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, Regina.

Terra was derived from the cross 'Random'/'Vicar'/'Random' made in 1968. Segregates were advanced by single seed descent and an F7 line was bulked in 1969 to form the cultivar. In 18 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 kolleri Wille), and to barley yellow dwarf virus.

Terra is medium early in maturity, similar to Random. Its multiflorous 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 is medium in height, with a texture similar to the outer glumes and the lemmas bear a few weak awns. The rachillas are glabrous, similar in texture to the outer glumes, with the inner glumes having a texture similar to the outer glumes.

Terra is average in groat protein and oil contents. Terra is more resistant to lodging. 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 kolleri Wille), and to barley yellow dwarf virus.

Terra is resistant to all races of loose smut and covered smut to which it has been tested.

Terra is not 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.

Terra is medium early in maturity, similar to Random. Its multiflorous 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 is medium in height, with a texture similar to the outer glumes and the lemmas bear a few weak awns. The rachillas are glabrous, similar in texture to the outer glumes, with the inner glumes having a texture similar to the outer glumes.

Terra is average in groat protein and oil contents.

REGISTRATION OF AMCOR SOYBEAN
(Reg. No. 149)

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

'AMCOR' soybean [Glycine max (L.) Merr.] originated as an advanced F7 line from the cross '71' × 'Corsoy' made at the Illinois Agric. Exp. Stn. in 1968. Before its release in 1979, Amcor was identified as L73D-195.


Foundation seed of Amcor was produced in 1979 by 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 an advanced F7 line from a high-yielding determinate (dtdt) advanced F5 line from the cross of 'Williams' × 'Ransom' made at the Illinois Agric. Exp. Stn. in 1970. Before its release, 'Elf' was designated as L74D-7.

'Elf' was tested extensively in both 75 and 76 cm rows in 1975, 1976, and 1977. It was also tested in the United States, Canada, and other countries. The soybean was released for production in 1979. Before its release, 'Elf' was designated as L74D-7.