New Varieties and Germplasms

The following is only a partial list of new wheat varieties and germplasms available in the region. Included are those for which we have current information.

VARIETIES

The Colorado Agricultural Experiment Station announced the release of 'Akron' hard red winter wheat. Akron has the pedigree 'TAM-107/Hail' and was tested in the SRPN in 1993 and 1994 as CO880169. It is a semidwarf cultivar, slightly later and taller than TAM-107 or Yuma. Akron is superior to TAM-107 in leaf rust resistance and inferior in resistance to the wheat curl mite. Akron has been similar to TAM-107, Yuma, and TAM-200 in grain yield averaged over eastern Colorado trials.

The Colorado Agricultural Experiment Station also announced the release of 'Halt' hard red winter wheat. Halt has the pedigree 'Sumner/CO820026, F1//PI372129,F1/3/TAM-107' and was tested in the SRPN in 1993 and 1994 as CO910927. It is the first cultivar developed in the U.S. with resistance to the Russian wheat aphid. Halt is a semidwarf cultivar and has been similar to TAM-107 in maturity and plant height. Halt has averaged about 5% less grain yield than TAM-107 in Colorado trials. Leaf rust resistance has been lower than most cultivars, but higher than TAM-107. Milling and baking quality has been superior to Lamar.

The Nebraska Agricultural Experiment Station and USDA-ARS announced the release of 'Niobrara' hard red winter wheat. Niobrara (PI584996) has the pedigree 'TAM-105*4/Amigo//Brule sel.' and was tested in the Northern Regional Performance Nursery in 1992 and 1993 as NE89522. It is targeted for production in southwest Nebraska and the Nebraska panhandle. Niobrara is a semidwarf cultivar, similar in height to Redland, with intermediate coleoptile length. Winterhardiness is similar to Scout 66 and it matures 2 days earlier than Redland. Niobrara is heterogeneous for the 1A/1R translocation and carries Sr6. It is moderately susceptible to leaf rust. Average grain protein content is lower than Arapahoe and Scout 66 with mixing properties similar to Arapahoe.

The South Dakota Agricultural Experiment Station, Nebraska Agricultural Experiment Station, and USDA-ARS announced the release of 'Nekota' hard red winter wheat. Nekota (PI584997) has the pedigree 'Bennett/TAM-107' and was tested in the SRPN in 1991 and 1992 as NE88427. It is targeted for winter wheat growing areas of South Dakota and south central and southwest Nebraska. It is a semidwarf cultivar with intermediately long coleoptile. Winterhardiness is similar to Scout 66 and maturity is similar to Alliance. Nekota is heterogeneous for the 1A/1R translocation and carries Sr6. It is moderately susceptible to leaf rust. Nekota has superior test weight patterns in South Dakota trials. Average grain protein content is lower than for Arapahoe and dough mixing properties are similar to Scout 66.

The Oklahoma Agricultural Experiment Station announced the release of two cultivars in spring of 1994. 'Custer' has the pedigree 'F29-

76/TAM-105//Chisholm' and was tested in the 1993 and 1994 SRPN as OK88767-11. It is a medium early semidwarf with plant height similar to Chisholm. Custer has good resistance to leaf rust, tan spot and mildew and is expected to do well in all areas of Oklahoma, except where soilborne mosaic is severe. 'Tonkawa' has the same pedigree as Custer and was tested in the 1993 and 1994 SRPN as OK88767-02. Tonkawa has similar characteristics to Custer, except that Tonkawa carries good resistance to soilborne mosaic virus. It is expected to perform best in northcentral Oklahoma.

The Kansas Agricultural Experiment Station announced the release of 'Jagger' hard red winter wheat in 1994. Jagger has the pedigree 'KS82W418/Stephens' and was tested in the 1994 SRPN as KS84063-9-39-3. Jagger has excellent general disease protection. It is comparable to Karl 92 in overall quality, with similar grain protein levels.

Agripro Seeds, Inc. announced the release of three new winter wheat varieties. 'Coronado' is a hard red winter wheat derived from the cross 'W85-084/W85-225' and is entered in the 1995 SRPN as W91-287. Coronado is a short semidwarf with mid-strong straw and early maturity. It offers good resistance to leaf rust, soilborne mosaic virus, and wheat streak mosaic virus. 'Rowdy' is a hard red winter wheat derived from the cross '854552#3/Mesa sib' and is entered in the 1995 SRPN as W91-091. Rowdy is a short semidwarf with strong straw and medium-early maturity. Rowdy is resistant to leaf rust and spindle streak virus. 'Oro Blanco' is a hard white winter wheat derived from the cross 'W81-133-2/Rio Blanco' and is entered in the 1995 SRPN as W88-2619W' Oro Blanco has been released for exclusive production through the American White Wheat Producers Association.

GERMPLASMS

The Kansas Agricultural Experiment Station announced the release of three Russian wheat aphid resistant wheats. KS94WGRC29 and KS94WGRC30 are both derived from the cross 'PI220127/P5//TAM-200/KS87H66'. KS94WGRC30 is derived from the cross 'PI220350/KS87H57//TAM-200/KS87H66/3/KS87H325'. PI220127 and PI220350 are RWA resistant accessions from Afghanistan. Both accessions are winter habit, but mature very late and are tall under Kansas conditions. KS94WGRC29 is a white seeded, semidwarf cultivar and carries effective levels of resistance to stem and leaf rust. It is susceptible to Hessian fly and WSMV. KS94WGRC30 is a red seeded, semidwarf cultivar and also carries effective resistance to stem and leaf rust. It is heterogeneous in response to Hessian fly and susceptible to WSMV. KS94WGRC31 is a red seeded, semidwarf line with effective resistance to stem and leaf rust and Hessian fly. It has been rated as moderately susceptible to WSMV.

The USDA-ARS and Kansas Agricultural Experiment Station announced the release of KS94WGRC32 leaf rust-resistant hard red winter wheat. It is derived from the cross 'TAM-107*2//KS8010-1-4-1/TA 359' where TA359 is an accession of T. Boeoticum, a wild diploid species. KS94WGRC32 heads three days later than TAM-107 and is slightly taller. Its reactions to diseases other than leaf rust are similar to TAM-107. It does not carry either 1RS translocation. Resistance is governed by a single dominant gene that segregates independently of genes previously tranferred from T. Monococcum.