

GROWTH AND PERFORMANCE OF CLONAL PARADOX ROOTSTOCKS TOLERANT TO *PHYTOPHTHORA*- SOLANO COUNTY

Bruce Lampinen

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Established: Spring 2005

Design: 3 rootstocks – all clonal Paradox (GZ1, AZ2 and JX2). Rootstocks are replants in three adjacent orchards with severe tree loss from water problems, randomized complete block design, with single tree replicates. Orchard BA7, LE1 and DA1 have 8, 3 and 12 replications of each rootstock respectively (except orchard DA1 had one less AZ2 rootstock due to a shortage at planting time).

2007 Growth and Survival Results

Tree death was minimal in the 2005 season but following the wet spring in 2006, there was extensive tree death and trees continued to die in 2007. By the end of the 2007 season, between 52 and 83 percent of all rootstocks had died including all of the GZ1 in two of the three orchards and all of the JX2 in one of the three orchards. Only AZ2 had some trees alive in all three orchards. Letters indicate significant difference in diameters between rootstocks within an orchard.

2007

Rootstock	Orchard BA7		Orchard LE1		Orchard DA1		Total percent dead
	Diam(mm)	% dead	Diam(mm)	% dead	Diam(mm)	% dead	
GZ1	39.3 a	50	.	100	.	100	82.6
AZ2	36.0 a	62.5	30.2	33.3	31.1 a	54.5	54.5
JX2	53.2 a	25	.	100	31.8 a	58.3	52.2
Total by Orchard		45.8		77.8		71.4	63.2