caused by *Phytophthora parasitica f. nicotiana* (Breda de Haan), black root rot caused by *Thielaviopsis basicola* ([B. and Br.] Ferr.) and *Fusarium* wilt caused by *Fusarium oxysporum* Schlescht. *f. sp. nicotianae* (Johnson). Va 528 is a white-flowered, early-maturing burley cultivar with a yield potential above both burley parents (exceeds Burley 37 by 320 kg/ha and Burley 64 by 140 kg/ha). The 1979-1982 yield for Va 528 was 2918 kg/ha. Because of early maturation (about 1 week before *Ky 14* and 2 weeks before Burley 64), Va 528 may escape the most severe effects of the aphid-transmitted viruses (particularly cucumber mosaic virus and peanut stunt virus). It is not resistant to the aphid-transmitted viruses, however. Phenotypically, Va 528 resembles Burley 37 but plants and leaves are larger. Price ($/kg) and buyer evaluations for Va 528 exceed either burley parent and it is adapted to the burley-producing areas of VA, TN, NC, and KY.

Breeder's seed of Va 528 will be available to public and private certified seed producers and maintained by the VPI & SU Southern Piedmont Ctr., Blackstone, VA 23824.

**References and Notes**


**REGISTRATION OF VA 409 TOBACCO**

'VA 409', a sun-cured tobacco cultivar (*Nicotiana tabacum* L.) (Reg. no. 90), was developed by the Virginia Agricultural Experiment Station from a cross of 'Little Sweet Orinoco' (LSO) with the dark-fired burning line, 55-307E and subsequent self-pollinations and backcrosses to LSO (bc2). Va 409 was tested as Va 8409 in small plot tests at the Southside Virginia Research Station, Charlotte Court House, Va. (1968-1974) and Southern Piedmont Center, Blackstone, Va. (1974-1978) and in advanced farm tests in Louisa and Fluvanna Counties, Va. (1969-1971 and 1976-1982). Va 409 was approved for release in 1978 by the Virginia Polytechnic Institute and State University Variety Release Committee when in the F₁ generation.

Va 409 is moderately resistant to black root rot caused by *Thielaviopsis basicola* (Berk. & Br.) Ferr. and in most seasons is significantly higher yielding than the LSO parent (approximately 200 to 400 kg/ha). Average yields for LSO and Va 409 were 1668 kg/ha and 2027 kg/ha, respectively, for the VA sun-cured variety tests for 1978-1982. Va 409 is similar to Va 407, the only other black root rot resistant sun-cured cultivar, in both genetic background and performance except that Va 409 is not subject to leaf drop or breakage in the field which reduces harvestable yields by as much as 36% in some seasons. The leaf breakage characteristic is severe enough to warrant the release of Va 409. In comparison to LSO, Va 409 produces more leaves (13), is 7 cm taller, and has leaves which are slightly longer and more narrow than LSO. Grade prices exceed LSO in most seasons, but are slightly below the average for Va 407 because of a tendency for downstalk leaves of Va 409 to cure with a slightly greenish color. Va 409 is adapted to the sun-cured production area of Virginia.

Breeder's seed of Va 409 will be made available to seed certification agencies or individuals and maintained by the VPI & SU Southern Piedmont Ctr., Blackstone, VA 23824.

**REGISTRATION OF STERLING WHEAT**

'Sterling soft white spring wheat ('*Triticum aestivum* L.), (Reg. no. 683) CI 17859, was selected as an F₂ line from the cross 'Fielder'/'4/2*A6535S-443-107/'3/'Springfield'/'PI 227196/A63166S-A-2-8 made at the University of Idaho Research and Extension Center in 1971. A6535S-443-107 is a sister selection of Fielder and 'Fieldwin' and A63166S-A-2-8 is a sister selection of 'Twin'. Sterling has been tested in Idaho irrigated and dryland yield trials since 1975 and in the Western Regional Spring Wheat Nursery and the Colorado irrigated trials at IDO144 in 1978 to 1980. Sterling is similar to Fielder in most agronomic and seed characteristics and it is difficult to distinguish between them. Sterling has averaged 1, 2, and 3 days earlier in maturity than Fielder, Twin, and Fieldwin, respectively.

Sterling has averaged 2 cm shorter than Twin, 'Dirkwin', and 'Crestone' and 5 cm shorter than Fieldwin and has been more resistant to lodging than the other cultivars in the Idaho irrigated trials. Spikes of Sterling are erect to inclined,awned, fusiform to oblong, and middense. Glumes are white, long, and midwide with narrow oblique to square shoulders, beaks are narrow, acuminate, and 2 to 5 mm long. The kernels are soft, white, ovate, and midlong and have a narrow, middeep crease and rounded cheeks. Sterling had moderate resistance to leaf rust caused by *Puccinia recondita* Rob. ex Desm. *f. sp. tritici* and stripe rust incited by *Puccinia striiformis* West. when released, but has since become susceptible to the Pacific Northwest races of both. It is moderately susceptible to the prevalent races of powdery mildew (*Erysiphe graminis* DC ex. Merat *f. sp. tritici*) found in Idaho. Yields of Sterling grown in nonirrigated Idaho yield trials for 3 years are similar to those of Fieldwin. Under irrigation, the average yield of Sterling for 6 station-years has been 105, 106, and 109% of Dirkwin, Twin, and Fieldwin, respectively. In 4 years of testing under irrigation in the San Luis Valley of Colo., Sterling yielded 92, 105, and 107% of Crestone, Twin, and Fielder respectively. The average test weight of Sterling is similar to that of Fieldwin and 3 and 4 kg/ha higher than those of Twin and Crestone respectively. Sterling has satisfactory milling and products quality similar to that of Fielder.

Sterling was named and released by USDA-ARS and the Idaho, Oregon, and Colorado Agricultural Experiment Stations in 1980. Breeder seed will be maintained by the Univ. of Idaho, Aberdeen Res. and Ext. Ctr., P.O. Box AA, Aberdeen, ID 83210 and the Foundation Seed Program, Agronomy Dep., Colorado State Univ., Fort Collins, CO 80523.

**REFERENCES**


D.W. Sunderman, Gerald H. Ellis, and Brendan O'Connell (1)