REGISTRATION OF GERMLASM

Registration of Pinto GH-196 and JM-126,
Pink UNS-117 and 6R-42, and Great Northern JM-24 Dry Bean Germplasms

Pinto GH-196 (Reg. no. GP-143, PI 578263), JM-126 (Reg. no. GP-144, PI 578264), Pink UNS-117 (Reg. no. GP-145, PI 578265), 6R-42 (Reg. no. GP-146, PI 578266), and Great Northern JM-24 (Reg. no. GP-147, PI 578267) dry bean (Phaseolus vulgaris L.) breeding lines were jointly released in October 1986 by the USDA-ARS and Washington State University. They include unique advanced-generation selections in three market classes.

Pinto GH-196 is an F1 selection from the parentage 'Pinto UI-114'/2/Pinto UI-114/PI 203958/3/Pinto UI-114/4/'Red Mexican UI-35'/3/'Taisho Kintoki' (the last being a red-seeded, early-maturing Japanese bush bean). GH-196 has uniform seed, similar to but slightly smaller than that of Pinto UI-114. It produces a heavy midst of pods on a moderately spreading vine. It matures 90 to 95 d from planting. It is consistently one of the highest-yielding selections under stresses of fusarium root rot [caused by Fusarium solani (Mart.) Sacc. f. sp. phaseoli (Burkholder) W.C. Snyder & H.N. Hans.] and drought (5). It is resistant to fusarium root rot, curly top virus (CTV), and has i bc2 resistance (4) to all strains of bean common mosaic virus (BCMV) except those in Pathogroup 7 (PG7), which includes the recently discovered strain US-10 (7). Greenhouse mechanical inoculation with PG7 strains of BCMV, NL-4 US-6 (Mexican) (4.6), and US-10 (7), caused mild mosaic in GH-196. In 1992, a selection from GH-196 was released by the University of Idaho as the cultivar UI-196 (8).

Pinto JM-126 is an F1 selection from the parentage Pinto 'NW-4107'/2/Nep II/'NW-410 (2). Nep II is a white-seeded, upright bush bean developed in Costa Rica that carries the dominant I gene (3) for resistance to BCMV. JM-126 is unique among pinto bean varieties in having I gene (hypersensitive) resistance to BCMV. It is also resistant to CTV and tolerant of fusarium root rot. JM-126 matures in 95 to 100 d, has large leaves, and an erect to sprawling indeterminate growth habit (5). When it sprawls, JM-126 seems to be more susceptible to sclerotinia wilt [caused by Sclerotinia sclerotiorum (Lib.) de Bary] than other pinto bean varieties. JM-126 produces attractive large, plump seeds (2.5 to 2.8 seeds g-') and more foliage covering the pods than occurs with most pink bean varieties, leading to less sunburn of pods and seed than occurs in earlier-maturing bean varieties. Pink 6R-42 is resistant to CTV, as well as the type and NY15 strains of BCMV.

Small amounts of seed of the germplasm may be obtained from the corresponding author.

D. W. Burke, J. P. Meiners, M. J. Silbernagel,* J. M. Kraft, and H. H. Koehler (9)

References and Notes

Published in Crop Sci. 35:945 (1995).


K-42, K-59, and K-407 breeding lines of red kidney bean (Phaseolus vulgaris L.) (Reg. no. GP-148 to GP-150, PI 578272 to PI 578274) were jointly released in October 1986 by the USDA-ARS and Washington State University. These breeding lines of diverse genotypes are all resistant to curly top virus (CTV) and have the dominant I gene resistance (1) to bean common mosaic virus (BCMV). All have strong upright, determinate, red kidney bush growth habits. They range in maturity from 85 to 100 days in Washington and Idaho. All are competitive in yielding ability and similar in seed characteristics to present commercial cultivars (2,3). Cooking quality was