MINNESOTA– New Perennial Ryegrass for Hay & Pasture Mixtures

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Several perennial grasses are used in Minnesota pastures and hayfields, but all lack the forage nutritive value of perennial ryegrass. Releases from the University of Minnesota's grass breeding program of winterhardy perennial ryegrasses have potential to improve profitability of livestock systems. Research established in 2016 at St. Paul, Rosemount, and Grand Rapids, MN, is evaluating forage yield and forage nutritive value of new varieties of perennial ryegrass grown in pure stands and in mixtures with legumes when grazed or harvested for hay. Treatments include Forageur and Spreader IV perennial ryegrass, and commercial varieties of meadow fescue, orchardgrass, and tall fescue, seeded in both pure stands and in binary mixtures with white clover when grazed or alfalfa when harvested as hay. While all grasses had some stand injury and some related 2017 first harvest yield loss because of the severe winter of 2016-'17, all grasses recovered. Yields of pure stands of Forageur and Spreader IV ryegrass averaged 3 tons/ac. Meadow fescue, orchardgrass, and tall fescue averaged 3.4 tons/ac. This research is funded by the Minnesota Agricultural Experiment Station and the Minnesota Department of Agriculture.