Registration of Crop Cultivars

REGISTRATION OF CASCADE HOP

(Reg. No. 1)

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'CASCADE' hop variety (Humulus lupulus L.) was selected at Corvallis, Oregon in 1956 and developed by the Oregon and Washington Agricultural Experiment Stations and the Plant Science Research Division, Agricultural Research Service, U.S. Department of Agriculture, with cooperation from the United States Brewers Association. Cascade originated from open-pollinated seed from a plant obtained previously by crossing 'Fuggle,' an English variety, with a male from a cross between 'Serebrianka,' a Russian variety, and a Fuggle seedling. It was released in January 1972 for commercial production.

Cascade is the first hop variety developed in the United States with aroma and brewing characteristics similar to those of varieties now being imported from Europe. Dried hops of this variety contain 5.5 to 7.5% α-acid, 4 to 6% β-acid, and 1 to 2 ml oil per 100 g. Columulone content of the α-acid is like that of Fuggle and 'Hallertauer.' Oil composition is like that of Fuggle, 'Styrian,' and 'Tettnanger' in farnesene content, with no unusual components. Storage stability is similar to that of Hallertauer.

Cascade is medium in maturity (early September) but retains brewing quality and bright appearance for about 3 weeks after maturity. The cones are compact, medium sized, and easily picked. It yields, picks, and handles best when grown seedless.

Cascade has good resistance to systemic down mildew crown infection incited by Pseudoperonospora humuli (Miy. & Tak.) G. W. Wils. and to down mildew cone infection. It is tolerant to the prevalent strains of Verticillium dahliae Kleb., but should not be planted on land known to be heavily infested with this wilt fungus. Current planting stock of Cascade carries a strain of prunius necrotic ringspot virus but is not seriously affected by it. Cascade is adapted to the hop-growing areas of Idaho, Oregon, and Washington.

The Oregon Agricultural Experiment Station, Corvallis, Oregon 97331, will maintain breeder clonal stock of Cascade.

REGISTRATION OF CRITANA THICKSPIKE WHEATGRASS

(Reg. No. 9)

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'Critana' thickspike wheatgrass (Agropyron dasystachyum (Hook.) Schribn.) was tested and released in 1971 by the Soil Conservation Service Plant Materials Center, Bridger, Montana, in cooperation with the Montana Agricultural Experiment Station, Bozeman. It is the first officially released variety of this species. In 1960, collections were made from several roadside cuts on medium- to fine-textured soils. The bulked collections were directly increased without selection and the increased lot was tested under the experimental designs of M-286 and P-15581.

Critana is strongly rhizomatous, forming a tight sod under dryland conditions. It has excellent seedling vigor and establishes more rapidly than 'Sodar' streambank wheatgrass in eastern Montana and eastern Wyoming. It is low growing with abundant, fine, light green leaves. It contains up to 30% glabrous spikes and has a trace of geniculate-awned lemmas. Interspecific hybrids between this species and slender wheatgrass (A. trachycaulum (Link) Malte) occur naturally in native stands. Critana may exhibit up to 2% seed or spike characteristics of slender wheatgrass.

Critana was released primarily for use in stabilizing disturbed areas, roadsides, airports, recreation areas, and construction sites receiving little or no maintenance. It may also be used for reseeding range sites that are severely eroded and have low production potential. It is adapted to medium- to coarse-textured soils and granular shaley clays in a precipitation range of 15 to 50 cm in the northern Rocky Mountains and adjacent Great Plains. At Bridger, Critana has yielded over 500 kg/ha of seed under irrigation. Leaf and stem rust may develop under irrigation but not under dry land condition.

The increase of Critana is limited to one generation each of foundation and certified classes. The USDA, SCS Plant Materials Center at Bridger, Montana, will maintain breeder seed.

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