Registration of Crop Cultivars

REGISTRATION OF SALEM OATS

(REG. No. 265)

Charles F. Murphy

'SALEM' oats (Avena sativa L.; CI 9204) was derived from the cross ‘Goodfield’ × ‘Moregrain.’ The cross was made at Raleigh, N.C. in 1964, and the final selection (F₆) was made in 1969. The line was tested as N.C. 43 and varietal release was approved by the N.C. Agric. Exp. Stn. in 1974.

This cultivar is well adapted to the piedmont section of North Carolina. It heads and matures from 2 to 4 days later than 'Carolee' and 6 to 8 days later than 'Yancey.' The later heading and maturity allow Salem to take advantage of the piedmont environment and allow time for maximum tiller development and grain filling. Salem, Carolee, and Yancey have about the same level of winterhardiness. In piedmont tests, Salem has exceeded the yield of both Carolee and Yancey by 24%. It also exceeds both of the cultivars in test weight. It has exceptionally good straw strength, is comparable in height to Carolee and Yancey, and has good resistance to powdery mildew and is resistant to some races of crown rust. Salem is moderately resistant to soil-borne mosaic.

Salem has semi-prostrate juvenile plant growth, medium size yellow stems and glabrous internodes. The leaf blade is medium in width; the leaf margins and sheaths are glabrous; and ligules are present. Panicles of Salem are equilateral and the branch attitude is erect. Panicles are medium in length and breadth. Panicle form is ovate, the branches are ascending, and the rachis is straight. Spikelet separation is by fracture, and floret separation by disarticulation. Lemmas are red, short, and glabrous and the grain is midplump. The second floret rachilla segment is medium in length and glabrous. Basal hairs are few or absent. Awns are common, twisted, and subgeniculate.

Breeder seed of Salem will be maintained by the N.C. Agric. Exp. Stn.

REGISTRATION OF EVANS AND HODGSON SOYBEANS

(REG. Nos. 109 and 110)

J. W. Lambert and B. W. Kennedy

'EVANS' and 'HODGSON' soybeans, Glycine Max (L.) Merr., were developed in a cooperative program of the Minn. Agric. Exp. Stn. and the ARS, USDA.

Evans (Reg. No. 109) originated as an F₆ plant of the cross 'Merit' × 'Harosoy.' Before its release, it was identified by the experimental designation M62-217. It is of Group O maturity, maturing at about the same time as Merit. It will be most useful in central Minnesota and in parable climates in other states.

Distinguishing characteristics of Evans are purple flowers, gray pubescence, dull seed coat, and buff hila. The canopy is narrow and the leaves are medium green. Evans exceeds both of the cultivars in test weight. Evans average 8 to 10% larger than those of Merit. Evans outyielded Chippewa 64 by 15 to 20%. Hodgson exhibits relatively low amounts of chlorosis on high lime soils.

Seed was released to certified growers in Minnesota, North Dakota, and South Dakota in 1974.

Hodgson (Reg. No. 110) originated as an F₆ plant of the cross of 'Corsoy' × 'Harosoy.' Before its release, Hodgson was identified by the experimental designation M62-217. It is of Group 1 maturity, maturing 1 or 2 days later than 'Chippewa 64.' It will be most useful in the southern third of Minnesota and areas with comparable climatic conditions in other states.

Distinguishing characteristics of Hodgson are purple flowers, gray pubescence, dull yellow seeds, and buff hila. The canopy is broad but relatively open. Leaves are medium green. Stems and pods are relatively dark brown and Hodgson is slightly shorter and lodges slightly more than Chippewa 64. Hodgson has 12% larger seed than Chippewa 64. Hodgson seeds are higher in oil by 1.5 percentage points. Hodgson outyielded Chippewa 64 by 15 to 20%. Hodgson is relatively low amounts of chlorosis on high-lime soils, and susceptible to phytophthora rot.

Seed was released to certified growers in Michigan, North Dakota, South Dakota, and Wisconsin in 1974.

The Minn. Agric. Exp. Stn. will be responsible for maintenance of breeder seed for Evans and Hodgson. Other information is published in "Varietal Trials of Farm Crops," miscellaneous report 24, Agric. Exp. Stn., St. Paul, MN 55108. States variety protection has been applied for by the Minn. Agric. Exp. Stn. specifying that the seed is to be sold only as a class of certified seed.


Registered by the Crop Sci. Soc. of Am. Received Apr. 18, 1975.

Professor of agronomy and plant genetics and professor of plant pathology, Univ. of Minn., St. Paul, MN.