smut and moderate resistance to covered smut and false loose smut but is moderately susceptible to most leaf spotting diseases.

Paragon is adapted to the park belt of Western Canada where it has outyielded Parkland and Conquest by 9% and 5%, respectively. In Manitoba, it has outyielded the feed varieties 'Keystone' and 'Galt'. Paragon has not competed successfully in yield with well-adapted feed varieties in the drier areas of Saskatchewan and Alberta.

Paragon is eligible for the malting grades in Canada, being low in protein and high in extract. Its saccharification values are midway between those of Parkland and Conquest.

Compared with Conquest, Paragon is 4 days later maturing and about equal in straw length.

The principal spike and grain characteristics are given below:

Spike — Six-rowed; mid-long; lax; lateral kernels overlapping at tip of spike; emerges 2.5-10 cm (1-4 in.); semi-nodding; lemma awn smooth; glume awn 3 to 4 times the length of the glume; glume hairs numerous, generally confined to a broad band; rachis edges with numerous short fine hairs.

Grain — Kernels mid-size, hull often wrinkled; aleurone blue; rachilla with numerous long hairs; lateral veins with a few fine barbs; basal marking varies from a horseshoe to an incomplete horseshoe depression, tending toward a crease.

REGISTRATION OF CENTENNIAL BARLEY1

L.P.V. Johnson2

'Centennial' barley (Hordeum distichum L. emend. Lam.), CI13625, originated as an F4 plant selection (7B) from the cross, 'Sanalta' x 'Lenta' in 1955. The parent, Sanalta, came from the cross, 'Lion' x 'Canadian Thorpe' (University of Alberta), while Lenta was from 'Kenia' x 'Maya' (Denmark). Hybridization, selection, and development were done at the University of Alberta, first in the Department of Plant Science and later in the Department of Genetics. Preliminary, replicated tests of F6 materials led to the selection of 7B-4 on the basis of agronomic and malting excellence. This was designated as H59-14 and placed in advanced University tests of 1960 and 1961. In 1962-63 it was entered in regional tests in co-operation with the Research Station, Lacombe, Alberta. Being outstanding in these tests, H59-14 was advanced in 1964 to the Co-operative Two-Rowed Barley Test conducted by the Associate Committee on Plant Breeding of the National Research Council and Canada Department of Agriculture. This test of 10 selections and 5 standards was conducted at 15 locations in 7 provinces. Three-year data gave H59-14 first rank in yield and in lodging resistance over all locations in the black and grey soil zones of Alberta. In February 1967, H59-14 was licensed (No. 1081) as the cultivar Centennial and simultaneously released.

Centennial is a two-rowed, rough-awned spring barley with kernels of the covered type, having long rachilla hairs and white aleurone. The spike is dense, mid-long and erect. The glume awn is round and equal to the length of the glume; glume 2/3 the length of the lemma, with numerous long hairs. Plants are mid-long and lax in type.

Literature Cited