

NOTICE TO GROWERS RELATIVE TO RELEASE OF A
COMMERCIAL VARIETY OF GREEN, DRY-EDIBLE PEA, GARFIELD

The Agricultural Research Service, United States Department of Agriculture; the College of Agriculture Research Center, Washington State University, Pullman, Washington; and the Idaho Agricultural Experiment Station, University of Idaho, Moscow, Idaho, announce the release and naming of a new variety of green, dry-edible pea designated as Garfield. Garfield was developed by the United States Department of Agriculture, Dry Pea and Lentil Program at Pullman, Washington, in cooperation with the College of Agriculture Research Center, Washington State University.

Garfield was tested under the experimental designation WA110-9. It originated as a pureline selection taken from USDA Plant Introduction line 244104 in the summer of 1970 by F. J. Muehlbauer. WA110-9 was entered in preliminary tests in 1971 and 1972. Subsequent yield tests were conducted in 1973, 1974, and 1975 at Pullman, Colfax, and Fairfield, Washington, and at Genesee, Idaho. The selection was also yield-tested at Steptoe, Washington, in 1975.

The major improvements of Garfield over Alaska strains are greater yield, larger, more uniform seed size, and greater plant height. Data indicate that Garfield consistently outyielded the checks by 15% over the three-year period throughout the pea-growing area of the Palouse, representing an average increase of about 250 pounds per acre.

Garfield is resistant to Fusarium wilt race 1, a potentially destructive disease of peas in the Palouse region. The large seed size (22.3 g/100 seed compared with 16.4 g/100 seed for Alaska) should improve the quality of split peas, one of the major uses of dry peas; however, the large seed size should not be a disadvantage for reconstitution. The increase in plant height (83 cm for Garfield compared with 76 cm for Alaska) should improve harvesting ease, especially on ridges where lack of vine has been a problem. Garfield did not differ from the checks in resistance to powdery mildew, seed bleach, or mechanical damage.

Garfield performed well in the root rot nursery conducted at Prosser, Washington, in 1975 by J. M. Kraft. It flowers at the 14th node, compared with the 12th node for the Alaska check. The difference in flowering node and the apparent tolerance to pea root rot should delay maturity about one week in most cases when compared with Alaska strains.

Garfield is released and offered for production in the Palouse region of eastern Washington and northern Idaho. Small amounts of breeder seed may be obtained by bona fide breeders upon written request to F. J. Muehlbauer, USDA-ARS, Washington State University, Pullman, WA 99163. Breeder seed will be supplied to the Washington Crop Improvement Association and to the North Idaho Foundation Seed Association for seed multiplication purposes.