Registration of ‘Ontagota 89’ Sesame

‘ONTAGOTA 89’ SESAME (Sesamum indicum L.) (Reg. no. CV-5, PI 561706) was developed at the Northwest Agricultural Research Center (CIANO-INIFAP-SARH), Ciudad Obregón, Sonora, Mexico. It was released in 1989 as a high-yielding cultivar with tolerance to root rot [incited by Macrophomina phaseolina (Tassi) Goidanich], and adapted for production in northwest Mexico.

Ontagota 89 was derived from the cross ‘Eva’/‘Pachecoño’ //‘Instituto 15’/‘CIANO 27.’ Eva is an early-maturing commercial variety released by the University of California Riverside Experiment Station. Pachecoño is a tall, late-maturing landrace cultivar. Instituto 15 is a tall and intermediate-maturing cultivar released by CIANO in 1960. ‘CIANO 27’ is a short, intermediate-maturing and nonbranching cultivar released by CIANO in 1960. Selections were made from the segregating population using the pedigree method. Ontagota 89 originated as an F1, F2, and F3 plant selection, bulked in the F3 generation, and designated as CD156-5. It was tested in regional yield trials at several locations in northwestern Mexico.

Ontagota 89 is a nonbranching, late-maturing cultivar. When seeded during the first 2 wk of May, it begins flowering ≈66 d after planting and reaches physiological maturity at 115 d. Mature plants of this cultivar average 163 cm in height; height to the first capsules averages 70 cm.

Ontagota 89 produces three white flowers per leaf axil. The capsules are bicarpeled, semi-deshinct, oblong-narrow with some pubescence and average 28.0 mm long and 8.0 mm wide. The average seed number per capsule is 84 and the lateral capsules are arranged 45° on the stem or branches. The seed is creamy white and ovate in form, with rounding margin and acute extreme, averaging 3.0 mm long and 2.0 mm wide. Seed weight averages 2.7 g 1000 seed−1, with a test weight of 59.8 kg hL−1.

Ontagota 89 was tested at Ciudad Obregón, Sonora, over a period of 6 yr and averaged 1264 kg ha−1. It outyielded the local check cultivar Yori 77 by 18%. Seed on Ontagota 89 has an average of 400 g kg−1 oil, 311 g kg−1 protein and 176 g kg−1 carbohydrates. The average oil, protein, and carbohydrate content of Yori 77 is 429, 292 and 167 g kg−1, respectively. The fatty acid composition of oil from Ontagota 89 seed averages 389 g kg−1 oleic acid, 419 g kg−1 linoleic acid, 130 g kg−1 palmitic acid, and 65 g kg−1 stearic acid with an oil iodine number of 111.0. The oil composition of the check cultivar, Yori 77, averages 415 g kg−1 oleic, 420 g kg−1 linoleic, 105 g kg−1 palmitic, and 59 g kg−1 stearic acid, with an iodine number of 113.5.

Seed of Ontagota 89 was distributed to seed-producing organizations in Sonora in 1990. Breeder seed will be maintained by CIANO, Apartado Postal 515, 85000 Ciudad Obregón, Sonora, Mexico. Additional information on the performance of Ontagota 89 has been published (1).