

Varieties and germplasm released by the WheatCAP

2017 Variety releases

1. ‘UI Sparrow (IDO1108DH) soft white winter wheat (PVP 201700189, application submitted 2017-03-30). This cultivar was developed using double haploid system and has high grain yield in most areas in ID and WA. The high grain yield was contributed by more productive spikes and spikelet numbers. This cultivar also has a combination of resistance genes that provides protection to stripe rust, snow mold, and dwarf bunt. UI Sparrow has very good winter hardiness and low grain cadmium content. news
2. ‘Melba’, Common wheat released by Washington State University. PVP 201700203. Application Submitted 2017-02-05.
3. ‘Ryan’, Common wheat released by Washington State University. PVP 201700204. Experimental synonym WA 8214. Application submitted 2017-02-05.
4. ‘Tekoa’, Common wheat released by Washington State University. PVP 201700124. Experimental synonym WA 8189. Application submitted 2017-03-09.
5. ‘NS Presser CLP’. Common wheat released by Montana State University. PVP 201700053, application submitted 2017-01-11. This is a Clearfield variety with two genes for resistance to imidazolinone herbicides. Initial selection of herbicide resistance was accomplished using molecular markers. The variety has been licensed to a private company for commercialization
6. ‘Stardust’ (PVP application 201700107, filed 21 Feb. 2017) is a hard white cultivar developed by the OAES with a sufficient level of pre-harvest sprouting tolerance and resistance to the wheat soilborne mosaic/wheat spindle streak mosaic complex appropriate to the central corridor of the southern Plains.
7. ‘AGS 2055’ is a common wheat variety released by the Board of Trustees of the University of Arkansas/ University of Georgia Research Foundation, Inc. from the University of Arkansas (PVP No. 201600401, Application submitted 2016-09-20).
8. ‘Tatanka’ are hard red winter wheat varieties released by Kansas State University Research Foundation in 2017. PVP 201700131, application submitted 2017-03-20.
9. ‘Jasper’ Soft white winter wheat released by Washington State University. PVP 20160029, application submitted 2016-11-28.
10. ‘Sequoia’ is a hard red winter wheat released by Washington State University. PVP 201600315, application submitted 2016-07-27.

11. 'Smith's Gold' (PVP201800136) is a hard red winter wheat cultivar developed by the Oklahoma Agricultural Experimental Station and designated as a potential replacement for 'Gallagher' with improved stripe rust resistance and baking quality. PVP pending.
12. 'Spirit Rider' (PVP201800137) is a hard red winter wheat cultivar developed by the Oklahoma Agricultural Experimental Station with elevated total dietary fiber in the grain and was selected with the aid of DNA marker assays for *Lr34* and *Rht8*. It was also found to carry the *Wx-B1b* allele, and it apparently has gene(s) conferring strong acid-soil tolerance different from *ALMT1*. PVP pending.
13. 'Lonerider' (PVP201800135) is a hard red winter wheat cultivar developed by the Oklahoma Agricultural Experimental Station with unusually broad adaptation to the southern and central Plains. Critical to its release was using marker assays to select for the absence of 1RS and presence of *Glu-D1d* in a genetic background prone to weaker gluten. PVP pending.
14. 'Lang-MN' (PVP201800165) is a hard red spring variety released by the MN wheat-breeding program in 2017. Lang-MN has competitive grain yields, high grain protein. Lang-MN has good resistance to Fusarium head blight, leaf rust, stripe rust, and bacterial leaf streak.
15. 'Thompson' (PVP 201800429) is a HRS wheat released by SDSU that has an excellent combination of high yield and disease resistance. Thompson has medium height and medium maturity with average protein content, test weight and grain quality. It is moderately resistant to leaf rust, stem rust and FHB.

Pending PVP

1. "Tiburon HP" is a Dessert Durum variety developed in collaboration between the UCD and Arizona Grain. Tiburon HP is a backcross derivative of Tiburon with the introgression of the high grain protein content gene and the *Yr36* stripe rust resistance gene.
2. 'Bob Dole', is a winter wheat varieties released by Kansas State University Research Foundation in 2017 pending PVP.
3. 'AG Icon' are hard red winter wheat varieties released by Kansas State University Research Foundation in 2017 pending PVP.

2017 Public release

1. Earl' hard white winter wheat released by Washington State University. Published in the Journal of Plant Registration. 'Jasper' Soft white winter wheat released by Washington State University. Public release Washington State University.

2017 Germplasm releases

1. Two lines derived from the D genome NAM population fixed from *Pm58*. Developed by E. L. Olson at Michigan State University.

2. ‘Yecora Rojo 515’ is a backcross derivative of Yecora Rojo combining *Puccinia striiformis* resistance genes *Yr5* and *Yr15*. It was developed by the University of California Wheat Breeding program.

2017 Mapping Populations

1. Eric Olson from Michigan State University developed a D genome nested association mapping population (DNAM). This is a BC₂F₄ population derived from direct hybridization of seven *Ae. tauschii* accessions with a common hexaploid wheat line, KS05HW14. The population is comprised of 420 RILs with a family structure of lines derived from a common *Ae. tauschii* accession. Subpopulations are derived from individual BC₁F₁ plants
2. Dr. Jianli Chen from the University of Idaho developed a DH population UI Platinum x LCS Star (UIP-Star) and genotyped it with the 90K SNP platform under support of Idaho Wheat Commission. The population has been planted in three environments in S ID and assessed for SPS and PTN in two environments this summer.
3. Dr. Daolin Fu from the University of Idaho generated an EMS population of UI Platinum, the parental line contributing the SNS 5AL QTL in the CAP project. More than 4,000 M₂ have been harvested.
4. Dr. Dubcovsky from UC Davis developed a TILLING population of 1,535 lines from the tetraploid wheat Kronos. All lines were sequenced by Exome Capture and four million mutations are available in database publicly available on line.
5. Dr. Sunish Sehgal developed an EMS Tilling population from the variety Overland (recurrent parent of winter wheat NAM population). 20,000 seeds were mutagenized and M₂ seeds was harvested from nearly 1,050 M₁’s in summer 2017.

2017 Cloned wheat genes

1. *Sr13*. from *T. turgidum* ssp. *dicoccoides*. Confers resistance to the wheat stem rust UG99-race group.
2. *Sr21*. from *T. monococcum*. Confers resistance to the wheat stem rust UG99-race group.