lines and cultivars under 14-d irrigation intervals during 1996 to 1998, forage yield of 9D11A-PRR3 was equivalent to that of the best cultivars and significantly exceeded that of Wilson by 19%. Fall dormancy of NM-9D11A-PRR3 is similar to that of Mesilla (fall dormancy class = 6). In standardized tests, NM-9D11A-PRR3 was rated as resistant (47%; resistant check ‘Agate’ = 46%) to phytophthora root rot. Although 9D11A-PRR3 was not specifically tested for resistance to other pests and pathogens, its parent population, Wilson, is resistant to bacterial wilt [caused by Clavibacter michiganensis subsp. insidiosum (McCulloch)], fusarium wilt [caused by Fusarium oxysporum Schlechtend. Fr. f. sp. medicaginis (Weimer) Snyder & Hans.], and the pea aphid [Acyrthosiphon pisum (Harris)]; moderating resistant to stem nematode [Ditylenchus dipsaci (Kühn) Filipjev], and spotted alfalfa aphid [Therohiphagus maculata (Buckton)]; and susceptible to anthracnose (Colletotrichum trifolii Bain.), phytophthora root rot (Phytophthora megasperma f. sp. medicaginis [Weimer] Snyder & Hans.), and the pea aphid (Empoasca fabae (Say)), and the blue alfalfa aphid [A. kondoi (Shinji)].

Two grams of seed from NM-9D11A-PRR3 will be provided upon written request to the corresponding author and agreement to make appropriate recognition of its source when this germplasm contributes to the development of new germplasm, cultivar, hybrid, or strain cross. Requests for seed from outside the USA should be accompanied by the appropriate customs and control documents.

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Registration and Notes

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Registration of A540, B803, and D883 Cotton Germplasm

Cotton (Gossypium hirsutum L.) germplasms A540 (Reg. no. GP-696, PI 604657), B803 (Reg. no. GP-697, PI 604658), and D883 (Reg. no. GP-698, PI 604659) were bred by hybridization and selection at the National Fibre Research Centre, KARI, Kibos, Kenya, in 1980 through 1987. They were released officially in October 1995. The parents were ‘UKA59/240’ and HARRA(73)44. UKA59/240 is a single-line selection from UKA67, selected from a hybrid of Albar 51 and strains of ‘Mwanza local’, at Ukuriguru, Tanzania (1). HARRA(73)44 is a selection from an interspecific hybrid of G. hirsutum, G. arboreum L., and G. raimondii Ulbrich that is maintained at Namulonge, Uganda (2). F₁ through F₇ were grown in bulk populations. Single-plant selection was carried out in F₇ followed by selection among progeny families. The germplasms are resistant to Xanthomonas campestris pv. malvacearum. A540, B803, and D883 yielded 13% and 19% more seed cotton, respectively, than BPA75 in seven tests conducted from 1988 through 1994 at Kibos. The lines gave 33, 32, and 40% more lint, respectively, than BPA75. Lint was 40.7% in UKA59/240 and D883 was a more modest 2.69 and 2.62 cm, respectively. Seed-cotton weight per boll was 5.2, 4.6, and 5.1 g in A540, B803, and D883, respectively, compared with 4.9 g for UKA59/240. Fiber strength in A540, B803, and D883 was 215, 195, and 200 kN m kg⁻¹, respectively, similar to 208 kN m kg⁻¹ for UKA59/240. Micronaire units were 4.1, 3.9, and 3.9 in A540, B803, and D883, respectively, similar to 3.9 in UKA59/240. Based on a visual grading scale of 1 (no fuzz) to 8 (very dense fuzz) for seed coats, A540, B803, and D883 averaged 5.6, 6.6, and 6.6, respectively, while UKA59/240 was 6.0. These germplasms have leaf and stem pubescence similar to UKA59/240. Such high pubescence is associated with resistance to jassid (Empoasca spp.) (3). Breeder seed will be maintained by the National Fibre Research Centre, KARI, Kibos, Kenya. Small quantities of seed (25 g) of these lines are available for distribution upon written request to the corresponding author.

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References and Notes


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Registration of E790, F962, and H314 Cotton Germplasm

Cotton (Gossypium hirsutum L.) germplasms E790 (Reg. no. GP-669, PI 604660), F962 (Reg. no. GP-670, PI 604661), and H314 (Reg. no. GP-670, PI 604662) developed by hybridization and selection at the National Fibre Research Centre, KARI, Kibos, Kenya, in 1980 through 1987. They were released officially in October 1995. The parents were ‘BPA75’, a cultivar grown in Kenya, and ‘UK68’. BPA75 is a seed issued in 1975 from ‘Albar’. The lines were selected from a hybrid of Albar 51 and strains of ‘Mwanza local’, at Ukuriguru, Tanzania (2). F₁ through F₇ were grown in bulk populations. Single-plant selection was carried out in F₇ followed by selection among progeny families. These germplasms are resistant to X. campestris pv. malvacearum. E790, F962, and H314 yielded 13, 12, and 19% more seed cotton, respectively, than BPA75 in seven tests conducted from 1988 through 1994 at Kibos. The lines gave 33, 32, and 40% more lint, respectively, than BPA75. Lint was 40.7% in E790, 41.1% in F962, and 40.4% in H314, compared with 35.1% in BPA75. The lines grew to 119, 113, and 118 cm, respectively, compared with 115 cm for BPA75. The maturity period was 132 d for E790 and 130 d for H314, compared with 130 d for BPA75. Staple length was 2.54 cm in the three germplasms, compared with 2.69 cm for BPA75. Seed-cotton weight per boll was 5.6 g in E790, 5.4 g in F962, and 5.3 g in H314, compared with 4.8 g in BPA75. Fiber strength in E790, F962, and H314 was 193, 190, and 198 kN m⁻¹, respectively, compared with 210 kN m⁻¹ for BPA75.