Seed harvested from the above disease nurseries was bulked with seed of CC XXXVI which had undergone selection for scald resistance in California, Georgia, Mexico, Syria, Turkey, France, and Korea, and with seed of CC XXVIII which had undergone selection for net blotch resistance in California, Mexico, Egypt, and Korea. In the winter of 1980-1981, this bulked seed was planted in isolation at El Centro, Calif. A strip of CC XXXVI-80 and CC XXXVIII-80 was planted around the outside of this isolation. Seeds on the male sterile plants (excluding the outside strip) was harvested.

In 1981 the seed harvested from the above isolation was planted in disease nurseries at Bozeman and Fairfield, Mont. The Bozeman nursery was inoculated with Montana isolates of R. secalis and P. teres. Plants susceptible to scald (approx. 50%) and net blotch (approx. 5%) were rogued. The Fairfield nursery had a heavy natural infection with a spot form of P. teres. Approximately 95% of the plants were rogued. The remaining fertile plants in both nurseries were harvested and bulked. Seed of CC XXXVI and CC XXXVIII from plants selected for resistance in a disease nursery at Davis, Calif., was added to the bulk.

The above bulk was planted in isolation at Scottsdale, Ariz. in 1981-1982. Seeds on male sterile plants were harvested.

In 1982 seed harvested from the above isolation was planted in a disease nursery at Bozeman and inoculated with Montana isolates of R. secalis and P. teres. Plants susceptible to net blotch (about 50%) were rogued (scald symptoms failed to develop). The remaining fertile plants were harvested in bulk. Seed of CC XXXVI harvested from a scald nursery at Davis was added. Population sizes were maintained above 10,000 plants in each generation.

CC XLIII contains high levels of resistance to scald and net blotch and should be a good source of plants with multigenic resistance. Agronomically, CC XLIII is quite variable, but presently it is best adapted to semiarid conditions.

Seed of CC XLIII can be obtained in 500 g quantities from the authors or from the Curator, World Collection of Small Grains, USDA-ARS, Beltsville Agric. Res. Ctr., Beltsville, MD 20705.

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References and Notes
3. Professor of agronomy, Univ. of Kentucky, Lexington. The investigation reported in this paper (nos. 83-5, 83-6) was in connection with a project of the Kentucky Agric. Exp. Stn., Lexington, KY 40546-0091 and is published with approval of the director. Registration by Crop Sci. Soc. of Am. Accepted 2 June 1983.

REGISTRATION OF UARK-1 AND UARK-2 EARLY-MATURING COTTON GERMPLASM

UArk-1 (Reg. GP225) and UArk-2 (Reg. GP226) were released as early-maturing cotton (Gossypium hirsutum L.) germplasm by the University of Arkansas Agricultural Experiment Station in March of 1983. UArk-1 and UArk-2 originated in 1977 as single plant selections in the F3 generation of the cross 'Auburn M' × PD 6520. Progeny rows in the F4 and subsequent generations were rogued of late-maturing or morphological off-types. 'Auburn M' is a cultivar released from the Missouri Agricultural Experiment Station and PD 6520 is a breeding line released from the USDA and South Carolina Agricultural Experiment Station. Plants of UArk-1 and UArk-2 are typical Delta types for comparisons of pest resistance and other factors at the commercial checks in Arkansas with a definite trend toward greater percent first harvest in all yield trials when compared with presently grown cultivars. UArk-1 was significantly earlier than UArk-2 which was significantly earlier than 'Deltapine 61' at Marianna in 1981; UArk-2 was significantly earlier than 'Stoneville 825' and 'Gumbo 500' at Jackson, Tenn. in 1982. Yields have been comparable to the commercial checks at Clarkedale, Ark. where the test site is infested with verticillium wilt (Verticillium albo-atrum Reinke and Berth).

Yields of UArk-1 and UArk-2 have been equivalent to commercial checks in Arkansas with a definite trend toward greater percent first harvest in all yield trials when compared with presently grown cultivars. UArk-1 was significantly earlier than UArk-2 which was significantly earlier than 'Deltapine 61' at Marianna in 1981; UArk-2 was significantly earlier than 'Stoneville 825' and 'Gumbo 500' at Jackson, Tenn. in 1982. Yields have been comparable to the commercial checks at Clarkedale, Ark. where the test site is infested with verticillium wilt (Verticillium albo-atrum Reinke and Berth).

UArk-1 and UArk-2 have shorter 2.5% span length, averaging 27.4 and 28.4 mm, respectively, than Mid-South commercial cultivars. UArk-2 averages 1% strength of 290 mN/tex (2-year average) while UArk-1 is slightly weaker at approximately 200 mN/tex (four location years).

Limited quantities of breeder seed of UArk-1 and UArk-