

DRAFT

Tomato (*Solanum lycopersicum*)
Powdery mildew; *Leveillula taurica*

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Comparison of processing tomato variety susceptibility to powdery mildew on tomato, 2009.

The study was conducted at the University of California West Side Research and Extension Center. On 22 May, tomato plants were transplanted into a Panoche clay loam. The field was sprinkler irrigated for 10 days and irrigated with buried drip. Each plot consisted of one 66-in. bed 13 ft long. The experimental design was a randomized complete block with four replications. Powdery mildew was first documented in this field on 19 July at which time less than 1% of leaves had sporulation. On 3, 19 and 28 Aug, powdery mildew severity was rated on each of ten leaves per plot using a scale of 0 to 10 based on percentage of the leaf with evidence of powdery mildew. Leaves rated 0 had no visible powdery mildew; leaves rated 10 were covered. On 20 Aug, the percentage of leaves that had died due to powdery mildew was estimated in each plot. Analysis of Variance was run and Least significant difference (LSD) $P=0.05$ is presented.

Treatments	Foliar severity ratings			Necrosis rating 20 Aug
	3 Aug	19 Aug	28 Aug	
AB 2 (STD)	1.1	5.3	6.8	3.3
CXD 255	0.4	3.6	4.1	1.5
H 8004 (STD)	1.0	4.8	7.3	4.8
H 2601 (STD)	0.6	5.1	7.5	4.0
H 4007	0.6	3.5	4.2	3.3
H 8504	0.6	3.7	4.5	3.3
H 9780 (STD)	0.4	4.2	3.1	3.1
HM 6898	0.6	5.0	6.2	4.0
HMX 6903	0.2	2.7	5.0	2.0
HMX 7883	0.5	2.8	4.9	3.0
HMX 7885	0.4	2.3	3.5	1.8
N 6390	0.5	4.0	6.9	3.3
PX 002	0.5	3.4	5.2	2.8
PX 650	0.7	3.0	4.5	2.3
SUN 6366 (STD)	0.9	4.2	7.8	5.8
SUN 6368 (STD)	0.7	4.8	8.8	4.5
LSD ($P=0.05$)	0.3	1.0	1.6	1.6
CV %	39.2	18.5	20.4	33.7