REGISTRATION OF KELSEY OATS
(Reg. No. 272)

R. I. H. McKenzie

‘Kelsey’ spring oats (Avena sativa L.), CI 1871, was licensed in 1967 by Agriculture Canada, and 120,000 kg of registered seed were distributed in Manitoba and Saskatchewan in an area east of the third meridian (106°W) for planting in the spring of 1967. Kelsey originated from the cross OT 604 × ‘Rodney’ and is a sister line of ‘Harmon.’ The cross was made at Ottawa, Ontario in 1956. Selection was mainly for kernel appearance, yield, and stem rust (Puccinia graminis f. sp. avenae) resistance at Indian Head, Saskatchewan, and Winnipeg, Manitoba. During 1959-66, Kelsey was tested (initially as IH 5880-3-3-1 and then as OT 611) for a total of 85 station years.

Kelsey is particularly well adapted to the black soil zones of the eastern prairies. It outyielded Harmon by 3%, ‘Garry’ by 7%, and Rodney by 7% in this area in tests conducted from 1962 to 1965. In 1975, Kelsey was grown on 28% of the oat acreage in North Dakota, 15% in Saskatchewan and 7% in Manitoba.

In the field, Kelsey is very similar in appearance to Rodney and Harmon, but has smaller kernels. It is slightly shorter and is 1 day earlier in maturity than these cultivars. It has a medium sized equilateral panicle. Like Garry and Harmon, Kelsey has the same genes (Pg-2 and Pg-4) for resistance to stem rust and is quite susceptible to race C10, the most prevalent stem rust race. It has moderate resistance to greyspeck (Mn deficiency), and more tolerance to crown rust (Puccinia coronata f. sp. avenae) and barley yellow dwarf virus than Harmon, Garry, or Rodney. It has the Victoria resistance to loose smut (Ustilago kolleri) and covered smut (Ustilago avenae), but is susceptible to newer races. Kernels are creamy white in color, short in length, and of average width. Kelsey has high test weight and moderately low kernel weight. Kernels are awnless. Protein content, fiber content, and percent hull are all very low. Kelsey has moderately high fat content and this combined with its very low fiber results in a higher energy value as livestock feed than other cultivars.

Breeder seed will be maintained by the Seed Section, Agriculture Canada Res. Stn., Regina, Saskatchewan.

Kelsey was named after Henry Kelsey, a Hudson Bay Company fur trader. He was the first fur trader or explorer to have seen the northern great plains, and he traveled across some of the area where this cultivar is adapted.

REGISTRATION OF SIoux OATS
(Reg. No. 273)

R. I. H. McKenzie

Sioux is a new oat (Avena sativa L.) developed by the Oat-Rust Area Project Group coordinated from the Agriculture Canada Res. Stn., Winnipeg, Manitoba. It was selected from the cross CI 6792 × ‘Rodney,’ 2877 4x ‘Pendek’ × ‘Lodi’ which was used as an F1 line and tested since 1967. In 1975, 15,000 kg of seed were distributed in Manitoba and Saskatchewan in an area east of the third meridian (106°W).

Hudson has strong, moderately short straw 2 days later than ‘Harmon’ and Rodney. The panicle is medium sized equilateral. It possesses three genes (P. graminis f. sp. avenae) resistance (Pg-2, Pg-4, Pg-10) which provide moderate to good resistance in western Canada. Hudson is moderately resistant to stem rust (Puccinia coronata f. sp. avenae), grey, and has the Victoria resistance to loose smut and covered smut (Ustilago kolleri). It is highly effective against new races which have recently appeared.

Kernels are creamy white in color and 15% awned. The primary kernel usually has a small awn. The test weight is low in test weight, medium in hull percent, and medium to low in protein. In feeding value, it is equal to the high test weight cultivar ‘Harmon.’

Hudson is particularly well adapted to the prairies because of good straw strength and resistance. It should respond well to good management practices. In 29 trials from 1970-74 on the eastern prairies