Registration of Crop Cultivars

REGISTRATION OF LIDAL BARLEY1
(Reg. No. 153)
R. L. Taylor2

'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 F2 progeny row from the cross 'Olli'/ 'Edda', made at the Palmer Research Center in 1954, and was tested in Alaska as 60II-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 Alaska3 where in 11 seasons it has produced an average grain yield of 2,894 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 5% 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.

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REGISTRATION OF WEAL BARLEY1
(Reg. No. 154)
R. L. Taylor2

'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 F2 progeny row from the cross 'Warrior'/ 'Edda', made at the Palmer Research Center in 1954, and was tested in Alaska as line 60II-54-1-10.

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 Alaska3 where in 11 seasons it has produced an average grain yield of 3,005 kg/ha, 3% above that of the commonly grown 'Golden Rain' oats. A preliminary feeding trial demonstrated little difference in milk production between barley- and oat-pea silages. Weal was released to seed producers in 1972.

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. Weal is very similar in maturity, plant height, and protein content to Edda, the most commonly grown cultivar. Compared with Edda, Weal 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 has produced an average grain yield of 3,005 kg/ha, 3% above that of Edda, the most commonly grown cultivar.

The spike is six-rowed, parallel in shape, yellow, and very dense. The spikes fill well to the base giving the spike a "square" base appearance. The spike is erect and exerts well from the boot. Lemma awns are long, rough, and are not deciduous. The rachis is tough and has long dense marginal pubescence. The lower rachis internode is very short. The neck is straight and the collar has almost continuous variation from closed to v-shaped to open.

Glumes are about one-half the length of the rachilla, the awns are about twice the length of the glumes, and are not deciduous. Glume hairs are long, rough, and are not deciduous. Glume hairs are long, rough, and are not deciduous. Glume hairs are long, rough, and are not deciduous.

The kernels are covered, medium sized, with short hairs on the rachilla, and have a white aleurone. 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.