Registration of Crop Cultivars

REGISTRATION OF DAWN BARLEY1
(Reg. No. 183)


'DAWN' winter barley (Hordeum vulgare L.), PI 470276, is a semihardy cultivar developed at the College Station of the University of Georgia Experiment Stations. The original cross, 'Barsoy' × FLX65-202-13, was made by Dr. D. A. Reid, USDA-ARS, Tucson, Ariz. An F1 plant from this cross was backcrossed to Barsoy by the senior author. Dawn was increased from a uniform F3 plot harvested in 1979 and was tested as Ga79-438. Seed was increased during the summers of 1980 and 1981 at Aberdeen, Idaho. It was evaluated in 12 yield tests in Georgia from 1980 to 1982 with an average yield of 3659 kg/ha, while 'Barsoy', 'Redhill', and 'Volbar', respectively. In 1982, Dawn averaged 2690 kg/ha in yield trials conducted in South Carolina, North Carolina, and Tennessee compared to 2852, 2637, and 4036 kg/ha for Barsoy, Redhill, and Volbar, respectively.

Dawn is an early maturing cultivar that is well suited for double cropping systems in the Piedmont region of the southeastern United States. It is 7 to 12 days earlier maturing and 20 cm shorter than Volbar under Georgia conditions. Dawn has fewer snaky peduncles than Barsoy and is resistant to spot blotch, caused by Cochliobolus sativus (Ito. & Kurib.) Drechs. and glume blotch, caused by Septoria nodorum Berk. Dawn is moderately resistant to yellow dwarf virus but is susceptible to scald, caused by Ustilago nuda (Jens.) Rostr.

Dawn is six-rowed with long, rough awns which are removed during threshing. Early growth is semi-prostrate. The glume awns are long, narrow, and drooping. The spike is erect or nodding, dense, and mid-long. Lateral kernels do not overlap even at the tip of the spike. Glumes are hairy and half the length of the spike and the glume awns are rough, white, and twice as long as the glumes. The lemma is yellow with few hairs on the nerves. Kernels are white, short and plump, and small.

This cultivar was named Dawn because of its early maturity. Breeder seed will be maintained by the Agronomy Dep., College of Agriculture, Experiment Station, Auburn University and released 24 Aug. 1981.

REGISTRATION OF AU OASIS PHALARIS1
(Reg. No. 84)


'AU OASIS' phalaris (Phalaris aquatica L.) is a cool season perennial forage grass developed by the Alabama Agriculture Experiment Station, Auburn University and released 24 Aug. 1981. It was tested under the experimental designation AP-2.

AU Oasis is an 8 clone synthetic originating from material selected from plant introductions established as spaced plants in 1959 by Hoveland. Plants were evaluated for vigor, winter growth, regrowth potential, and disease resistance. An open-pollinated progeny trial of selected clones was conducted for 3 years at the Auburn University Plant Breeding Unit, Talladega, Ala. to evaluate forage yield distribution. Clones were selected from the following sources: one each from P.I. 240280, P.I. 236482, P.I. 240284, P.I. 219636, P.I. 240242, two from P.I. 207960, and one from P.I. 219637.

The original cross, 'Oasis' × P.I. 207960, was made by Dr. D. A. Reid, USDA-ARS, Auburn, Al. in 1959 by Hoveland. Plants were evaluated for vigor, winter growth, regrowth potential, and disease resistance. An open-pollinated progeny trial of selected clones was conducted for 3 years at the Auburn University Plant Breeding Unit, Talladega, Ala. to evaluate forage yield distribution. Clones were selected from the following sources: one each from P.I. 240280, P.I. 236482, P.I. 240284, P.I. 219636, P.I. 240242, two from P.I. 207960, and one from P.I. 219637.

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AU Oasis phalaris is best adapted south of Latitude 33°N and winter declines after inflorescence emergence in stands from 63 to 74%. Crude protein content ranges from 63 to 74%. Crude protein content ranges from 63 to 74%. Average daily gain of beef steers averaged 0.78 kg/ha over a 3-year period and was similar to that obtained on high quality grain pastures. Alkaloid levels of AU Oasis have been low, caused no animal toxicity in contrast to Australian sources which have alkaloid levels that cause problems in sheep.

AU Oasis phalaris is best adapted south of Latitude 33°N and northward in mild coastal areas. It has survived for several years with very low winter temperature caused considerable damage to winter pastures. Alkaloid levels of AU Oasis have been low, caused no animal toxicity in contrast to Australian sources which have alkaloid levels that cause problems in sheep.

Original clones used in the formation of this variety have been lost so breeder seed is being produced by AU Oasis through careful isolation and cultural control of the phalaris seed nursery. A small quantity of Syn. 1 seed is being kept in cold storage for breeder seed increase whenever necessary.

Foundation, registered, and certified seed of AU Oasis is being produced and marketed by International Seeds, Halsey, Ore. Its winter decline after inflorescence emergence in stands from 63 to 74%. Crude protein content ranges from 63 to 74%. Crude protein content ranges from 63 to 74%. Average daily gain of beef steers averaged 0.78 kg/ha over a 3-year period and was similar to that obtained on high quality grain pastures. Alkaloid levels of AU Oasis have been low, caused no animal toxicity in contrast to Australian sources which have alkaloid levels that cause problems in sheep.