REGISTRATIONS OF CULTIVARS

Registration of ‘Roane’ Wheat

‘Roane’ (Reg. no. CV-899, PI 612958) is a full-season, high yielding, apically awnleted soft red winter wheat (Triticum aestivum L.) with exceptionally high test weight and resistance to a broad spectrum of plant pathogens and insect pests. The Virginia Agricultural Experiment Station released Roane in the fall of 1999. Roane wheat was named in honor of Curtis W. Roane, Professor Emeritus, Virginia Polytechnic Institute and State University, for his contributions toward the development of disease and insect resistant small grain cultivars.

Roane was derived from the three-way cross of VA 71-54-147/‘Coker 68-15’/IN65309C1-18-2-3-2. The first two parents, VA 71-54-147 (Cfr 17449) and Coker 68-15 (Cfr 15291), are also the parents of the cultivar Saluda (Starling et al., 1986). The third parent, IN65309C1-18-2-3-2, was developed by Purdue University and obtained from the 1983 USDA-ARS Uniform Eastern Soft Red Winter Wheat Nursery (UESRWWN). The final cross was made in 1984, and the population advanced, using a modified bulk breeding method. Roane was derived as an F₃₈ head row and tested under the designation VA 93-54-429.

Coleoptiles of Roane are predominantly red. Juvenile plants exhibit a prostrate growth habit. Plant color at booting is blue green, and a waxy bloom is present on the stem and leaf sheaths. Anther color is yellow. Spikes are tapering, lax, and apically-awnleted. Glumes are medium in length and width, and have oblique shoulders with acute beaks. Kernels of Roane are red, soft, and ovate with a narrow and middeep grooves, rounded cheeks, and a midlong brush. The phenol biotypes D and L. However, Roane has expressed a significant level of resistance to Hessian fly even in areas where biotype 1 is unique in that it has some resistance mechanism that reduces the incidence and/or development of barley yellow dwarf virus. For this disease, Roane had an average score of 1.3 out of 9.0 (1 indicates no disease), compared with average scores greater than 3.8 for susceptible cultivars such as Pocahontas and FFR555W. Roane is resistant to the prevalent field populations of powdery mildew caused by Erysiphe graminis DC.