

INTRODUCTION TO CEREAL CROPS

BARLEY



Barley is normally planted in mid fall and harvested, grazed, or cut for silage the following spring. Winter barley has a very similar growing season to winter wheat. Barley is an annual, cool season cereal that grows 2–4 ft tall. In early stages before flowering, barley looks like many other small grains. Barley can be identified by examining the leaf collar when it is pulled away from the stem which will have two overlapping appendages that clasp the stem, called auricles.

There are two different groups of barley, the six-rowed and two-rowed types. These are identified by the arrangement of the seeds on the head. Six-rowed barley will have six rows of kernels, three on each side of the stem. Two-rowed barley appears to have only two kernels on each side of the stem.

Using barley in cover crops protects from erosion, especially when grown as a winter annual. Barley roots can reach a depth of 6.5 feet protecting soil from the wind and water erosion at the same time helping to break soil compaction.

Barley is less winter hardy than wheat or rye and should be seeded earlier in the fall. Winter barley is typically planted from August 1 through October 10 at a seeding depth of 1 - 2 inches.

CEREAL RYE



Cereal rye is very winter hardy and grows and tillers rapidly allowing it to be grazed as early as 4 to 6 weeks after planting. Cereal rye can be planted later than most all other cover crops and still provide excellent fall and spring grazing. Rye should be grazed or harvested prior to heading.

Rye's fibrous roots system allows it to scavenge and hold nitrogen well into spring. The massive root system also makes it an exceptional erosion control plant as a monoculture or within a cover crop blend.

Many studies have shown that the allelopathic benefit for weed suppression in Cereal Rye plantings is exceptional.

WHAT IS TRITICALE?



Triticale is a cereal crop developed by human intervention from crosses between wheat (Genus Triticum) and rye (Genus Secale). It has been developed to incorporate the high yield potential and quality of wheat and the adaptability of rye and is adapted to a wide range of soil types and environments. Triticale has an aggressive root system that binds light soils better than wheat, barley and oats. Under ideal conditions researchers have found that triticale can out yield wheat, barley, and oats. Triticale is well established as an ingredient in livestock rations.

SEEDING RATES
FOR TRITICALE

RATE	DEPTH
80-120lbs per acre	1/2" - 1"

348WINTER TRITICALE



813

WINTER TRITICALE



KEY ATTRIBUTES

- Awnletted (very short beards)
- > Semi-erect fall growth habit
- > Good winterhardiness
- > High silage yields
- > Tolerant of wheat streak mosaic virus
- > Proven variety for 12+ years
- > Long season maturity for optimized grazing
- Adapted to large area including Central and Southern Plains

KEY ATTRIBUTES

- > Awnletted (very short beards)
- > Semi-erect fall growth habit
- > Very good fall seedling vigor
- > Good winterhardiness
- Medium maturity
- > Good straw strength
- > Tolerant of rust
- > Tolerant of wheat streak mosaic virus
- > High silage yields
- > Adapted to the Southern and Central Great Plains

AG-135

WINTER TRITICALE



FRIDGE TRITICALE





KEY ATTRIBUTES

- > Awnletted (very short beards)
- Medium maturity
- > Semi-erect fall growth habit
- > Vigorous fall growth
- > Tolerant of rust and wheat streak mosaic virus
- > Tall stature with good straw strength
- Excellent green leaf duration (holds its leaves well into spring)
- > Adapted to the southern and central plains
- > Very good silage yields

KEY ATTRIBUTES

- > Easy to grow and control
- > Excellent for grazing
- > High silage value
- > Rapid early season growth
- > Excellent weed suppression
- > Quickly established cover crop
- › Outstanding erosion control
- > Excellent winter survival
- > Excellent control
- > Excellent lodging resistance

TRITICALE COMPARISON

	FALL FORAGE YIELD ¹	SILAGE YIELD ²	SILAGE QUALITY ³	MATURITY⁴	HEIGHT⁵	LODGING ⁶	LEAF RUST	STRIPE RUST
TriCal 131	8	7	7	5	5	2	R	MR
TriCal 813	7	7	7	6	7	2	R	MR
TriCal 348	5	5	4	8	8	8	S	R
TriCal 135	7	8	6	4	7	2	R	R
Fridge	5	7	7	8	7	5	S	-
Slick Trit II	5	6	5	9	7	5	S	-

¹ Dry matter production measured by repeated hand clippings simulating fall and winter grazing.

² Yields expressed at 35% dry matter. 1=Poor: 9=Excellent.

³ Comparative relative feed values.

⁴ 1=very early: 9=very late.

⁵ 1= short: 9=tall.

⁶ 1=no lodging: 9=Prone to lodging.

 $^{^7}$ 1=no damage from cold winter temperatures: 9=all leaves burned, seedling plant dead from cold temperatures.



OTHER CEREALS

CEREAL RYE

- > Very Winter Hardy
- > Extensive Soil Holding Root System
- > Excellent Weed Suppression
- > Vigorous Growth In Spring
- > Excellent Cover Crop
- > Reduces Erosion
- > Fits Many Crop Rotations

JERRY OATS

- > Tall and Leafy
- > Produces Well In High PH Soils
- Cut Prior to Boot Stage For Optimal Quality
- > Very Good Cover Crop
- Mixes Well With Cool Season Peas For Quality Spring Hay

SPRING BARLEY

- > Produces High Quality Forage
- > Excellent Feed Quality
- > Very Vigorous Spring Growth
- > Reduces Erosion
- > Excellent Weed Suppression
- Available With or Without Beards

GOLIATH OATS

- > Premium Forage
- > White Hulled
- Late Maturity
- > Tall and Leafy
- Mixes Well With Cool Season Peas For Quality Spring Hay

WINTER BARLEY

- > Midseason
- > Produces High Quality Forage
- > Mediocre Winter Hardiness
- Greenbug Resistant
- > Tolerant to BYDD