

NORTH DAKOTA– Winter Rye Varieties for Forage Production

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Winter rye is an extremely hardy winter cereal crop that can tolerate a wide range of environmental conditions. Rye is the earliest of the winter cereal grasses to initiate growth and produce forage/biomass in spring. Advantages of winter rye as a forage crop include early spring growth and harvest, providing an opportunity to sow a second crop for haying, grazing, or cover cropping if adequate moisture and fertility levels are present. There is increasing popularity of rye as a forage crop in many regions.

Table 1. NDSU:CREC 2017 Rye Variety Forage Trial.

Variety	Harvest date	Spring stand (%)	Day of heading	Plant height (in.)	Harvest moisture (%)	Forage DM yield (ton/ac)
Rymin	8-Jun	96	154	38.6	70.4	2.29
ND Dylan	8-Jun	99	153	43.1	68.0	2.72
Dacold	8-Jun	94	158	44.7	69.3	2.43
Aroostok	1-Jun	80	148	34.4	73.6	1.79
Wheeler	8-Jun	89	157	44.4	70.2	2.07
Mean		94	152	39.8	70.9	2.28
C.V.%		5.1	0.4	5.8	2.3	10.4
LSD.05		7	1	3.4	2.5	0.35

Winter rye was evaluated at the NDSU Carrington Research Extension Center (CREC) demonstrating its value as a reliable forage crop; varieties were planted on September 19, 2016. The trial was sown into undistributed flax stubble at 1.2 million PLS/ac. Fall soil moisture levels were dry or below normal; stand establishment was good. Differences were detected in winter survival (Table 1). The start of the spring growing season was average with adequate soil moisture recharge from winter precipitation. Precipitation for April-May was only 60% of normal. Rye varieties were harvested 3-6 days after heading, June 1-8, 2017. Forage yields (Table 1) were slightly above average despite dry conditions experienced. Results demonstrate winter rye is an option as a reliable forage crop and can be produced in a relatively short time period under many growing conditions.