



Timothy

N.J. Ehlke and D.J. Vellekson

Varietal Trials Results, January 2006



Timothy is adapted throughout Minnesota for use in hay and pasture mixes; it is very winterhardy. When timothy is the major component in

hay its stage of maturity affects both yield and quality. Early heading is the preferred time to harvest timothy, which produces the majority of its forage at the first harvest.

Varieties of timothy differ in maturity, so care should be taken to choose those that fit the management requirements of the crop mixture. Early varieties are best adapted to a three-cut system with alfalfa.

Late-maturing varieties should not be harvested more than twice during the growing season. They may be more appropriate in mixes with birdsfoot trefoil or red clover.

While early maturing varieties of timothy had greater forage production than the late-maturing varieties at all locations over all harvest years, quality forage may be maintained later in the season with the later varieties. Timothy does not normally persist well under heavy grazing pressure.

Varieties in the experiment station timothy trials were established in pure stands in 1992 at Rosemount and at Grand Rapids in 1993. Trials were also established at Rosemount and Grand Rapids in 1999 and 2002. Trials are harvested two or three times per year. Nitrogen was applied at all locations in the early spring and after both first and second harvest at a rate of 50 pounds per acre.

Dry matter yield, in tons per acre, of timothy seeded at two locations.

Variety	Heading, % 06/07/04	Rosemount			Grand Rapids		
		1993- 1995	2000- 2002	2003- 2005	1994- 1996	2000- 2002	2003- 2005
Early-intermediate maturity:							
Aurora	25	—	3.3	3.6	—	3.3	1.8
Climax	1	3.8	3.4	3.8	3.6	3.0	2.0*
Colt	3.5	—	3.7	4.0	—	3.3	1.7
Comtal	1	3.7	3	3.2	3.4	2.8	1.7
Itasca	2.5	—	—	3.8	—	—	2.0*
Goliath	—	3.4	—	—	3.4	—	—
Promesse	1	—	3.1	3.1	—	3.1	1.6
Summit	65	—	—	4.1	—	—	1.6
Timfor	1	3.8	—	3.8	3.5	—	1.7
Toro	—	3.9	—	—	3.7	—	—
Late maturity:							
Heidemij	—	3.0	—	—	3.5	—	—
Hokusen	—	3.4	—	—	3.3	—	—
Motim	—	—	3.4	—	—	2.8	—
LSD 5%	10	0.4	0.5	0.4	0.4	0.3	0.2

* 2004-2005 yields only.

Timothy Planting Rate and Date

Bushel Weight, Pounds	45
Seeds/Pound	1,234,000
Planting Rate, Pounds/Acre	
In Mixtures	3
Planting Rate, Seeds/Sq. Ft.	
In Mixtures	85
Planting Date	
In Mixtures	Use Date for Legume