REGISTRATION OF CROP CULTIVARS

4 of *P. megasperma* f. sp. *glycinea* and surviving plants were backcrossed to Beeson 80. This process was repeated for six successive backcrosses. *F₂* plants of Beeson 80 × PRX9-249 were inoculated with race 4 of the pathogen and surviving plants were grown to maturity. Seeds from 91 *F₂* plants were planted 10 cm apart in rows 1 m apart in the field in 1981. The *F₃* lines that appeared phenotypically identical to Beeson 80 were harvested individually and progeny from each line were tested for reaction to races 4 and 7 of *P. megasperma* f. sp. *glycinea*. Thirty-three lines that were homozygous resistant in their reaction to the above races, indicating they contained the genes *Rps₅* and *Rps₁*, were compositied and evaluated as Beeson 80 BC₉ in the Uniform Soybean Tests Northern States in 1982. These tests were conducted by research workers in ARS-USDA and in cooperating state experiment stations in Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Nebraska, New Jersey, Ohio, Pennsylvania, South Dakota, Wisconsin, and in Ontario, Canada. Keller was released in Indiana and Ohio in August, 1983.

Keller is very similar to Beeson 80 in agronomic characteristics and in chemical composition of the seed. Both cultivars have purple flowers, gray pubescence, brown pods at maturity and yellow seeds with imperfect black hila. Seeds of Keller appear to be shinier than those of Beeson 80. Keller has a seedling emergence score of 2, indicating seedling emergence superior to that of Beeson 80, which has a score of 5. Since Keller has the *Rps₅* gene from Beeson 80 and the *Rps₁* gene from PI 86972-1, it is resistant to races 1 through 11, 13 through 18 and 21 of *P. megasperma* f. sp. *glycinea*. Keller is adapted to production in those areas where Group II soybean cultivars have been successfully grown.

Foundation seed of Keller was produced by releasing states in 1982, and publicity was released on 1 Aug. 1983. The Purdue University Agricultural Experiment Station will maintain breeder seed.

K. L. Athow, F. A. Laviolette, J. R. Wilcox, and T. S. Abney (2)

References and Notes

1. This research was supported in part by a grant from the Indiana Crop Improvement Assoc.

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REGISTRATION OF NC 50 TOBACCO

'NC 50' is a flue-cured tobacco cultivar (*Nicotiana tabacum* L.) (Reg. no. 91), developed and released cooperatively by the USDA-ARS and the North Carolina Agricultural Research Service. It was tested as NC 9150 USDA in the North Carolina Official Variety Test in 1980 (3) and as NC 50 USDA in the same test in 1981 (2, 1). It was tested in the Flue-Cured Regional Small Plot Test in 1981 and 1982. NC 50 resulted from a breeding line F₄ selection from the cross of flue-cured cultivars 'Speight G-28' and 'Coker 347'. Line 5116 was an F₁ between cultivars 'McNair 944' and 'Coker 411'. NC 50 was in the F₈ generation when planted by growers in 1984. 'NC 50' is a FLUE-CURED tobacco cultivar, resistant to leaf scald (caused by *Bipolaris sacchari* De Haan). It is resistant to bacterial wilt caused by *Pseudomonas solanacearum* (Smith) A. Br., Fusarium wilt (caused by *Fusarium oxysporum* f. sp. *nicotianae* (Cohn) D. H. G. Phillips) and common rust (caused by *Puccinia melanocephala* H. & P. Syd.), and moderately resistant to ring spot (caused by *Leptosphaeria sacchari* (Brandes and Jeswiet) Dowson). Vegetative cuttings will be maintained by the Hawaiian Sugar Planters' Assoc., Aiea, HI 96701.

D. J. Heinz, T. L. Tew, H. K. Meyer, and K. K. Wu (3)