REGISTRATION OF PARK BARLEY
(Reg. No. 162)

A. E. Foster, M. K. Anderson, V. D. Pederson, and R. E. Pyler*

'Park' barley (Hordeum vulgare L.), C.I. 15768, was developed by the North Dakota Agricultural Experiment Station in cooperation with AR-SEA-USDA and was released 12 Jan. 1978. It was tested as ND 231 and traces to a single F₃ plant selected from the cross, 'Dickson'3/C/CI 4738/7'Trail'7/UM570/4/ND B133, made in 1966. Early generations of this cross were grown in the field and greenhouse at Fargo, N. Dak., and the F₃ generation was grown in a winter increase nursery at Ciudad, Obregon, Sonora, Mexico.

Park is a six-rowed, rough-awned spring barley. The kernels are covered and medium-sized with a colorless aleurone and short hairs on the rachilla. It is medium-early, mid-tall, and has moderately strong straw. Compared with 'Larker', Park is 1 day later in heading, equal in height, and stronger strawed. Park is resistant to Puccinia graminis Pers. f. sp. tritici Eriks. and Henn. and is much more resistant than Larker to prevalent strains of Helminthosporium sativum P.K. B., Helminthosporium teres Sacc., and Septoria passerinii Sacc. The yield of Park has exceeded that of Larker by 2% in 60 trials in North Dakota. Park performs best, relative to Larker, under conditions where leaf diseases affect yield.

Park is best adapted to northeastern North Dakota and northwestern Minnesota. The kernel plumpness and test weight of Park are slightly lower than Larker. Quality tests conducted by North Dakota State University, the USDA Barley and Malt Laboratory, Madison, Wis., and industry laboratories indicated that Park is superior to Larker in extract, wort N, and enzyme activity. It has been classified as a cultivar acceptable for malting and brewing by the Malting Barley Improvement Association. Breeder seed will be maintained by the North Dakota Agricultural Experiment Station, Fargo, ND 58105.

REGISTRATION OF SC-1 COTTON
(Reg. No. 72)

T. W. Culp and D. C. Harrell*

'SC-1' cotton (Gossypium hirsutum L.), released in March 1977, was developed cooperatively by AR-SEA-USDA and the South Carolina Agricultural Experiment Station. It is the product of 90 years of breeding to overcome the undesirable genetic association between lint yield and fiber strength. SC-1 was developed by pedigree selection from the cross 'Coker 421' × PD 4398. Coker 421 is a selection of 'Coker 418'. Coker 418 was a selection of 'Coker 310' and 'Pee Dee' barley via the SC-1 crossing program of the Texas A&M Multi-Adversity Resistant Cotton Breeding Program.

'SC-1' cotton was developed by the North Dakota Agricultural Experiment Station. Breeder seed is maintained by the South Carolina Foundation Seed Association, Bossburg, GA. Foundation seed is produced by the South Carolina Foundation Seed Association and sold to qualified producers of certified seed.

REGISTRATION OF TAMCOT SP21S COTTON
(Reg. No. 73)

L. S. Bird*

'Tamcot SP21S' (Gossypium hirsutum L.) was released in October 1977 (1, 6). Parents were SP21 (Reg. No. 61) and Tamcot SP37 (Reg. No. 30). The cross (SP21FXSP37F)F₁XF₁(SP21VXSP37V) was made and individual plant selection began in the F₂. Individual plant selection was based on seed mold and a reduced rate of germination on 1.5% water agar at 13.3 °C. This was followed by selection for cotyledon resistance to a mixture of B₁, B₂, B₃, B₄, and B₅ genes; resistance to root-knot nematode complex incited by Meloidogyne incognita (Kofoid and White) Chitwood; and Verticillium wilt. Strain designation H₁4-14-71 and an H₇ strain designation H₁16-72. Tamcot SP21S is intermediate in reactions with respect to departure from a susceptible type. The described levels of resistance used for representing differences with respect to departure from a susceptible type have been given (4).

SP21S has high resistance to bacterial leaf spot caused by the B₁, B₂, and B₅ genes; resistance to leaf blight caused by Xanthomonas campestris pv. campestris; and resistance to leaf blight caused by Xanthomonas campestris pv. vesicatoria (Kovda) Mor. and Xanthomonas vesicatoria (Kovda) Mor. The resistance to leaf blight and leaf spot is due to the B₁, B₂, B₃, and B₅ genes. Tamcot SP21S has high resistance to root rot caused by Fusarium oxysporum f. sp. vasinfectum (Att.) Snyd. and Hans. and Verticillium wilt caused by Verticillium dahliae (Berk. and Cannon) Sacc. Tamcot SP21S has high resistance to lodging caused by Helminthosporium sativum f. sp. graminicola (Ark.) Snyd. and Hans. and Helminthosporium sativum f. sp. graminicola (Ark.) Snyd. and Hans. and Helminthosporium sativum f. sp. graminicola (Ark.) Snyd. and Hans. and Helminthosporium sativum f. sp. graminicola (Ark.) Snyd. and Hans. and Helminthosporium sativum f. sp. graminicola (Ark.) Snyd. and Hans. and Helminthosporium sativum f. sp. graminicola (Ark.) Snyd. and Hans. and Helminthosporium sativum f. sp. graminicola (Ark.) Snyd. and Hans. and Helminthosporium sativum f. sp. graminicola (Ark.) Snyd. and Hans. and Helminthosporium sativum f. sp. graminicola (Ark.) Snyd. and Hans.