

A Conservation Plant Released by the Natural Resources Conservation Service Lockeford Plant Materials Center, Lockeford, CA

'Blando' brome Soft brome

Bromus hordeaceus L. ssp. hordeaceus



'Blando' brome (Bromus hordeaceus L. ssp. hordeaceus) is an annual grass cultivar released in 1955 by the NRCS (formerly Soil Conservation Service) in cooperation with the California Agricultural Experiment Station.

Description

'Blando; brome is a winter growing, self-seeding, annual grass from 8-24 inches in height. It has strong seedling vigor, is suberect in growth habit, medium early in maturity, and has an outstanding reseeding ability. Its growth starts in the fall of the year and it matures in April and May.

Source

Soft brome, (*Bromus hordeaceus*) is a cool season grass from Europe, naturalized and widely distributed in the annual ranges of California, including the Sierra foothills, the range areas bordering the Sacramento-San Joaquin Valley and the high mountain chaparral ranges of

southern California. The source of 'Blando' brome, was a field collection made in the spring of 1940 on a winter annual range near San Ramon, California by D.J. Vanderwal. This collection designated P11657, originally named *Bromus mollis* was compared with 27 other collections of soft brome and evaluated in 1940 by the USDA Soil Conservation Service nurseries in Pleasanton and San Fernando. After extensive trials of plot and field plantings in the annual rangeland areas of California, the cultivar was released in 1955 in cooperation with the California Agricultural Experiment Station. 'Blando' brome performed exceptionally well under adverse conditions and in drought years compared to other accessions. 'Blando' brome is self-fertile and growth characteristics are stable.

Conservation Uses

'Blando' brome was originally released with a recommendation for use for converting grain production sites to rangeland. Since then it has been widely used for several conservation uses.

Livestock – 'Blando' brome is rated as one of the most important forage plants. It ranks highest of the annual bromes in forage rating, producing excellent forage when young and is grazed heavily up to the time of reaching maturity. Seed does not shatter readily and the plants are grazed extensively during the summer with the livestock getting more nutriment than they would otherwise from the dry stalks and leaves alone. Production amounts are 1200 lb per acre when unfertilized and 4,000 lb per acre when fertilizer is applied.

Erosion Control - The ease with which it can be established and its outstanding reseeding ability contributes to its suitability for seeding natural or manmade disturbed areas to protect them from erosion and producing sediment. These include bare unvegetated slopes, such as: brush burn areas, newly constructed roads, driveways, housing and industrial developments, gullies, drainage ways, ditch and channel banks, dikes, levees, dams, and reservoirs, and other types of construction on sloping land.

Wildlife Food and Cover - During the winter and spring months when the leaves of 'Blando' brome are green and succulent, it is an important component in the diets of both deer and quail. Quail also eat the seed after it matures. It also furnishes good nesting cover for quail in areas that are protected from grazing, which will occur normally if ranges are properly used.

Cover Crops and Soil Improvement- 'Blando' brome is recommended as a reseeding annual cover crop on orchard and vineyards. It withstands mowing better than other grasses and can mature seed under minimum water. Its drought tolerance and good root production may encourage its use as a green manure or annual cover.

Area of Adaptation and Use

'Blando' brome is adapted to the annual ranges of California, including the Sierra foothills, the range areas bordering the Sacramento-San Joaquin Valley and the high mountain chaparral ranges of southern California. The area of adaptation has a Mediterranean climatic zone with an annual rainfall above 10 inches.. 'Blando brome grows from sea level to approximately 3,200 feet but not well above 4,000 feet elevation. It grows well on low fertility sites but responds exceptionally well to applications of nitrogen-phosphorus fertilizers. It requires good drainage, is adapted on coarse to fine textured soils and does best on neutral or slightly acid to mildly alkaline soils. Under very droughty conditions when little plant growth occurs, seed usually is produced insuring perpetuation.

Establishment and Management for Conservation Plantings

Areas to be seeded should have a firm seedbed, which has been previously roughened by disking, harrowing, or raking. Seeding should be made in the fall of the year. The preferred method of seeding is with a drill, although good stands have been obtained from broadcast seeding, followed by a cultipacker, spiketooth harrow or similar tool to cover the seed. Seed should be planted uniformly over the area and covered to a depth of 1/2 inch. The seeding rate for range or pasture seeding is 4 pounds per acre drilled and 6 pounds per acre if broadcast planted. For a critical area planting the seeding rate is 18 pounds per acre. When used in cover crop planting 'Blando' brome is seeded at 6 pounds per acre.

In critical areas the plantings can be left to grow to maturity. The seed and its stalks and leaves from one year's growth will provide erosion protection of the slopes for next year's stand. 'Blando' brome responds very well to applications of nitrogen-phosphorus fertilizers particularly on the low fertility sites of natural or manmade disturbed areas.

When using 'Blando' brome for forage production, do not graze until plants are 4 to 6 inches tall. On newly seeded stands withold grazing until a seed crop has matured. In subsequent years, at the end of the grazing season, adequate seed will have been produced to self re-seed the pasture if the pasture has a uniformly patchy appearance.

For cover crops mowing height should be a minimum of 4 inches. 'Blando' brome must not be mowed later than 3 to 4 weeks prior to seed maturity. This will allow the plant to set seed for next year's cover. Following seed set, the cover can be mowed as close as desirable or disked under.

Ecological Considerations

'Blando' brome may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed. It may displace perennial grasses by outcompeting them for moisture early in the season. Please contact your local NRCS Field Office, Cooperative Extension Service Office, or state natural resource or agriculture department regarding its status and use in your area.

Seed and Plant Production

Seeding should be accomplished in fall in a firm well prepared seed bed with seed planted in 24-36 inch rows at a depth of ½ inch at a rate of 4 lb per acre. Weeds should be controlled by cultivation or herbicides. Irrigation is not required except in dry years. The seed should be harvested when the grain is at the hard dough stage. The crop should be swathed and then combined when dry. Seeds should be hammer-milled at 650 rpm with a ¼ inch screen. Seed yields have averaged 300 pounds per acre under good dryland conditions. There are approximately 300,000 seeds per pound.

Availability

For conservation use: 'Blando' brome is widely available from commercial seed producers.

For seed or plant increase: Foundation seed can be obtained for the purpose of large-scale increase, through the California Crop Improvement Association and the USDA-NRCS Lockeford Plant Materials Center.

Conservation Plant Release Brochure for 'Blando' brome (*Bromus hordeaceus* subsp. *hordeaceus*). USDA-Natural Resources Conservation Service, California Plant Materials Center. Lockeford, CA 95237. Published January, 2014

For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <http://www.nrcs.usda.gov/, and visit the PLANTS Web site <http://plants.usda.gov or the Plant Materials Program Web site <http://www.plant-materials.nrcs.usda.gov>