Registration of Crop Cultivars

REGISTRATION OF FLORIDA 77 ALFALFA¹
(Reg. No. 99)

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'Florida 77' alfalfa (Medicago sativa L.) was developed by the Florida Agricultural Experiment Station in cooperation with AR-SEA-USDA, Tucson, Ariz. It was tested under the experimental designation Florida 66A. Seed became available in October 1980.

Florida 77 was developed from 'Florida 66' (Crop Sci. 10:456. 1970) by two cycles of mass selection for persistence, followed by two cycles of selection for resistance to Biotype H of the spotted alfalfa aphid (Theroaphis maculata (Buckton)). For resistance to the aphid, 167 and 600 resistant plants were identified and intercrossed in the first and second cycles, respectively. The second cycle population was grown in an isolated plot at Gainesville, Florida to produce breeder seed of Florida 77.

Florida 77 is a nondormant variety with fall dormancy similar to 'African' and light to dark purple flowers. In Florida it has been more persistent than any other variety tested. Forage yields in Florida have been equal to or greater than Florida 66 and other varieties in the 1st harvest year and superior in subsequent years because of better stands. Florida 77 was highly resistant to Fusarium wilt caused by Fusarium oxysporum Schlecht. f. medicaginis (Weimer) and susceptible to bacterial wilt caused by Corynebacterium insidiosum (McCull) H. L. Jens and to Phytophthora root rot caused by Phytophthora megasperma Drechs in tests conducted at St. Paul, Minn. It is resistant to Biotype H of the spotted alfalfa aphid. It has not been tested for resistance to anthracnose, pea aphid, or stem nematode. It is adapted to the coastal plain area of southeastern USA.

Breeder seed will be maintained by the Agronomy Dep., Univ. of Florida. Only one generation each of breeder, foundation, and certified seed is recognized. Stands producing foundation and certified seed are limited to 2 and 5 harvest years respectively. Seed production shall be limited to the southern alfalfa seed production area, south of 40°N Lat. at elevations below 760 m.

Florida 77 was favorably reviewed by the National Certified Alfalfa Variety Review Board at the December 1979 meeting. Application will not be made for plant variety protection.

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REGISTRATION OF CP 72-356 SUGARCANE~
(Reg. No. 56)

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'CP 72-356' sugarcane, a tri-species hybrid involving Saccharum officinarum L., S. spontaneum L., and S. barberi Jesw., was developed through cooperative research of AR-SEA-USDA, the Univ. of Florida Food and Agricultural Services, and the American Sugar Cane League, Inc., and was released to the industry in the fall of 1980.

CP 72-1210 is a good-ratooning, high-tonnage, mid-season-flowering variety that is mostly selected by a medium sized barrel, a high stalk population, and erect growth habit. When compared over 2 harvests (seven plant cane, seven first ratoon, and six second ratoon) at Terra Ceia, Pahokee, and Torry muck, CP 72-1210 produced 24% more tonnes of cane/ha and 25 and 26% more sugar/ha at early and late harvests, respectively. CP 72-356 is susceptible to borer damage and stubble yield was significantly higher. CP 72-356 is an early mid-season-flowering variety that is mostly self-stripping. It has a high stalk population, erect growth habit. When compared over 20 replicated tests at four research locations in Florida, CP 72-356 was superior in subsequent years because of better stands. Florida 77 was highly resistant to anthracnose, pea aphid, or stem nematode. It is adapted to coastal areas where the disease is prevalent. It is resistant to anthracnose, pea aphid, or stem nematode. It is adapted to the coastal plain area of southeastern USA.

Breeder seed will be maintained by AR-SEA-USDA at the Sugarcane Field Station, Canal Point, FL 33438.

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⁴ Registered by the Crop Sci. Soc. of Am. Contribution of AR-SEA-USDA.
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