



**The UC Davis Triticale Breeding Program**, led by Joshua Hegarty began in 2017 and is part of the Small Grains Breeding and Molecular Genetics laboratory at the University of California, Davis, directed by Prof. Jorge Dubcovsky. The mission of the triticale breeding program is to develop new cultivars of this highly productive crop that will deliver value for growers in California and beyond. The primary breeding objectives include developing cultivars with the straw strength to withstand the highly fertile land of the Central Valley, in addition to developing awnless cultivars for the production of hay. Beyond forage and feed grain applications, ongoing research and breeding have made improvements to the human-consumption grain quality that may be used in artisan milling and baking.

### UC-Bopak a Triticale Cultivar Adapted to the California's Central Valley

**UC-Bopak (UC3190)** is a triticale intended for the production of feed grain and silage with exceptional high yield and good tolerance to lodging and disease resistance

**Development:** **UC-Bopak** was selected at the University of California, Davis from material originally developed at CIMMYT in Mexico and tested as 'UC3190'. UC-Bopak was selected for plants with a shorter stature, minimal lodging and high grain yield under high input conditions.

**Characteristics:** **UC-Bopak** is a medium height triticale, which stands approximately 7.5 inches taller and heads out 4 days earlier than the widely used cultivar 158EP. UC-Bopak produces an exceptional grain yield, averaging 8.3% higher than 158EP across the 14 sites tested. Compared with UC-Atrea, UC-Bopak is 3 inches taller, heads 2 days later, has slightly greater yield potential, but slightly more susceptibility to lodging.

**Disease resistance:** **UC-Bopak** has shown good levels of resistance to all major pathogens including stripe rust, septoria, and yellow dwarf virus.

**Area of adaptation and primary use:** **UC-Bopak** has performed very well in all locations throughout the central valley of California, delivering high yields even when under drought and nutrient stress. This fully awned cultivar is intended for the production of feed grain and silage.

**Procedures to maintain stock seed classes:** The Department of Plant Sciences at UC Davis will maintain Breeder seed. Foundation seed will be produced and distributed by the Foundation Seed Program of the University of California, Davis. The California Crop Improvement Association will provide certification services. Increases of foundation seed are allowed for indefinite number of cycles.

**Intellectual property protection:** **UC-Bopak** is protected under Plant Variety Protection under Title V, and is sold as certified seed. To obtain information and/or a license for **UC-Bopak** contact InnovationAccess: Sonia Vazquez, Senior Intellectual Property Analyst, University of California, Davis, Tel. (530) 754-8474, [sovazq@ucdavis.edu](mailto:sovazq@ucdavis.edu).

