

## Orchardgrass

Nancy Ehlke and Donn Vellekson



Orchardgrass often is used in hay and pasture mixes with other grasses and legumes because it establishes rapidly and recovers quickly after grazing or harvesting. Its major limitation is a lack of winterhardness, but in areas with reliable snow cover it can persist and remain productive for many years.

Maturity is another important consideration. Other grass and legume species in the mixture, seed availability and timing of needed grazing or cutting will help determine the best variety for a certain situation.

Orchardgrass varieties were established in pure stands in 2002 and 2005 at Rosemount, and in 1998, 2002 and 2006 at Grand Rapids.

Experimental plots were generally harvested three times per year at Rosemount and two or three times per year at Grand Rapids. Nitrogen was applied in the early spring and after each harvest at a rate of 50 pounds per acre for each application.

### Orchardgrass Planting Rate and Date

Bushel Weight, Pounds.....	14
Seeds/Pound.....	653,000
Planting Rate, Pounds/Acre	
Alone.....	10
In Mixtures.....	3
Planting Rate, Seeds/Sq. Ft.	
Alone.....	150
In Mixtures.....	45
Planting Date	
Alone... Early Spring or Late Summer	
In Mixtures..... Use Date for Legume	

### Dry matter yield of orchardgrass, in tons dry matter per acre, of orchardgrass varieties seeded at two locations.

Variety	% Heading*	Winter Injury**	Rosemount			Grand Rapids		
			2003-05	2006-07	2007-08	1999-01	2004-05	2007-09
AC Nordic	—	—	—	—	—	3.7	—	—
Albert	3	4.8	—	3.7	3.1	3.9	—	3.2
Ambassador	—	—	—	—	—	3.6	—	—
Bengal	—	—	—	—	—	—	—	—
Condor	—	—	—	—	—	3.8	—	—
Duke	8	5.8	3.7	3.5	3.0	3.8	1.6	3.3
Elsie	—	—	—	—	—	3.5	—	—
Extend	—	—	3.6	—	—	—	1.6	—
Haymate	—	—	—	—	—	3.7	—	—
Hawkeye	—	—	3.8	—	—	3.9	1.6	—
Justus	16	7.5	3.4	3.5	3.1	3.4	1.5	2.7
Kayak	50	1.8	—	3.6	3.3	—	—	3.5
Megabite	—	—	3.8	—	—	3.7	1.7	—
Mammoth	—	—	—	—	—	—	—	—
Napier	3	5.8	—	3.6	3.3	—	—	3.0
Orion	—	—	3.5	—	—	4.1	1.4	—
Potomac	3	7.0	3.8	3.6	2.6	—	1.3	3.2
Warrior	6	7.8	3.4	4.0	2.9	—	1.5	2.8
LSD 5%	12	1.2	NS	NS	0.6	0.4	NS	0.6

\*Percent heading at first harvest, higher percentage = earlier maturity.

\*\* Winter injury; 1 = no injury, 9 = dead.