

Chuck,

*This is the description we use for Field inspection  
in North Dakota.*

## KULM WHEAT

KULM hard red spring wheat was developed and released by North Dakota State University. The area of adaptation is North Dakota and the spring wheat growing area of the Upper Midwest, USA. Kulm has been tested in North Dakota, South Dakota, Minnesota, and eastern Montana. It is recommended for North Dakota except where Wheat Stem Sawfly is a known production risk. The best area of adaptation is similar to Butte 86 and Sharp. Kulm heads early, similar to Butte 86 and Sharp. Kulm has good lodging resistance, better than Butte 86 and Sharp. The data is limited, but appears satisfactory on shattering resistance. Kulm has excellent test weight, better than Butte 86 and similar to Sharp. There is good yield potential, (mean yield performance better than other conventional height cultivars. Kulm is awned, conventional height, early maturity and has a lax, tapering and erect spike. It is resistant to the prevalent Stem Rust races in North Dakota and is resistant-to-moderately resistant to Leaf Rust races in North Dakota. Kulm has hollow stems and is susceptible to the Wheat Stem Sawfly.

Plant Characteristics: White coleoptile with long coleoptile expression, same as Stoa. The juvenile plant growth habit is semi-erect. Leaves have blue-green color at booting, most similar to Stoa. The flag leaf at booting is recurved, twisted and no waxy bloom. The first leaf below flag leaf is narrow (8-11 mm), long (25-28 cm); no pubescence present. It has white auricles, with no pubescence. Kulm heads early, 3 days earlier than Stoa.

Stem: The stem is white; the strength being midstrong; stronger than Stoa. Stem has no waxy bloom present; has hollow internodes with pubescence present on last internode of rachis. Kulm is medium tall with an average height of 88 cm; (6 cm shorter than Stoa).

Spike: yellow anthers, mid-long awns (6-9 cm). The spike is short to mid-long (5-7 cm), narrow (10-13 mm), tapering with a lax density. At maturity the spike is erect and the awns are white/amber.

Glumes: yellow at maturity, short (6-7 mm); mid-wide (3-3.5) with narrow, elevated shoulders. The beak is mid-wide, medium short with an acuminate apex. Glumes are glabrous.

Seed: Kulm seed is red, short (5-6 mm); is shorter than Stoa. Seed is mid-wide (2.5-3.5 mm), with oval shape. The brush is small, short & no collar. The crease is mid-wide, mid-deep. It has a rounded cheek, and small germ. Seeds are most like Grandin. The average weight per 1,000 seeds is heavier than Stoa.

Variants: Kulm has taller plant variants (5-15cm) at a frequency of 7/10,000.