

Red Clover

Nancy Ehlke and Donn Vellekson



Red clover can be seeded in pure stands or with grasses for grazing, hay or silage. It is more easily established in pasture renovation than either alfalfa or trefoil.

Historically, varieties of red clover have not persisted beyond two crop years in Minnesota because they are susceptible to diseases and winter kill. However, most of the improved

varieties currently sold for use in Minnesota can persist for three years if there is good winter snow cover.

Experimental varietal trial plots were established at Grand Rapids in 1991, 2001 and 2006, and at Rosemount in 1999, 2002, 2005 and 2006. Harvest frequency is generally three times per year.

Winter injury at Rosemount was quite severe in 2003-04, with all varieties somewhat injured. Varietal differences were observed; ratings in the summary table give some indication as to winterhardiness in the second production year.

A benefit of red clover is its resistance to potato leafhopper injury. Nonetheless, a severe infestation at Rosemount in 2003 injured some varieties. Scarlett and Marathon had very little injury while Freedom and Arlington had severe chlorosis from the feeding insects.

Red Clover Planting Rate and Date

Bushel Weight, Pounds.....	60
Seeds/Pound.....	272,000
Planting Rate, Pounds/Acre	
Alone.....	9
In Mixtures.....	5
Planting Rate, Seeds/Sq. Ft.	
Alone.....	55
In Mixtures.....	30
Planting Date	
Alone.....	Early Spring to September 1

Dry matter yield of red clover, in tons dry matter per acre, seeded at 2 locations.

Variety	Potato*	Winter Injury**	Rosemount				Grand Rapids		
	Leafhopper Injury		2000	2003	2006-07	2007	2000-01	2003-04	2007
	7/14/2003	5/24/04							
Arlington	3.5	6.5	5.2	3.6	4.3	3.7	3.0	1.2	1.1
Cinnamon Plus	2.3	7.5	—	4.2	4.8	4.3	—	1.3	1.3
Freedom	4.8	8.5	5.5	3.7	—	—	3.2	1.2	—
Juliette	3	6.3	5.6	4.0	—	—	3.3	1.3	—
Marathon	1.5	5.0	5.6	4.3	4.4	4.2	3.2	1.4	1.3
Prima	—	—	5.3	—	—	—	3.5	—	—
Randolph	—	—	—	—	—	—	—	—	—
Redlan Grazell	1.3	8.0	—	4.3	—	4.4	—	1.5	—
Redstar	—	—	5.9	—	—	—	3.4	—	—
Scarlett	1.3	5.3	—	4.0	4.7	4.3	—	1.4	1.4
LSD 5%	0.9	1.4	0.6	0.3	NS	0.4	0.3	0.2	0.3

* Potato leafhopper injury-Rosemount 1 = none, 5 = worst.

** Winter injury; 1 = none; 9 = all dead.