hard, deep orange color

Howden – Harris, 115 days, 24 lbs poor set A standard for a long time, attractive shape

\*\* Iron Man – Harris, PMT, 110 days, 3-4 lbs along with Cannon Ball and Mystic Plus good small pumpkins with good set

Rock Star – Johnny’s, 98 days, 15 lbs Good handles, solid and dense flesh, nice ribs

Magic Lantern – Harris, PMT, 115 days, 16-24 lbs long season, stays green, rubbery handle

\*\* Gladiator – Harris, PMT, 115, 20-25 lbs great set/yield, large, grower quote - “awesome”

\* Super Herc – Harris, PMT, 115 days, 30-40 lbs consistent +30lbs good size

\* Merlin – Harris PMT, 115 days, 15-25 lbs good orange color “peoples choice from Norwich Pumpkin Festival”

Charisma – Johnny’s PMT, 98 days, 14-18 lbs nice ribs, thick stem, leaves held up, consistent size brown vs. orange color, can bleach out late in season with no cover

\*\* Magician – Harris, PMT, 110 days, 10-16 lbs ZMV resistant, nice ribs, good shape, consistent in size, handle size matches fruit size

\*\* Cannon Ball – Harris, PMT, 110 days, 5 lbs great set, uniform size, 3 per plant, big thick handle, dark burnt orange color

Baby Pam – 100 days, 2 lbs consistent size, good set

Pick A Pie – Rupp, 85 days, 5-6 lbs good stem

Gold Challenger - Rupp, 20-24 lbs varied size (stick with Gold Medal)

Wolf – Johnny’s, 120 days, 15-25 lbs large almost too big handle, roadside direct market sales and not for wholesale, full vine, questionable fruit set, late maturing variety

Neon – 70 days, 7-8 lbs nice color, ok handles, smooth skin, consistent uniform size

Big Rock – Johnny’s, 98 days, 24 lbs nice ribs, good handles, round shape, heavy dense fruit

Expert - Johnny's 98 days, 25 lbs good ribs, tall in shape

Old Zeb – Rupp, 110 days, 15 lbs old variety, dip rib, thin curly handle, some people like it

18 Kt Gold – Rupp, PMT, 100 days, 18-20 lbs varied size, good handle

\* Gold Medal - Rupp, 95 days, 35-40 lbs good set, varied size, something of a standard

20 Kt Gold – Rupp, PMT, 100 days, 18-22 lbs good handles (go with 18 Kt Gold)

Howdy Doody - Rupp, 90 days, 18 lbs good handles, varied shape

## Results

The majority of the pumpkins in the trial did well. There were no real bad pumpkins in the trail. Do not jump into a new variety with both feet. Grow a small amount of any new variety on your farm before you commit to it in a big way. It is always better to trail a new variety on your own farm for a couple of years to see if it consistently does well year after year under different growing conditions.