Registation of 'CIANO Cocorim-92' Cotton

'CIANO Cocorim-92' cotton (Gossypium hirsutum L.) (Reg. no. CV-105, PI 570666) was developed and released in 1992 by the Cotton Improvement Program of the Yaqui Valley Experiment Station (Centro de Investigaciones Agrícolas del Noroeste [CIANO]–Instituto Nacional de Investigaciones Forestales y Agropecuarias [INIFAP]), Cd. Obregón, Sonora, as a stormproof, high-yielding cultivar with enhanced earliness and improved fiber strength and is adapted for production in northeast and northwest Mexico.

CIANO Cocorim-92 was derived from the cross Stripper 61-28/Ca 1012. Stripper 61-28 is an early-maturing experimental strain from Arkansas, later released and renamed 'Quapaw'. Ca 1012 is an early-maturing strain developed on the Texas High Plains at Lubbock. Plant selection was carried out initially, from F₂ through F₄, by L.M. Verhalen, at Oklahoma State University, Stillwater, OK, using the pedigree method. CIANO Cocorim-92 originated from subsequent individual plant selections (designated as M72-117-10-3-206) in the Yaqui Valley, and was bulked in the F₆ generation.

CIANO Cocorim-92 is a cluster-type cultivar, with a semi-pubescent stem and with short internodes on both sympodial and monopodial branches; height of the first square is 15 cm. Mature plants of this cultivar average 95 cm in height. Leaves are small and intermediate in pilosity. At the peak of boll formation, plants tend to bend over, due to their heavy boll load, but as boll opening proceeds, plants return to their former erect position.

CIANO Cocorim-92 has white-creamy flowers; capsules have four or five locules, with some pubescence on sepals. Bolls are rounded and their average size is 5.9 g seedcotton per boll. Seed index (weight in grams per 100 seed) averages 11.4 g.

CIANO Cocorim-92 is an early-maturing cultivar. It outyields 'Deltapine 80', which is the regional check, and is slightly better than 'Deltapine 50' when seeded during the first 2 wk of March; it begins flowering about 75 to 78 d (670 heat units) after planting and reaches blooming peak at 95 to 100 d; boll opening starts about 115 to 120 d after planting and peaks around 135 to 140 d. Lint yield at first pick averages 73%, compared with 50% for the local check cultivar Deltapine 80.

CIANO Cocorim-92 has an average fiber length of 2.70 cm, its fiber strength is 582 MPa, and its micronaire reading averages 4.7 units.

CIANO Cocorim-92 was tested in the Yaqui Valley, Sonora, over 3 yr and averaged 1470 kg ha⁻¹ of lint. It outyielded Deltapine 80 by 11.7%. CIANO Cocorim-92 was validated on farmers' fields in the Yaqui Valley over 2 yr and averaged 1680 kg ha⁻¹ of lint. It outyielded the check cultivar by 45.3% in 1990 and 5.5% in 1991. CIANO Cocorim-92 was tested in the National Elite Test in 1991 and averaged 1490 kg ha⁻¹ of lint. It outyielded the check cultivars Deltapine 80 (four tests) and Deltapine 50 (one test), by 1.9 and 15.5%, respectively.

Seed of CIANO Cocorim-92 was distributed to seed-producing organizations in Sonora in 1992. Breeder seed will be maintained by CIANO, Apartado Postal 515, 85000 Cd. Obregón, Sonora, Mexico. More detailed information on the performance and characteristics of CIANO Cocorim-92 is available (1).

ARTURO HERNANDEZ JASSO* AND LORENZO PEREZ Sous (2)

Registration of 'SDEV 87001' Finger Millet

'SDEV 87001', a grain cultivar of finger millet (Eleusine coracana (L.) Gaertn.] (Reg. no. CV-163, PI 570666) was developed by the Sorghum and Millet Improvement Program of the Southern African Development Community–International Crops Research Institute for the Semi-Arid Tropics (SADC–ICRISAT). This cultivar was tested in Zimbabwe for the designation SDFM 723. SDEV 87001 was released in October 1992 as 'FMV 2' by the National Variety Release Committee because of its superior grain yield.

Six hundred sixty-seven germplasm accessions of E. coracana were acquired from the Plant Germplasm Quarantine Center, Beltsville, MD, in April 1986 for evaluation. Plants from PI 462703 showing a uniform phenotype were selected in a 1986 observation-seed increase nursery at Muzarabani, Zimbabwe. This accession was further evaluated in 1986–1987 seed increase nursery at Marondera and small plot seed harvested from this second cycle of selection was multiplied to produce SDFM 723.

SDEV 87001 was tested by SMIP and the Finger Millet Improvement Program of the Department of Agriculture Specialist Services in Zimbabwe for 5 yr from 1991–1992. The mean grain yield of SDEV 87001 of the farmers' local cultivar (3.46 vs. 2.07 Mg ha⁻¹) was 16.9% of 'FMV 1'. SDEV 87001 is superior to FMV 1 and the farmers' local cultivar for threshing percentage (72.6% vs. 65.2%, respectively), ear heads per plant (9.3, 6.4, and 6.0, respectively), individual grain weight (2.75, 2.49, and 2.35, respectively) and shorter finger length (5.0, 7.8, and 6.3 cm, respectively) than FMV 1 and the farmers' local cultivar.

Mean plant height of SDEV 87001 is 82.5 cm, with 75% heading is 87.3 d, which is similar to the farmers' local cultivar. Plant pigmentation is green. Culm branching is present, and the mean culm thickness is 12 mm. Ear size is 90 mm, and inflorescence shape is semicircular. Anther color is creamy yellow. Finger dimensions average 9 by 210 mm and mean length is 100 mm. Mean number of leaves on the main shoot is 9, and the habit is erect. No significant insect problems were observed. Grain is medium size, round in shape, and in color. Seed dormancy is present for 7 to 10 wk.

Finger millet is mostly used for brewing. The diastatic unit is the primary criterion for malting quality; there were no significant differences in diastatic unit among SDEV 87001 (73.1) and the farmers' local cultivar (74.1). SDEV 87001 was tested by SMIP and the Sorghum and Millet Improvement Program (SMIP) and the SADC–ICRISAT in the Zimbabwe National Variety Release Program in 1991–1992. The mean grain yield of SDEV 87001 was 167.1% of the farmers' local cultivar. SDEV 87001 was tested by SMIP and the Sorghum and Millet Improvement Program (SMIP) and the SADC–ICRISAT in the Zimbabwe National Variety Release Program in 1991–1992. The mean grain yield of SDEV 87001 was 167.1% of the farmers' local cultivar.

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