Registration of GIFU B-129-S9
Lotus japonicus Germlasm

GIFU B-129-S9 Lotus japonicus (Regel) Larsen germplasm (Reg. no. GP-158, PI 591056) was released by the USDA-ARS in cooperation with the Department of Molecular Biology of Aarhus University in Denmark in April 1995. Handberg and Stouggaard (1) reported that L. japonicus is suitable for genetic and molecular biology research because (i) it is a diploid (2n = 2x = 12), perennial, autogamous legume with good seed set and a sexual regeneration time of approximately 3 mo, (ii) it has a relatively small haploid genome size, estimated at 0.5 pg per haploid complement, and (iii) it is susceptible to Agrobacterium tumefaciens and transgenic plants can be regenerated after hygromycin, geneticin, or kanamycin selection. Stable transformation followed by regeneration has been demonstrated (1,2). Transformed plants can be generated efficiently and quickly using GIFU B-129-S9 germplasm.

GIFU B-129-S9 germplasm was developed from the GIFU accession B-129, which was obtained from William F. Grant of McGill University in Quebec, Canada. This material was collected near Gifu, Japan, by Professor I. Hirayoshi of Kyoto University. An inbred line of B-129 was selected at College Station, Texas Agricultural Experiment Station, Pullman, WA 99164-6402.

J. STOUGAARD AND P. R. BEUSELINCK*

References and Notes

3. J. Stouggaard, Dep. of Molecular Biology, Aarhus University, DK-8000 Aarhus C, Denmark, P.R. Beuselinck, Mog. Unit, Dep. of Agronomy, 207 Waters Hall, University of Missouri, MO 65211. Joint contribution of the USDA-ARS and the Department of Molecular Biology, Aarhus University. Registration by CSSA. Accepted 30 Sept. 1995. *Corresponding author.

Published in Crop Sci. 36:475-476 (1996).

Registration of 16 Sorghum Germplasm Lines:
Tx2892 through Tx2906 and Tx2908

Germplasm lines of sorghum [Sorghum bicolor (L.) Moench] designated Tx2892 through Tx2906 and Tx2908 (Reg. no. GP-384 to GP-399; PI 585279 to PI 585294) were released by the Texas Agricultural Experiment Station in 1994. These lines are 3-dwarf (combine height) except for Tx2906 which is 2-dwarf (dw1 Dw2 Dw3 dw4) and possess unique combinations of several grain quality factors, plant traits, and disease resistances.

The complete pedigree of each of the 16 lines is listed in Table 1. All lines are restorers in the A1 cytoplasmic-genetic male-sterility system. Reactions in A2 and A3 are either unknown or not indicated. There are 13 different basic pedigree combinations involved in these 16 lines. Pedigrees involved have publicly released materials in their background except for the following unreleased designations: SC120-6 = IS2816 (Zerazera): high leaf quality, excellent general disease resistance; SC103-12 = IS2403 (Durra GPR 148): leaf quality, large seeds. Each of these germplasm lines was developed using the pedigree method of selection and seed descent was practiced, starting with the original source of germplasm.

Data in Table 2 provides descriptive information on agronomic traits of the lines Tx2892 through Tx2908. Maturity of these materials ranges from Tx2892, which is earlier than RTx430, to approximately 4 d later. Height of lines ranges from 2-dwarf than RTx430. Tx2906 is genetically 2-dwarf and is slightly shorter than RTx430. Nine of these lines have a red color, whereas the remaining lines are white. Only Tx2903 has a mesocarp (z). None of these lines have a pigmented testa. Tx2892, Tx2895, Tx2902, and Tx2908 have a yellow endosperm (normal starch). Only Tx2906, and Tx2908 have purple plant color, whereas the remaining lines have tan plant color.

The red epicarp color and tan plant color of lines Tx2896, Tx2899, Tx2900, Tx2901, Tx2903, and Tx2905 should prove very useful in production of a hybrid array with improved leaf quality, non-staining glumes, and red seed. Hybrids evaluated using these lines...