**ADDITIONAL DESCRIPTIVE INFORMATION FOR BARLEY VARIETIES**

**B1202** - Developed from the cross of RPB70-268/2B75-1223//Klages by Busch Agricultural Resources, Inc. It is a two-rowed spring barley. The awn on the lemma is long and rough. Rachilla, rachis and glume hairs are all long. The glume awns are equal in length to the glume and glumes are completely covered with hair. The hull is adhered and slightly to semi-wrinkled. Aleurone is colorless. B1202 is protected under the Plant Variety Protection Act and can only be sold or advertised by variety name as a class of certified seed.

**BARONESSE** - Developed in Germany from the cross of 5238.8/74 X 754465 and tested in cooperation with Montana State University. Baronesse is a two-rowed, rough-awned spring barley that is medium-short in height and medium in maturity. This variety is merchandised in the western United States by Western Plant Breeders. Baronesse is protected under the Plant Variety Protection Act.

**BOWMAN** Bowman is a two-rowed feed barley developed by North Dakota Agricultural Experiment Station, North Dakota State Univ. in cooperation with USDA-ARS and released in 1984. Bowman has semi-smooth awns and long rachilla hairs. A few, < 1 %, rough awned plants are present in Bowman. Bowman is adapted under dryland conditions and has high test weights.

**CALGARY** - A two rowed feed barley developed by Serasem in France. The pedigree is (Dominique x Blenheim) x (Barleta x Chapka). Calgary has short rachilla hairs, white aleurone with semi-erect heads. Calgary will be marketed in the U.S. by Arizona Plant Breeders. Calgary has good yields and lodging tolerance under irrigated conditions in Montana trials. Plant Variety Protection is being applied for.

**CONLON** – A two-rowed malting barley developed by North Dakota Agricultural Experiment Station and released in 1996. Conlon was selected from the cross Bowman*2/Brigitta mutant//ND10232 made in 1988. F3 selection was made in 1990 and was tested as ND 13299. Conlon has been accepted for malting in Montana by the American Malting Barley Association. Conlon is protected under the Plant Variety Protection Act and can only be sold or advertised by variety name as a class of certified seed.

**GALLATIN** - Developed from the cross of Summit/Hector cooperatively by the Agricultural Research Service, USDA, and the Montana Agricultural Experiment Station. It was released jointly by the Agricultural Research Service, USDA, and the Montana and Idaho Agricultural Experiment Stations. Gallatin is a two-rowed, rough-awned, spring barley. The spike is mid-long, mid-lax and semi-nodding prior to maturity, but nodding at maturity. The awn glumes are equal to the length of the hair-covered glume. The rachis is edged with hairs. The kernels are mid-sized, with short rachilla hairs.

**HARRINGTON** - A two-rowed malting barley variety developed by the University of Saskatchewan from the cross of Klages/3/Gazelle/Betzes//Centennial selection. It was released through the SeCan Association. It is susceptible to leaf diseases (net blotch, scald), stem rust, and loose smut. It has a long, rough awn and a white aleurone. It has a tendency for kernel skinning unless carefully threshed. This variety has been accepted for malting in Montana by the American Malting Barley Association.
ADDITIONAL DESCRIPTIVE INFORMATION FOR BARLEY VARIETIES (continued)

**HAXBY** - Haxby is a two-rowed feed barley developed by Montana State University and released in 2003. The cross between MT860756 (Gallatin / Bellona) and MT83533 (Clark / Lamont) was made in 1990 and Haxby was tested as MT950186 in Montana trials from 1995-2002. Haxby has had high test weights under dryland and irrigated trials in Montana. It should be adapted to dryland and higher moisture areas in Montana and the Northern Great Plains. Plant Variety Protection is being applied for.

**HAYS** - Hays is a two-rowed barley developed by Montana State University and released and in 2003 as a hay barley. Hays is a hooded barley from a cross of Haybet / Baronesse made in 1993. Hays was tested in grain and forage trials from 1998 to 2002 as MT981060. Forage yields were similar to Haybet and higher than Westford over 17 forage trials. Grain yields were higher than Haybet and similar to Harrington while test weights have been similar to Haybet. Hays is approximately three inches shorter and two days later in heading than Haybet. Plant Variety Protection is being applied for.

