REGISTRATION OF HOLDEN OATS1
(Reg. No. 224)

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'HOLDEN' oaks (Avena sativa L.), C.I. 7978, Wis. X843-75, was developed and released by the Wisconsin Agricultural Experiment Station. It was selected at Madison from the cross 'Clim-land' × 'Garry' × 'Hawkeye' × 'Victoria' from which 'Goodfield' (8), 'Dodge' (9), and 'Garland' (10) also were derived.

The first cross was made in 1955, the second in 1947, and the third in 1952. The F2 generation was grown in Mexico in 1954-55 through the cooperation of the Crop Quality Council. F2 lines were then produced at Madison in 1955. Plant selection for desirable agronomic and disease reactions continued through the F3 generation in 1957. The composite of seeds from plants in an F3 line harvested in 1958 became Holden. Garland and Holden were derived from the same F3 line. Holden has been in nursery yield trials at Madison since 1960, in Wisconsin Experiment Station trials since 1962, and was in the Cooperative Uniform Midseason Oat Performance Nursery from 1963 through 1967 (3, 4, 5, 6, 7).

Holden's main attributes are an improved yielding ability over Garland and a wider adaptation in Wisconsin. Holden has outyielded Garland in Wisconsin tests by about 179 kg/ha (5 bu/acre). However, it has yielded somewhat less than 'Lodi' or 'Orbit'. Yields of Holden in adapted areas in other North Central states have equaled or exceeded those of Garland in most cases (e.g. 1, 2, 12). Holden ranked in the upper 33 percentile for yield in each of the 5 years it was in the regional nursery, an indication of its adaptability. Seed growers in Wisconsin reported good yields for Holden in 1967 and they increased their acreage of this variety in 1968.

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H Holden has very attractive kernels which are plump and yellow. Test weight per bushel is high. Plant height is intermediate and panicles are moderately compact. Holden resists lodging, but not as well as Lodi or Goodfield. Compared to Garland, Holden is about 2.54 cm (1 inch) taller, its straw strength is about equal, and it heads and ripens about a day later.

Holden is resistant to prevalent races of oat smut, including the Clingland and Victoria races (3, 6, 7), but it is susceptible to barley yellow dwarf (red leaf) virus. It has the AB genes for stem rust resistance. Adult plants are quite susceptible to some newer races of crown rust present in Wisconsin. However, Holden possesses seedling resistance to races 203, 216, 240, 254, and 326 (3, 4, 5, 6, 7). It is susceptible to race 564. Reaction to stem Septoria is intermediate between those varieties with tolerance and the more susceptible types. Foundation seed will be maintained by the Wisconsin Agricultural Experiment Station.

REGISTRATION OF TARGET SUMMER RAPE1
(Reg. No. 1)

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'TARGET' (Brassica napus L.), a summer rape variety developed by the Plant Science Department of the University of Manitoba, originated as an individual plant selection from the variety 'Tanka.' Prior to release in March 1966, Target was identified as 857-478 in Cooperative Tests. Target is rapidly replacing the varieties ' Nugget' and Tanka in Manitoba, Saskatchewan, and Alberta.

The Target represents improvements over other Canadian rape varieties in yielding ability, earliness and oil content of the seed (Table 1). Seed yields have been 8% higher than those for Tanka and 14% higher than those for Nugget in Cooperative Tests. The variety flowers up to 4 days earlier and matures 2 days earlier than Tanka. The oil content of the seed of Target

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