ing in fields infested with soybean-cyst nematodes and/or phytophthora rot.

Distinguishing characteristics of Mack are purple flowers, tawny, somewhat tough, and wide yellow seeds attached to a thin, fuzzy and blackhills. Maturity, plant height, seed quality, and chemical composition of seed are nearly similar to 'Dare.' Shatter resistance is superior to that for Dare, but Mack lodges somewhat more than Dare. The disease and nematode reaction for Mack is similar to that for Pickett 71, but maturity is approximately 16 days earlier.

Yields of Mack have been similar to 'Hill' and Dare when grown where phytophthora rot and soybean-cyst nematodes were not problems but higher where either or both of these pests reduced yields. Mack is susceptible to root-knot nematodes. Other information on Mack has been published.6

The Arkansas Agricultural Experiment Station will maintain breeder seed.

3Registered by the Crop Science Society of America. USRL No. 734. Received Feb. 15, 1972.
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REGISTRATION OF MOSAIC RESISTANT LITTLE CRITTENDEN, BLACK MAMMOTH, MADOLE, AND LITTLE WOOD TOBACCOS1 (Reg. Nos. 54 to 57)

C. C. Litton, G. B. Collins, P. D. Legg, G. A. Everette, and J. B. Masterson6

'MOSAIC RESISTANT LITTLE CRITTENDEN' (Reg. No. 54), 'MOSAIC RESISTANT BLACK MAMMOTH' (Reg. No. 55), 'MOSAIC RESISTANT MADOLE' (Reg. No. 56), and 'MOSAIC RESISTANT LITTLE WOOD' (Reg. No. 57) tobacco (Nicotiana tabacum L) cultivars were developed cooperatively by the Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture and the Kentucky Agricultural Experiment Station. These cultivars were developed for use in controlling tobacco mosaic virus (TMV) in dark tobacco production and are used as air-cured (type 30) or fire-cured (types 22 and 23) cultivars. The resistant cultivars were obtained by transferring TMV resistance into four dark tobacco cultivars. A dark fire-cured (types 22) fire-cured tobacco on some soil type, mostly in the eastern five-cured districts. In tests over a 3-year period and under disease-free conditions, the resistant cultivar bloomed 3 days earlier and was equal to the recurrent parent in yields and values per 45.5 kg under air-cured conditions. When fire-cured, the parental cultivar was superior to the mosaic resistant cultivar by an average of 257 kg and $484 per ha.

Mosaic Resistant Little Wood (Reg. No. 57) is the result of a cross between 'Little Wood' and the mosaic resistant breeding line. Little Wood was the recurrent parent and the new cultivar was in the BC 5 generation when released. Mosaic Resistant Little Wood produces long, broad, droopy leaves of fine, quality best suited to gray loams or clay soils. It produces a thin-bodied leaf (suitable for export cutting) tobacco. The new cultivar is primarily fire-cured (type 22) and produces cigar-wrapper tobacco on some soil type, mostly in the eastern five-cured districts. In tests over a 3-year period and under disease-free conditions, the resistant cultivar bloomed 3 days earlier and was equal to the recurrent parent in yields and values per 45.5 kg under air-cured conditions. When fire-cured, the parental cultivar was superior to the mosaic resistant cultivar by an average of 312 kg and $365 per ha.

4Registered by the Crop Science Society of America. USRL No. 14563 is a soft white winter wheat developed from the cross 'Heines VIII'/'Alfa' (Redmond) made in 1960 at the Oregon Agricultural Experiment Station. The original selection was made from an F2 line with additional selections made from F3 head rows. Yamhill was released in 1969.

Yamhill is middull, with white stiff straw. The spike is awned, dense, inclined, and fusiform to oblong in shape. Glumes are glabrous, white, wide with narrow to midwide shoulders. Beaks are obtuse to acute and 1 to 2 mm in length. Kernels are white, middling, soft, ovate to oval and have a small germ. The crease is narrow to midsize with deep rounded cheeks. A middling to middling brushy husk is present.

Yamhill is adapted to the winter wheat growing areas of western Oregon and Washington. Yamhill is resistant to the