Registration of KS3579 Winter Rapeseed Germplasm

KS3579 winter rapeseed (Brassica napus L. subsp. oleifera (Metzg.) Sinsk. f. biennis) was developed by the Kansas Agricultural Experiment Station and has been released in 1996. The entire test, including KS3579, was lost to winterkill. The best surviving line is KS3579 which always survived with harvestable stands even though, in 3 of 15 locations, more than one-half of the test entries were lost to winterkill. The entire test, including KS3579, was lost to winterkill at 3 of 19 locations in 1996.

In 1995, KS3579 averaged 107 cm tall (10 cm shorter than Ceres) and 6 d earlier to 50% bloom date than Ceres, had 333 g kg⁻¹ total oil (10 g kg⁻¹ less than Ceres), and yielded 1417 kg ha⁻¹ (85% of Ceres). KS3579 has not been evaluated for resistance to either white mold [caused by Sclerotinia sclerotiorum (Lib.) de Bary] or virulent blackleg.

Breeder seed of KS3579 will be maintained and distributed by the Kansas Agricultural Experiment Station. Small amounts of seed will be provided upon written request. Recipients are asked to make appropriate recognition of the source of the germplasm used in development of a parental line, cultivar, or hybrid.


References and Notes

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Registration of Arkot 8110 Germplasm Line of Cotton

Arkot 8110 (Reg. no. GP-663, PI 595850) is a germplasm line of cotton (Gossypium hirsutum L.) developed by the Arkansas Agricultural Experiment Station and released in 1995 (3). The line possesses glabrous leaves/stems, nectaries, and a favorable combination of agronomic and host-plant resistance traits. Its fiber properties are relatively poor.

Arkot 8110 originated from a 1981 cross between 'Tamcot SP21S' (1) and Pee Dee 6520 (5). Individual plant selections were made from the F₃ population and bulked. Procedures of Bird (2), modified to permit selection for lateral root development, were used to select the line designated as 8110-27 from the bulked F₄ population. Subsequently, seeds from the F₇ generation were reselected using the same procedures to produce the line designated as 8110-27-07. Further selections were made from 8110-27-07 in 1991, but none were found superior to it.

Over 19 tests from 1988 through 1993 at four Arkansas sites in the Mississippi River Delta, Arkot 8110 yielded significantly more lint (1152 vs. 1098 kg ha⁻¹) than 'DES 119' (4) and had similar maturity and lint percentage. Fiber micronaire (4.97 vs. 4.65 units), length (27 vs. 29 mm), strength (258 vs. 262 kN m kg⁻¹), and elongation (7.5 vs. 8.3%) of Arkot 8110 differed significantly from DES 119.

Resistance of Arkot 8110 to the bollworm (Helicoverpa zea (Boddie)) and tobacco budworm (Heliothis virescens (F.)) complex was equal to that of DES 119 at three sites of the 1991 and 1992 Regional Bollworm/Budworm Tests where genotypes were evaluated.