RELEASE OF DARK RED KIDNEY DRY BEAN 'FIERO'

The Agricultural Research Center of Washington State University, the Idaho Agricultural Experiment Station and the Agricultural Research Service, U.S. Department of Agriculture, jointly announce the release of a new dark red kidney dry bean 'Fiero'. This cultivar is a high yielding, upright bush, mid-season maturity, and disease resistant dark red kidney dry bean adapted to the U.S. Pacific Northwest.

Fiero is an F₆ derived F₉ line from the cross 'Montcalm'/K-59. Montcalm is a very popular commercial cultivar release by Michigan State University that has long been the dark red kidney standard; however, its yields are generally low. Germplasm line K-59 is a curly top virus (CTV) resistant light red kidney germplasm developed by D.W. Burke. Both parents have dominant I gene resistance to bean common mosaic virus (BCMV) and an intermediate level of resistance to halo blight. The stems, leaves and pods of K-59 are resistant to Race 2 of the halo blight bacterium [Pseudomonas syringa pv phaseolicola (Burkholder) Young et al.]. Fiero was selected from individual plants possessing desirable disease resistance, seed quality and architectural traits. Fiero has complete resistance to CTV and I resistance to BCMV. Fiero also has tolerance to halo blight. Fiero has an upright determinant bush growth habit (Type I growth habit) like Montcalm and resistance to lodging.
Tested across 40-location years in the Cooperative Dry Bean Nursery (CDBN) in 1997 and 1998, Fiero was the highest yielding dark red kidney bean, 17% yield higher than Montcalm. Fiero matures in 100 d, 1 to 2 d later than Montcalm. Seed size is slightly larger than Montcalm, 57 vs. 55 g 100\(^{-1}\) seeds. Fiero had acceptable canning quality for overall appearance, color and shape for a dark red kidney, in tests conducted by USDA-ARS/Michigan State Agricultural Experiment Station and New York State University.

Fiero has been released as a non exclusive public variety without Plant Variety Protection. Breeder and foundation seed will be maintained by Washington State Crop Improvement Association, Inc. Department of Crop and Soil Sciences, WSU Seedhouse, Pullman, WA 99164-6420.