REGISTRATION OF CROP CULTIVARS

Fidler has better rust and smut resistance than any existing cultivar. Gene Pc-39 confers a high level of resistance to all but two isolates (which it has moderate resistance) of oat crown rust found in Canada during 1978 and 1979. It also has good stem rust resistance conferred by genes Pg-1 and Pg-13 and possibly Pg-2, Pg-3, and Pg-9. It is susceptible to the rarely occurring race NA 26. Fidler is resistant to all races and collections of loose smut and covered smut to which it has been tested.

Fidler has been equal in yield to 'Hudson' in Manitoba trials, but in Saskatchewan and Alberta it has been lower yielding than either 'Cascade' or Hudson. It has short, fairly stiff straw with glabrous nodes, and its panicle is equilateral with short panicle branches. Kernels are creamy white in color and medium to small in size. The primary kernel often has a small awn and a few basal hairs sometimes are present. The rachilla is medium long with a slight pubescence. The test weight is moderately low but higher than that of Hudson.

Fidler is well adapted to Manitoba because of its good yield, strong straw, and superior crown and stem rust resistance.

Breeder seed will be maintained by the Seed Section, Agriculture Canada, Research Station, Regina, Saskatchewan.

Fidler is named after Peter Fidler, a surveyor and fur trader with the Hudson's Bay Company from 1788 to 1821.

REGISTRATION OF TERRA OATS
(Reg. No. 298)


'Terra' naked oats (Avena nuda L.) was tested under the accession numbers RL 2966 and OT 195. It was licensed (license No. 1633) in 1976 by the Plant Products Division of Agriculture Canada. It was developed by the Oat Rust-Area Project Group which is co-ordinated from the Agriculture Canada Research Station, Winnipeg.

Terra was derived from the cross 'Random'// 'Vicar'// Random made in 1968. Segregates were advanced by single seed descent and an F4 line was bulked in 1969 to form the cultivar. In 38 station-years of co-operative oat trials from 1972 to 1974, Terra outyielded the naked oat cultivar Vicar by 15%. When compared on a groat basis, yields approach those of Random and 'Hudson.' It is a moderately short, stiff-strawed cultivar which responds well to good management practices.

Terra is tolerant to greyspeck (manganese deficiency) but susceptible to crown rust (incited by Puccinia coronata Cda. f. sp.avenae Eriks.) and stem rust (incited by Puccinia graminis Pers. f. sp.avenae Eriks. and E. Henn.), loose smut (incited by Ustilago avenae (Pers.) Rostr.), covered smut (incited by Ustilago kollerii Wille), and to barley yellow dwarf virus.

Terra is medium early in maturity, similar to Random. Its multilobed spikelet is not as lax as that of other naked oats. The stem is medium in length with glabrous nodes; leaves are of medium width, glabrous, and grass green. The panicle of Terra occurs in medium width, glabrous, and grass green. The panicle of Terra

REGISTRATION OF AMCOR SOYBEAN
(Reg. No. 149)

R. L. Cooper, R. J. Martin, A. K. Walker, and A. F. Schmidt

‘AMCOR' soybean (Glycine max (L.) Merr.) originated as a selection out of a high-yielding determinate F3 line from '71' × 'Corsoy' made at the Illinois Agric. Exp. Stn., USDA on 1 Aug. 1979. Amcor was identified as L75D-195.

Amcor was in the Regional Preliminary Tests Uniform Regional Test in 1976, 1977 and 1978. Breeder seed was produced in 1978 and released by the Ohio Agricultural Research and Development Center, the Pennsylvania and South Dakota Agric. Exp. Stns., USDA on 1 Aug. 1979.

Amcor is a tall Group II indeterminate cultivar. 'Beeson,' Amcor is 2 days later in maturity, 10 to 15 cm taller and has an average lodging score of 2.7 as compared to 2.0 for Beeson. Taller growth appears to contribute to higher seed yields where conditions, drought or low fertility, limit the growth of shorter varieties such as Beeson. It has purple flowers, gray pubescence on the stem, and seed with yellow hila. Amcor has resistance to Phytophthora megasperma (Drech.) var. sojae A. A. Hildeb.

Foundation seed of Amcor was produced in 1979 and certified seed producers in 1980. The Ohio Agricultural Research and Development Center will maintain breeder seed.

REGISTRATION OF ELF SOYBEAN
(Reg. No. 150)

R. L. Cooper

‘Elf' soybean (Glycine max (L.) Merr.) originated as a selection out of a high-yielding determinate (dt,dt) advanced hybrid of 'Williams' × 'Ransom' made at the Illinois Agric. Exp. Stn. in 1970. Before its release, Elf was designated as L74D-109.

Elf was tested extensively in both 75 and 17 cm rows on the Uniform Regional Test in 1976 and 1977. It was also tested in the Uniform Regional Test in 1975 and 1976.