REGISTRATION OF STEPHENS WHEAT
(Reg. No. 614)

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'The moderate level of tolerance to eyespot caused by Cercospora herpotrichoides Fron. and the relatively early maturity of Stephens, tested as OR 65-116-70-MBW-2, are advantages in the 300 mm or less rainfall areas where early fall seeding and drought avoidance are desired. Conversely, Stephens has superior yield potential under high rainfall or irrigated conditions, as evidenced by its overall high and stable average yield performance in the Western Regional Soft White Winter Wheat Nursery.

Stephens has mature plant resistance to prevalent races of stripe rust (Puccinia striiformis West) and is resistant to prevalent races of leaf rust (Puccinia recondita Fries) Wint. F. sp. tritici (Eriks.) Carl.). It is moderately resistant to powdery mildew (Erysiphe graminis De. F. sp. tritici Em. Marchal) and carries the B14 or B16 gene for resistance to common bunt (Tilletia foetida (Walls.) L.) Liro or T. caries (De.) Tul.).

The Western Wheat Quality Laboratory SEA-FR has identified Stephens as having promising overall quality characteristics equal or superior to most of the common wheat cultivars.

Stephens is medium in height with a strong, white stem. The spike is awned, fusiform, middense, glabrous, white, midlong glumes. The shoulders are narrow, acuminate, and oblique, with beaks narrow, acuminate, and 2 to 3 mm long. The awns are flared, white, and 2 to 7 cm long. The kernel is relatively large, white, soft, and ovate with a germ and midline crescent, which is midline.

Stephens was named after the late David Stephens, superintendent of the Sherman Branch, who released many of the earlier cultivars grown in the Pacific Northwest.

Foundation seed was made available in 1977. Breeder seed is being maintained by the Crop Science Dep., Oregon State Univ., Pullman, WA 99164. The Oregon Agric. Exp. Stn. maintains Fortune germplasm in cooperation with SEA, USDA, Corvallis, Ore; senior instructor of agronomy, Pendleton, Ore; and research geneticist, SEA, University of Idaho, respectively.