Registration of Crop Cultivars

REGISTRATION OF LIDAL BARLEY
(Reg. No. 153)

R. L. Taylor

'LIDAL' barley (Hordeum vulgare L.), CI 15247, was developed cooperatively by the Alaska Agric. Exp. Stn. and the ARS-USDA. Lidal was selected as an F₃ progeny row from the cross 'OLIF'/ 'Edda', made at the Palmer Research Center in 1954, and was tested in Alaska as 60F1-54-1-2.

Lidal is a high yielding, early, midtall, rough-awned, six-rowed, spring barley. The kernels are covered, medium sized, with short hairs on the rachilla, and have a white aleurone. The semi-dense spike results in kernel-tip displacement, imparting a distinctive spreading-awn appearance to the head, in comparison to either parent. Principal performance comparisons have been in the Matanuska Valley of south-central Alaska where in 11 seasons it has produced an average grain yield of 2,984 kg/ha, 2% above Edda, the most commonly grown cultivar. Compared with Edda, Lidal is 2.7 days earlier in maturity, 2.3 cm. shorter, equal in test weight, and 3% higher in crude protein content of grain. Yield component characteristics of Lidal include the production of 14% more culms, 4% fewer kernels per culm, and kernels 4% lighter in weight than Edda. It is superior to Edda in resistance to lodging, head shattering at maturity, and barley stripe (Helminthosporium gramineum Rabh.), being moderately susceptible to this disease. Lidal is recommended for feed grain production in all areas of Alaska where cereals can be grown dependably. Its earlier maturity over the commonly grown Edda may permit some extension of the area of dependable barley production.

Lidal was released for seed production in 1972. Breeder, foundation, and certified seed classes are recognized. Breeder seed is maintained at the Alaska Agric. Exp. Stn., Palmer, AK 99645.

REGISTRATION OF WEAL BARLEY
(Reg. No. 154)

R. L. Taylor

'WEAL' barley (Hordeum vulgare L.), CI 15248, was developed cooperatively by the Alaska Agric. Exp. Stn. and the ARS-USDA. Weal was selected as an F₃ progeny row from the cross 'Warrior'/ 'Edda', made at the Palmer Research Center in 1954, and was tested in Alaska as line 60F1-54-4-10.

Weal is a midseason, midtall, hooded, high-yielding, six-rowed, spring barley. The kernels are covered, medium sized, with short hairs on the rachilla, and have a white aleurone. Principal performance comparisons have been in the Matanuska Valley of south-central Alaska where in 11 seasons it has produced an average grain yield of 3,005 kg/ha, 3% above that of Edda, the most commonly grown cultivar. Compared with Edda, Weal is very similar in maturity, plant height, and protein content of grain, 5% lower in test weight, and superior in resistance to lodging and head shattering at maturity. Yield component characteristics of Weal include the production of 20% more culms, 9% fewer kernels per culm, and kernels 5% lighter in weight than Edda. Field observations indicate that Weal is moderately resistant to barley stripe (Helminthosporium gramineum Rabh.).

Although an excellent grain producer, Weal probably will be used also for forage production in Alaska, since it does not produce awns, which are objectionable in forages. Weal may be used as a replacement for all, or part, of the oat component grown with field peas in annual-forage mixtures. Grown alone, Weal has produced 6,205 kg/ha of forage dry matter, 7% more than the commonly grown 'Golden Rain' oats. A preliminary dairy-cow feeding trial demonstrated little difference in feed quality or milk production between barley-pea and oat-pea silages.

Weal was released to seed producers in 1972. Breeder, foundation, and certified seed classes are recognized. Breeder seed is maintained at the Alaska Agric. Exp. Stn., Palmer, AK 99645.