Registration of ILWC 39 and ILWC 181:
*Cicer echinospermum* Germplasm Lines
with Resistance to *Callosobruchus chinensis* (L.)

Two *Cicer echinospermum* P.H. Davis germplasm lines, ILWC 39 (Reg. no. GP-171, PI 594331) and ILWC 181 (Reg. no. GP-172, PI 594332), were jointly developed by the ICARDA–ICRISAT Kabuli Chickpea Project at Aleppo, Syria. Both ILWC 39 and ILWC 181 are resistant to the bruchid seed beetle *Callosobruchus chinensis* (L.). In addition, ILWC 39 and ILWC 181 are resistant to fusarium wilt [caused by *Fusarium oxysporum* Schlechtend.:Fr. f. sp. *ciceris* (Padwick) Matuo & K. Sato] and to cold. ILWC 39 is resistant to leaf miner (*Liriomyza cicerina* Rondani) as well.

These lines were released in 1994 for use in breeding programs because of their resistance to seed beetle, which has not been identified to date in cultivated chickpea (*Ci. arietinum* L.), and their resistance to two or more stresses. The gene or genes for resistance to seed beetle can be easily transferred from *Ci. echinospermum* to chickpea (2).

One hundred and thirty-seven accessions of eight wild *Cicer* species were evaluated for reaction to *Ca. chinensis* in the Entomology Laboratory at ICARDA in Syria during 1988 to 1991, following the method described by Weigand and Tahhan (3). Two accessions of *Ci. echinospermum*, ILWC 39 and ILWC 181, had 0% seed infestation and no progeny per female produced during the 45-d test period in two screenings. Both accessions have spiny seed coats, and it has yet to be determined whether this is the reason for their resistance.

ILWC 39 and ILWC 181 are accessions introduced from Turkey. Both lines were uniformly resistant to *Ca. chinensis*, although ILWC 39 is a heterogeneous population and ILWC 181 is a pure line.

Both ILWC 39 and ILWC 181 have a prostrate growth habit, pink flowers, late maturity with pod dehiscence, and low yield (1). ILWC 39 (4.5 cm) is shorter than ILWC 181 (6.5 cm), and its 100-seed weight (11.4 g) is less than that of ILWC 181 (12.8 g). For both lines, the seed shape, type, and color are similar to the desi-type chickpea, which is characterized by small, angular, and colored seeds.

The seeds of these lines are being maintained by the Genetic Resources Unit of ICARDA, and small quantities can be obtained upon request for use in breeding programs.

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References and notes