

# REGISTRATION OF VONA WHEAT<sup>1</sup>

(Reg. No. 599)

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'VONA', CI 17441, a hard red winter wheat (*Triticum aestivum* L. em Thell.), was named and released by Colorado State University in 1976 for both irrigated and dryland production in the southern and central Great Plains area. The cultivar is from the cross II 21183/C0652363//Lancer KS62136 made in 1968. II 21183 is a semidwarf spring wheat from the International Maize and Wheat Improvement Center (CIMMYT) and has the pedigree of Andes 64A/Sonora 64//Tacuari. C0652363 is a hard red winter wheat selection from the Colorado State University with the pedigree of Warrior/2/Kenya 58/Newthatch/2\* (Cheyenne/Tenmark/Mediterranean)/Hope/3/Parker. The F<sub>1</sub> of II 21183/C0652363 was crossed with a hard red winter wheat selection of the pedigree Lancer/KS62136 is derived from the cross Norin 16/3/Nebraska 60//Mediterranean/Hope/4/Kaw.

Vona originated from an individual F<sub>1</sub> plant selection followed by head selection in the F<sub>2</sub>. No further reselection occurred. Vona was identified as selection C0725049 after the F<sub>1</sub>. Vona is a sister selection to the cultivar 'Lindon'. It has been in state-wide yield trials since 1973 and was entered in the Southern Regional Performance Nursery in 1975 and 1976. In an average of 22 Colorado trials, Vona has outyielded 'Lindon' by 5%, 'Centurk' by 7%, and 'Scout 66' by 10%. It has a test weight equal to or better than that of Centurk and Scout 66 but is slightly lower than Lindon.

Vona is early in maturity, heading on an average of 1 to 2 days earlier than Scout 66. It is semidwarf in stature, averaging 5 cm shorter than Lindon and 20 cm shorter than Scout 66

over a wide range of production conditions. The stem is white, strong, and hollow. The spike is awned, dorsoventrally compressed, fusiform, lax, middense, inclined, and shattering resistant. The glumes are white, midlong, and midwide, with oblique shoulders. The beak is midwide and 4 to 7 mm long. The awns are white and average 63 mm long. The kernel is red, midlong, hard, and ovate with a midsized germ; crease wide, shallow, and rounded; brush midsized and short. Vona has seedling resistance to races 56, 15, 15B2 151, and 17 of stem rust (*Puccinia graminis* Pers. f. sp. tritici Eriks. & E. Henn.) but is susceptible to prevalent races of leaf rust [*P. recondita* Rob. ex. Desm. f. sp. tritici]. It has good milling and baking properties in comparison with currently grown hard red winter wheat cultivars. Both Vona and Lindon have lower winterhardness levels than Scout 66. Foundation seed of Vona was released to growers in eastern Colorado in the fall of 1976. Colorado State University Experiment Station will be responsible for maintenance of breeder seed.