REGISTRATION OF PAHA WHEAT1
(Reg. No. 510)

R. E. Allan and O. A. Vogel2

'Paha' wheat, Triticum aestivum L., C.I. 144845, is a short-strawed club winter wheat selected from the cross 'Soowam 92'.4 'Omar' made at Pullman, Washington, in 1961. Paha was developed cooperatively by the Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture and the College of Agriculture of Washington State University. It was jointly released to growers by the Agricultural Research Service and the Washington, Idaho, and Oregon Agricultural Experiment Stations in 1970. Paha has short white straw that varies from 80 to 100 cm and usually is 10 to 20 cm shorter in plant height than Omar. Otherwise, it is morphologically similar to Omar. It has a very dense awnletted spike with brown glumes that are mid-long and mid-wide. Paha has a test weight comparable to Omar but heavier than 'Nugaines'; equal to Omar; and generally greater than 'Luke.' It is similar to Omar in growth habit, maturity, winterhardiness and kernel type. Paha is superior to Omar and Moro in resistance to lodging and shattering. In seedling emergence it is better than 'Nugaines'; equal to Omar; and generally poorer than Moro.

Paha is not adapted to areas above 46 cm of rainfall; under these conditions it tends to lodge and produces less grain than Omar. It has more tolerance to Cercospora top blight. The only known injurious insect is the Pacific grass bug. Paha resists the prevalent races of the stripe rust fungus in the Pacific Northwest. It has more tolerance to Cercospora foot rot (strawbreaker) than either Moro or Omar. Paha is comparable to Omar for resistance to common bunt. It is more susceptible to leaf rust, powdery mildew and flail smut than Omar.

Paha is recommended primarily for 28- to 38-cm (11- to 15-inch) rainfall areas of the Pacific Northwest, especially when grown under conditions favorable to stripe rust and Cercospora foot rot. It has exceeded the yields of Moro and Omar in these rainfall areas of Washington by 10 to 20% over a three-year period. Paha is not adapted to areas above 46 cm of rainfall; under these conditions it tends to lodge and produces less grain than 'Nugaines' or 'Luke.'

Paha has the excellent milling and pastry baking quality characteristics typical of Omar and is superior to Moro in all respects for traditional club wheat quality. Breeder Paha seed will be maintained by the Washington Crop Improvement Association at Washington State University, Pullman, Washington 99163.

1 Cooperative investigations between Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture and Washington Agricultural Experiment Station, Pullman, Washington 99163. Registered by the Crop Science Society of America. Received Jan. 15, 1972. 2 Plant Materials Specialist, Soil Conservation Service, U. S. Department of Agriculture, Pullman, Washington 99163. 3 Registered by the Crop Science Society of America. Received Jan. 15, 1972. 4 'Omar' made at Pullman, Washington in 1961. Paha was developed cooperatively by the Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture and the College of Agriculture of Washington State University. It was jointly released to growers by the Agricultural Research Service and the Washington, Idaho, and Oregon Agricultural Experiment Stations in 1970. Paha has short white straw that varies from 80 to 100 cm and usually is 10 to 20 cm shorter in plant height than Omar. Otherwise, it is morphologically similar to Omar. It has a very dense awnletted spike with brown glumes that are mid-long and mid-wide. Paha has a test weight comparable to Omar but heavier than 'Nugaines'; equal to Omar; and generally greater than 'Luke.' It is similar to Omar in growth habit, maturity, winterhardiness and kernel type. Paha is superior to Omar and Moro in resistance to lodging and shattering. In seedling emergence it is better than 'Nugaines'; equal to Omar; and generally poorer than Moro.

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