Registration of 'Maranna' Barley

'Maranna' (Reg. no. CV-250, PI 584508) spring barley (Hordeum vulgare L.) was developed by the Oregon State University Agricultural Experiment Station and released in 1993. The Washington State University and University of Idaho Agricultural Experiment Stations joined in the release.

Maranna, tested as ORS-2, was derived from the cross OSB74133/M33. OSB74133 is a six-row spring germplasm line of Coast type developed at Oregon State University. M33 is a six-row spring Manchurian-group germplasm line developed at the University of Minnesota. Progeny were advanced in a modified pedigree system. Bulked seed from a single F₄ head row was increased and evaluated at multiple testing sites in Oregon prior to submission to the Western Regional Spring Barley Nursery (WRSBN) in 1990. ORS-2 was tested in the WRSBN for 3 yr (1990–1992). Approximately 1000 head rows were grown at Corvallis, OR, in 1992 and harvested in bulk for breeder seed.

Maranna is a six-row, smooth-awned, white-aleurone feed barley, with a semi-lax spike. It is a short-statured, lodging-resistant selection. Averaged over 48 environments in the WRSBN, the yield of Maranna was 5830 kg ha⁻¹. This yield was equal to that of 'Steptoe' and was 14% higher than 'Morex'. Averaged over 11 station-years in Oregon, the yield of Maranna was 6910 kg ha⁻¹, which was a 13% advantage over Steptoe, a 21% advantage over Morex, and a 5% advantage over 'Westbred Gusto'. The average height of Maranna over 3 yr of testing in the WRSBN was 68 cm. This represents a 16% reduction compared with Steptoe and a 25% reduction compared with Morex. Lodging scores for Maranna, which was evaluated in multilocation National Variety Performance Trials in 1983 and 1985. KAT/PM-2 was released because of its superior yield potential and uniformity compared with local cultivars. Grain yield as high as 2500 kg ha⁻¹ has been reported. Crude protein, ash, and fiber constituted 14.5, 2.24, and 4.47%, respectively, of the grain basis.

KAT/PM-2 can be grown between 50 and 1500 m altitude in dryland or stress conditions. Under dryland or stress conditions, Maranna may not achieve its grain-filling potential. In the WRSBN, the average test weight of Maranna was 61.6 kg hl⁻¹, a value comparable to Steptoe but 2% lower than Morex and the nursery average. In these same trials, the percentage of plump seed remaining on a 2-mm sieve for Maranna, Steptoe, and Morex was 74, 83, and 81%, respectively. Maranna is similar to currently available Pacific Northwest spring barley cultivars in terms of reaction to common diseases. No specific resistances have been noted; like all other currently available cultivars in this region, Maranna is susceptible to the Russian wheat aphid [Diuraphis noxia (Mordvilko)] and barley stripe rust (caused by Puccinia striiformis Westend. f. sp. hordei).

Breeder and Foundation seed will be maintained by the Oregon State University Foundation Cereal Seeds Advisory Committee in cooperation with the Washington State University Foundation Seed Project and the Idaho Agricultural Experiment Station. Seed for research purposes may be obtained from the corresponding author.

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Registration of 'KAT/PM-2' Pearl Millet

'KAT/PM-2' pearl millet [Pennisetum glaucum (L.) R. Br. Reg. no. CV-11, PI 584758] was developed by the National Dryland Farming Research Institute (KARI), Katumani, Machakos, Kenya, September 1985. KAT/PM-2 was released because of its superior yield potential and uniformity compared with currently grown local cultivars. Grain yield as high as 2500 kg ha⁻¹ has been reported. Crude protein, ash, and fiber constituted 14.5, 2.24, and 4.47%, respectively, of the grain basis.

The female parent of KAT/PM-2 was Serere 6A, which has been designated S6A, P26, or KNP26 in various trials. The male parents of KAT/PM-2 were ex-Gatunga, P164, and P165. KAT/PM-2 are all local populations with large grain size. Populations were mass selected for high grain yield potential and resistance to rust (caused by Puccinia striiformis) and leaf blight (caused by pathogens in Helminthosporium genera). In 1979, 64 crosses were made between three male parents (ex-Gatunga, P164, and P165) and Serere, which were advanced by the pedigree method to the F₄ generation. In 1983, equal quantities of seed of 12 superior F₄ lines were advanced by the pedigree method to the F₆ generation. Approximately 1000 head rows were grown at Corvallis, OR, in 1992 and harvested in bulk for breeder seed.

Maranna is susceptible to the Russian wheat aphid [Diuraphis noxia (Mordvilko)] and barley stripe rust (caused by Puccinia striiformis Westend. f. sp. hordei).

Breeder and Foundation seed will be maintained by the Oregon State University Foundation Cereal Seeds Advisory Committee in cooperation with the Washington State University Foundation Seed Project and the Idaho Agricultural Experiment Station. Seed for research purposes may be obtained from the corresponding author.

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References and Notes
