Registration of Crop Cultivars

REGISTRATION OF STEVELAND BARLEY
(Reg. No. 106)
Frank C. Petr and Ralph H. Hayes

'STEVELAND' barley (Hordeum vulgare L. emend. Lam.) 48AB2637, CII3100, was developed cooperatively by the University of Idaho Agricultural Experiment Station, Oregon Agricultural Experiment Station, and the United States Department of Agriculture. The initial cross of 'Trebi' × 'Lubin' was made by Harland Stevens in 1941. Subsequent selections were also made by Stevens with the final F₂ selection made in 1948 at the Aberdeen Branch Experiment Station. The initial production of Foundation seed was grown from headrows at Mesa, Arizona, in the winter of 1966-67.

The ancestry of Steveland is of interest. The female parent was 'Trebi' (CI 936), a variety derived from a single plant selected by Dr. H. V. Harlan in 1909 from a lot of seed originating in Trebizond, Asiatic Turkey. The pollen parent, 'Lubin' (CI 2135), was also selected by Harlan from a mixture of types in 'Rasput' (CI 996) which was introduced from Russia.

Steveland is a six-rowed, rough awned, spring habit, feed barley. The kernels have a blue aleurone and short-haired rachilla. Steveland can be classified as a semi-dwarf barley with a semi-lax spike of medium length. The foliage has a grey-green color resulting from a waxy film on the leaves and leaf sheaths that is especially evident prior to heading. Steveland is susceptible to the race of loose smut that also attacks Trebi, but is resistant to local races of stem and leaf rust.

The outstanding characteristics of Steveland are high yield, short straw and early maturity. Under irrigation at Aberdeen and Twin Falls, Idaho, Steveland outyielded Trebi by 7 bushels per acre in 20 years of testing. In 15 years of testing at Aberdeen, Steveland averaged 7 to 9 bushels more than Trebi, 'Bonneville,' and 'Gem'. Test weight of Steveland generally is higher than Bonneville and Gem, but slightly lower than Trebi. Under similar growing conditions, Steveland usually produces a smaller kernel than the other varieties mentioned above.

Steveland was entered in the Rocky Mountain Barley Nursery from 1963 to 1968 and in the Great Plains Nursery in 1964 and 1965. During the period of regional testing, it ranked consistently high in yield, earliness, short straw height and general resistance to lodging. Steveland showed an adaptation to a wide range of climatic and terrestrial conditions. Data obtained from non-irrigated regional nurseries indicated it is not well adapted to non-irrigated areas with low rainfall. Steveland is recommended for irrigated areas of southern Idaho and eastern Oregon on soils of moderate fertility.

The University of Idaho will maintain Breeder and Foundation seed stocks at the Teton Branch Experiment Station.

REGISTRATION OF PARAGON BARLEY
(Reg. No. 107)

W. H. Johnston

PARAGON' barley (Hordeum vulgare L. emend. Lam.) CI 13649 (Br. 7440-1-1) was developed at the Canada Department of Agriculture, Research Station, Brandon, Manitoba. The pedigree of Paragon is the same as 'Conquest' except for an additional cross with 'Parkland', viz. 'Vantage' × Jet (1949) 2× 'Vantmore' (1952) 3× Br. 4635 (1954) 4× 'Swan' (1955) 5× Parkland (1957) 6× Parkland (1959). Paragon was licensed for sale in Canada in 1968 and registered the same year. Breeder seed will be maintained by the originating station.

Paragon is a six-rowed, smooth-awned spring barley of the Manchurian type. It has good resistance to stem rust and loose

1 Registered by the Crop Science Society of America. Received Nov. 7, 1968.
2 Formerly Research Agronomist and Agricultural Research Technician respectively, Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture, Branch Experiment Station, Aberdeen, Idaho.
4 Unpublished register listing C.I. designations and origin of introduced and domestic lines and varieties.

1 Registered by the Crop Science Society of America. Received Dec. 9, 1968.
2 Head, Cereal Crops Section, Canada Department of Agriculture, Research Station, Brandon, Manitoba, Canada.