REGISTRATION OF ORBIT OATS1
(Reg. No. 203)

N. F. Jensen2

"ORBIT" oats (Avena sativa L.), C. I. 7811, (New York Selection 5279a1B-3B-70) was developed by the Cornell University Agricultural Experiment Station and received wider testing in cooperation with the Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture, and other experiment stations. It is from the cross, 'Alamo' 4× 'Garry Sel. 5' (C. I. 6589) 3× Goldwin 2× Victoria × Rainbow, made by N. F. Jensen at Ithaca in 1952. In 1957, the F₃ head which eventually became Orbit was selected, grown as a head row in 1958, and entered the Ithaca row yield trials in 1959.

Orbit is a short, early-midseason, stiff-strawed, high-yielding, muted-white kernel oat. In comparison with Garry, the dominant New York variety during the period of testing, Orbit is about 3 days earlier, 6 inches shorter, and 3 bushels per acre higher yielding; it shows less lodging, has larger kernels, and a higher percentage of groats. Orbit has the AB genes for stem rust resistance. There appear to be but small differences between Orbit and Garry in stem and crown rust reaction, smut reaction, and test weight. However, the advantage for the first two is with Orbit and for the latter two with Garry. Orbit has been tested in more than 100 nurseries in New York and other states and would appear to be adapted to widely different growing conditions throughout the United States.

The outstanding features of Orbit are high yield combined with short strong straw and a large, heavy kernel; individual kernels of Orbit are more than 20% heavier than kernels of Garry.

Orbit was approved for release and named in 1963. The initial production of breeder seed was at Ithaca in 1962, followed by foundation increases in 1963 and 1964. Certified seed was first produced in 1965 and distributed in the spring of 1966. The recognized classes of seed are breeder, foundation, and certified (foundation seed is required for the production of certified seed). Breeder seed will be maintained by the Cornell University Agricultural Experiment Station.

Performance data and other information on Orbit was reported by Jensen.3

1 Registered by Crop Science Society of America. Received June 3, 1966.
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