



WHY HYBRID RYE? BECAUSE IT YIELDS!

Hybrid Rye for Grain

Hybrid rye grain for distilling, milling, and feed.

WHAT IS HYBRID RYE?

Hybrid rye is bred to produce high-yielding rye cereal grain and forage with low incidence of disease. Hybrid rye performs well in drought conditions and on sandy soils and even better on more productive soils.

First developed in Germany in 1986, hybrid rye was made commercially available in 1995 and is now widely grown in Europe and increasingly in the U.S. and Canada.

MARKETS FOR HYBRID RYE

Rye is used in animal feeds and for food as flour in baked goods, distilled into whiskey, and cooked as whole grain or flaked, similar to oatmeal.

INCORPORATING HYBRID RYE INTO YOUR CROP ROTATION

Hybrid rye can follow any crop that allows fairly early planting in September. Hybrid rye performs best with early fall planting following a short-season crop species other than a grass, such as early soybeans, hay, or legume cover crops.

Organic hybrid rye seed is not yet available, but conventional seed may be planted on organic acres with your certifier's approval.



HYBRID RYE VARIETY SELECTION

Albert Lea Seed carries two grain-type hybrid rye varieties that also may be harvested for silage or hay or that may be grazed.

KWS Bono Hybrid Winter Rye*

- Highest yields by U of MN in 2016, 2017 & 2018
- Excellent drought tolerance, best dryland variety
- Very large, deep rooted system

KWS Brassetto Hybrid Winter Rye*

- Dramatically higher yields than common varieties
- Very good standing, good fusarium resistance, and low ergot
- Superior grain quality for milling, distilling or feed

** Requires a license agreement. Due to Plant Variety Protection (PVP) law, the seed may not be saved for replanting or sold for seed.*



PERFORMANCE: Hybrid Rye for Grain

The Universities of Minnesota, Wisconsin, Maine, and North Dakota State University evaluate rye varieties at multiple locations across those states. Grain yields for hybrid rye are 40 to 100% greater than for open-pollinated rye varieties.

Table 1. Grain yield and plant characteristics for selected grain-type hybrid and open-pollinated winter rye varieties tested at three locations in Minnesota, 2016-2018 (adapted from: 2018 Winter Rye Field Crop Trials Results, University of Minnesota).

Full report: https://www.maes.umn.edu/sites/maes.umn.edu/files/2018_winter_rye_final.pdf

	Best Use	Days to heading ¹	Plant height ²	Straw strength ³	Susceptibility to ergot ⁴	Test weight ⁵	Grain Yield ⁶ (bu/A)
Hybrid Varieties							
Bono	Grain	6	1	1	1	1	130.0 a
Brassetto	Grain	7	2	1	1	5	119.4 b
Open-Pollinated Varieties							
Aroostook	Cover crop	1	6	9	4	4	60.9 d
Hazlet	Grain, cover crop	7	4	4	1	1	94.2 c
ND Dylan	Grain, cover crop	6	7	9	2	9	93.7 c

¹ 1-9 earliest to latest heading dates

² 1-9 shortest to tallest

³ 1-9 strongest to weakest

⁴ 1-9 least to most susceptible

⁵ 1-9 heaviest to lightest test weight

⁶ Yields followed by different letters are statistically different at $P < 0.10$

PLANT GROWTH & POLLINATION

Hybrid rye produces eight to 20 tillers per plant and large root systems. Each fall tiller represents a potential head of rye the following spring. Spring tillers can also produce viable seed heads, but are much less productive than fall tillers.

Pollination and Ergot: Hybrid rye has lower incidence of ergot due to more uniform development and flowering. A field of hybrid rye sheds pollen in a very short period of time – in a matter of hours.

In addition, the KWS hybrids are PollenPlus® varieties, which produce more pollen than open-pollinated varieties. You may notice a “dust cloud” of pollen over the field during pollen shed. The hybrid uniformity of flowering and pollen shed reduces potential ergot infection. Once rye flowers are pollinated, they close immediately and are no longer susceptible to ergot spores.

Spring tillers and damaged fall tillers may set heads and pollinate later than the majority of the tillers in a field, increasing their exposure to infection from ergot spores.

PLANTING

Plant hybrid rye early, evenly, and at an optimum population to allow for maximum fall tillering. With a uniform, dense stand of rye in the spring, few spring tillers will form, minimizing the potential for ergot infection.

Planting date: Plant hybrid rye from September 1 through 21 in southern Minnesota for best tillering and grain yields. Adjust this planting window slightly earlier if north of this region and later if south of this latitude. Plant after fall soil temperatures are below 59°F. Planting too early may increase the possibility of winter kill; later planting will result in reduced grain yields.

Planting Depth: Seed hybrid rye 0.75 to 0.8 inch deep. Rye can emerge from greater depths, but deeper planting will slow fall growth and plant development.

Planting rate: Planting rates for hybrid rye, 800,000 live seeds/A, are lower than those for open-pollinated varieties, because of the hybrid rye's ability to form many more tillers, particularly when planted at the optimum time. Calibrate drills or other seeding tools to deliver the recommended 800,000 live seeds per acre.