**LEGACY** - Legacy is a six rowed malting barley developed by Busch Agricultural Resources, Inc. In 1989 the cross of 6B86-3517/Excel was made and selection as an F4 head row was made in 1992. Legacy is moderately susceptible to leaf and stem rust and moderately resistant to net blotch. Legacy was similar in maturity and slightly taller than Gallatin over all Montana intrastate locations. Legacy has been accepted for malting in Montana by the American Malting Barley Association. Legacy is protected under the Plant Variety Protection Act and can only be sold or advertised by variety name as a class of certified seed.

**LEWIS** - Developed from the cross of Hector/Klages cooperatively by the Agricultural Research Service, USDA, and the Montana Agricultural Experiment Station. It is an awned, two-rowed spring barley. The aleurone is white, spike is mid-lax, mid-long and nodding at maturity. The awn is rough, and the glume awn is equal to the length of the glume. The kernels are mid-sized with adhering hull. The hull is finely wrinkled, with long rachilla hair.

**LOGAN** - Developed from the cross of ND7085/ND4994-15//ND7556 by the North Dakota Agricultural Experiment Station. Logan is a two-rowed spring barley with semi-smooth awns, long rachilla hairs, and barbs on the lateral veins of the lemma. The aleurone is colorless, kernels are covered and mid-long, and the hull is white and wrinkled. Logan is resistant to net blotch, powdery mildew, and pathotype MCC of wheat stem rust. It is moderately resistant to spot blotch, scab, and common root rot. Logan is susceptible to barley yellow dwarf virus, pathotype QCCJ of wheat stem rust, loose smut, scald, septoria, and leaf rust. Logan is protected under the Plant Variety Protection Act of 1994 and can only be sold or advertised as a class of certified seed.

**MEDALLION** - Medallion was developed by Western Plant Breeders. Medallion is a short semi-dwarf six rowed awned barley with blue aleurone. It has very good straw strength and is best suited to irrigated and high moisture conditions. Medallion is protected under the Plant Variety Protection Act.
ADDITIONAL DESCRIPTIVE INFORMATION FOR BARLEY VARIETIES (continued)

**MERIT** - Developed by Busch Agricultural Resources and released for malt production in 1998. Merit is medium in plant height and medium late in maturity. It has a nodding head type with rough awns. Glume length is one half the length of the kernel with glume hairs confined to a band. Seed is finely wrinkled with wax present. The aleurone is colorless. Merit is resistant to net blotch and moderately resistant to scald. It has not been tested for any other plant disease, or insect resistance. Merit is protected under the Plant Variety Protection Act and can only be sold or advertised by variety name as a class of certified seed.

**MORAVIAN 37** - Developed by Coors Brewing Company and released for malt production under contract. Moravian 37 is a medium-short in plant height and medium-late in maturity. Moravian 37 is protected under the Plant Variety Protection Act and can only be sold or advertised by variety name as a class of certified seed.

**MOREX** - Developed from the cross of Cree/Bonanza by the Minnesota Agricultural Experiment Station and released in 1978. Morex is a six-rowed, smooth awned variety. The spike is semi-erect and medium long. Under some conditions the straw of Morex tends to break off prior to maturity, and kernel shattering and rachis breaking occur; therefore, Morex probably should be swathed prior to harvest. It is resistant to stem rust and loose smut, and moderately resistant to spot blotch. Morex has been accepted as a malting barley for production in Montana by the American Malting Barley Association.

**STARK** - Developed from the cross of ND 7014/Bowman sib by the North Dakota Agricultural Experiment Station and released in 1992. It is two-rowed with a semi-smooth awn and a white aleurone. Stark is medium height with good straw strength. It is susceptible to stem rust and loose smut.

**VALIER** - Developed by Montana State University from a cross of Lewis / Baronesse and released in 1999. Valier is a two-rowed, white aleurone, mid-season maturity, feed barley. The spike has long rough awns equal to the length of the hair-covered glume. Kernels have adhering, finely wrinkled hulls and long rachilla hairs. Valier retains sterile lateral florets. Valier is protected under the Plant Variety Protection Act and can only be sold or advertised by variety name as a class of certified seed.

**XENA** - Developed from a Stark/ Baronesse cross by Western Plant Breeders. Xena is a two rowed standard height hulled spring feed barley, with mid-season maturity. Stem has waxy coating, closed collar, and the neck is straight. The head is semi-erect, strapped shaped, slightly waxy, and semi-nodding at maturity. Glume length is more than half the length of lemma and is covered with short hairs. The lemma has long rough awns and the rachilla hairs are long. Seed is mid-long, wrinkled with white aleurone. Lateral florets are extremely reduced in size. Xena is protected under the Plant Variety Protection Act.