

UNCHARTED

Leading in uncharted territory

BREEDER'S BULLETS

AS YET DISCOVERED

Leaf rust resistance of Uncharted is unexplainable by its susceptible parents and must be caused by yet-discovered leaf rust resistance gene(s) or a unique combination of unknown genes.

THE WILD SIDE

Molecular markers reveal five chunks of DNA from wild relatives of modern wheat – one from *Thinopyrum*, two from *Aegilops tauschii*, one from *Triticum ventricosum* via Jagger, and one unknown source from Duster. This is an unusual amount of ancient genetics for one variety.

UNCHARTED WATERS

Uncharted tends to be more competitive with other varieties in wetter years with disease resistance to back it up.

FIREWALL

Uncharted has the potential to do for Oklahoma's BYD predicament as Duster did for Hessian fly.

Dr. Brett Carver,

Oklahoma State Wheat Breeder



NEW TERRITORY

An eclectic pedigree delivers five chromosomal segments from wheat's wild relatives into a single variety, Uncharted. This unique blend of genetics provides across-the-board protection against the more common foliar diseases in the central corridor.

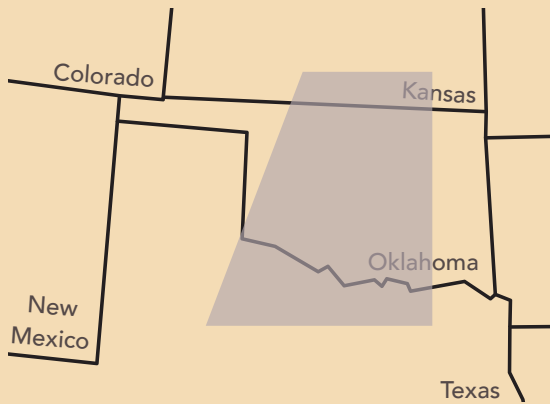
Uncharted is the only HRW variety adapted to Oklahoma that carries a two-gene stack for BYD immunity. Other significant attributes include green leaf retention to physiological maturity and good acid-soil tolerance. It is highly recommended for early-planted grazing systems.

TRADEMARKS



Breeding system that imparts selection pressure for adaptation to early-planted, stocker-cattle grazed systems.

ADAPTATION MAP



A STEP OUT FROM BENTLEY

Bentley

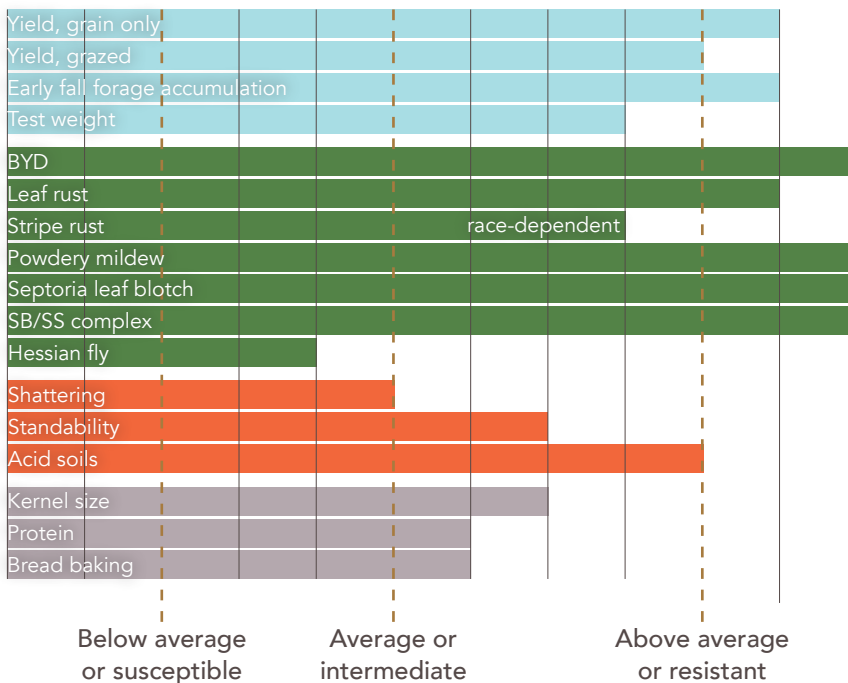
- » BYD susceptible
- » Leaf rust susceptible
- » Mildew susceptible
- » Stay-green ordinary
- » Chronic-drought tolerant
- » Normal fall canopy, more erect
- » Holds winter dormancy well

Uncharted

- » BYD resistant
- » Leaf rust resistant
- » Mildew resistant
- » Stay-green enhanced
- » Below-average drought tolerance
- » Aggressive fall canopy, more prostrate
- » Holds winter dormancy when grazed

Similarities: Yield potential, acid-soil tolerance, Hessian fly susceptibility, shattering tendency

BAR EXAM



END-USE QUALITY

Overall Quality	Desirable
Dough Properties	Average mix strength
Baking Quality	Very good loaf volume
Milling Quality	Good test weight; good kernel size

GENEALOGY

Bottom Line:

Every branch of the Uncharted family tree features a wild relative of modern wheat, thus providing resilience to stress conditions.

