

2012 Trial of Late Blight Resistance in Tomato Varieties

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Since 2009, we have had annual outbreaks of late blight (LB) in NY. Several tomato varieties with resistance to LB are now commercially available, and there are other varieties for which there are occasional reports of resistance. To see how these varieties, along with other popular tomato varieties, withstood LB disease pressure in 2012, a variety trial was performed in both Freeville and Geneva, NY. In both locations, Bill Fry's lab determined that the strain killing plants was the US-23 clonal lineage, pathogenic on both tomatoes and potatoes, and mefenoxam (Ridomil formulations and similar fungicides) sensitive.

We used 35 commercially available varieties of tomato, which are listed below. Some varieties were chosen because of known resistance to LB, while others were included by grower request. The list includes a mixture of fresh market, processing, cherry, and grape tomatoes, along with recently-released and heirloom varieties.

Of the 35 varieties tested in 2012, there were 6 that had excellent resistance** to US-23. They were: Mountain Magic, Mountain Merit, Defiant PHR, Lemon Drop, Matt's Wild Cherry, and Plum Regal. Additionally there was one variety, Mr. Stripey, which had very good resistance*. It's important to remember that even though the trial was done in two locations, both locations were found to have the same strain of LB.

Varieties are listed in alphabetical order:

AB 2	Florida 47	Lemon Drop **	Red Bounty
Aunt Ginny's Purple	Golden Sweet	Matt's Wild Cherry **	Red Deuce
Amish Paste	H1439	Mountain Fresh Plus	Red Pearl
BHN1009	H3402	Mountain Magic **	Rocky Top
Brandywine	H9704	Mountain Merit **	Scarlet Red
Charger	H9780	Mr. Stripey *	Sun Gold
Defiant PHR **	JTO-99197	New Yorker	Tasti-Lee
FL 8059	Juliet	Plum Regal **	West Virginia 63
FL 8111	Legend	Primo Red	