
For Immediate Release**Contact: Wilma Trujillo**
Southeast Area Agronomist
Phone: (719) 336-7734
Wilma.Trujillo@colostate.edu**Collaborative Winter Wheat On-Farm Testing Program in Southeast Colorado**
By Wilma Trujillo

Collaborative Winter Wheat On-Farm Testing (COFT) began in 1995 when 28 eastern Colorado wheat producers agreed to plant the newly released variety 'Halt'. Since then, a number of newly released wheat varieties, Akron, Yumar, Ankor, Prowers 99, Above, Bond CL, Avalanche, Hatcher, Ripper, Bill Brown and Snowmass, have been tested throughout the state.

The objective of COFT is to compare performance and adaptability of popular and newly released CSU varieties, and promising commercial varieties under unbiased testing conditions. The COFT is a partnership between wheat producers, CSU Extension, CSU Wheat Breeding Program, Colorado Wheat Administrative Committee and Colorado Wheat Research Foundation. This program is unique among the Land Grant Universities and the only one in the USA to feature a uniform set of varieties tested through on-farm conditions.

The program offers an opportunity for wheat producers to evaluate new varieties in their own fields and demonstrate the adaptability of the varieties to the growing conditions of the different agro-ecosystems throughout eastern Colorado. CSU Extension agents play an important role in the program. They recruit new collaborators, deliver seed, assist with planting, monitor the test plots throughout the growing season, coordinate visits, and communicate with producers and CSU Crop Testing coordinators. During harvest, the extension agents obtain yield, test weight, grain moisture and protein content of each variety in each farm. Samples from each variety at each site are collected and sent to the CSU Wheat Breeding Program laboratory for measurements of the milling and baking qualities.

On-farm research can be tedious and require a great deal of time and resources, but the information obtained on performance and adaptability is a powerful tool to help producers select a set of wheat varieties that minimize their risks.

In the last 35 years, Colorado wheat improvement research has resulted in a significant yield advantage over the most popular wheat varieties from the 1970's. Yield advantage of the newly release variety Byrd, over Hatcher (released in 2004) was recorded at an average of 6.2 bu/acre from 2009 to 2012. In 2012, Colorado growers seeded 30.3% of an estimated 2.43 million acres in Hatcher alone. Wheat growers in Cheyenne and Kiowa counties planted 62.2% and 68.8% to CSU wheat varieties (Hatcher, Ripper and Snowmass), respectively.

Colorado State University Extension is working with wheat producers to plant the 2012 -2013 COFT.

In Southeast Colorado, we have 10 COFT trials in Baca, Prowers, Kiowa, Bent and Cheyenne counties. This year COFT trials include 6 varieties: Byrd, Hatcher, Delanie, Brawl CL Plus, Snowmass and COW245W.

Byrd, released by CSU in 2011, is the top-yielding variety in dryland conditions. It is very drought tolerant with medium maturity and intermediate reaction to stripe rust. It has a medium-long coleoptile, excellent straw strength, medium test weight, and excellent milling and baking qualities.

Hatcher is a high-yielding hard red wheat and the most planted variety in Colorado since 2008. It is characterized by a good stress tolerance and test weight with moderate resistance to stripe rust and good milling and baking qualities.

Denali is also a CSU release hard red wheat variety that is medium to late maturing and medium height. It has average milling and baking qualities and is also moderately susceptible to the new races of stripe rust.

Brawl CL Plus, also a CSU 2011 release, is a two-gene Clearfield high yielding variety of early maturity and medium-long length coleoptile. It has good stripe rust resistance and excellent straw strength, test weight and milling and baking qualities. The Clearfield two-gene variety allows the use of Beyond herbicide for post-emergence cool season grass control (jointed goat grass). Also, this two-gene Clearfield variety will allow the use of methylated seed oil with Beyond herbicide to enhance control of feral rye grass.

Snowmass, a CSU released hard white variety, is medium maturity with good test weight. Its resistant to stripe rust was ineffective against the new races of stripe rust that appeared in 2012. It has excellent resistant to wheat streak mosaic virus and remarkable high milling and baking qualities.

COW245 is a hard white winter wheat that has not been named yet by the Colorado Wheat Research Foundation. This variety was selected from the cross of KS01HW152-1 and TAM 111. It has medium maturity and height, coleoptile length is medium-short and straw strength is medium. This variety is stripe rust resistant and moderately resistant to wheat streak mosaic virus.

For more information on the Colorado Wheat Improvement Program, visit <http://coloradowheat.org/>, <http://www.extsoilcrop.colostate.edu/CropVar/> and <http://wheat.colostate.edu/>.