REGISTRATION OF DELCOT 277J COTTON\textsuperscript{1}  
(Reg. No. 71)  
W. P. Sappenfield\textsuperscript{2}

‘DELCOT 277J’ cotton \((Gossypium hirsutum\ L.)\) was developed at the Missouri Agricultural Experiment Station and released in May 1978.

Delcot 277J, formerly designated MO63-277J, is a mass selection of S65-396, S65-391 and S65-396 are component lines of ‘Delcot 277’ \(2\). Testing and mass selection of each component line was continued until 1974, following release of Delcot 277 in 1970. The S65-396 mass selection was continued as MO63-277J, now named Delcot 277J. Delcot 277J has been equal to or slightly superior in yield to Delcot 277 (1:1 blend of S65-391 and S65-396). During 5 years, 1971-72 and 1974-76, Delcot 277J averaged 143 kg/ha more lint than ‘Stoneville 213’, the dominant commercial cultivar in southeast Missouri.

Delcot 277J seeds have been observed to be more tolerant than those of S65-391 to seed coat cracking during spindle picking and ginning. This trait is significant to preservation of seed quality. Consequently, Delcot 277J has shown slight seedling vigor superiority to Delcot 277. Otherwise, Delcot 277J possesses similar characteristics of those of Delcot 277 \(2\). Outstanding features are resistance to Verticillium wilt, incited by \(V.\ albo-atrum\) and \(V.\ dahliae\), and Fusarium wilt \(1\), incited by \(Fusarium oxysporum\ f. sp. vasinfectum\) \(\text{Atk.}\) Synder and Hansen, early maturity, high fiber yield, good fiber length, and yarn strength. Delcot 277J appears best adapted in the north central fringes of the Cotton Belt on medium and light textured soils.

Breeder seed will be maintained by Foundation Seed Stocks, Dep. of Agronomy, University of Missouri, Columbia, MO 65211. Application for plant protection will be made.

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REFERENCES


REGISTRATION OF REDALTA, GREENALTA, AND BIGALTA LIMPOGRASS\textsuperscript{1}  
(Reg. Nos. 52, 53, and 54)


Redalta, Greenalta, and Bigalta limpograss are stoliniferous species of \(D\). \textit{lanatus} that were established in the United States from introductions of diploid \(D\). \textit{lanatus} from Africa, by Dr. A. J. Oakes, research agronomist, Germplasm Materials Center, USDA. They spread by decumbent stolons and new culms establish by rooting from the nodes. Redalta and Greenalta have diploid \((2n=18)\) chromosome nuclei, while Bigalta is a tetraploid \((2n=36)\).

Redalta is fine-stemmed with narrow leaves, reaches a height of 100 to 120 cm on fertile soils and spreads only 0.33 m/year. Leaves and stems of Redalta have a distinct reddish color at advanced stages of maturity. Redalta is very cold tolerant and is adapted to Norway and the Great Lakes region. Greenalta is best adapted to the humid and sub-tropical parts of Florida and the southeastern states. Bigalta is adapted to the humid tropics of Florida, Louisiana, and coastal sections of Texas and Mexico.

Outstanding features are resistance to Verticillium wilt, Fusarium wilt, and Fusarium root rot. In vitro organic matter digestibility (IVOMD) than either of the diploids is superior. Forage yields of Bigalta are usually comparable to Redalta and Greenalta. It is higher in in vitro organic matter digestibility (IVOMD) than most other tropical grasses and maintains relatively high IVOMD even after moderate frost damage. Values as high as 65 to 76% IVOMD are typical for 6- to 8-week old Bigalta. It is also well-adapted to the wet flatwood soils of Florida and wet areas of the humid tropics.

The limpograsses are poor seed producers, but they produce a reasonably high seed yield per area planted. They can be propagated vegetatively from cut stems incorporated into moist seedbeds. These cultivars of limpograss have been most productive in the tropics where they are prevalent.

Foundation stock vegetative planting materials of Redalta, Greenalta, and Bigalta will be maintained by the Soil Materials Center, Brooksville, Fla. The Department of Agriculture, Dep. of Food and Agricultural Sciences, Gainesville, will maintain foundation stocks. The Agricultural Research Center, Ona, will also maintain foundation stocks of Greenalta. The Department of Agronomy, Dep. of Agronomy, University of Florida, will maintain foundation stocks of Redalta. Bigalta. No application will be made for Bigalta.