to final economic biomass, and ILL 5582 has shown early vigor in Syria. ILL 5582 had a high response to total seasonal rainfall (7.23 ± 1.07 kg seed ha⁻¹ mm⁻¹ rain) in comparison with the local check (5.35 ± 1.05 kg seed ha⁻¹ mm⁻¹ rain), with the difference significant at P = 0.10, in 13 trials in northern Syria (2).


ILL 5582 has yellow cotyledons, medium-large seeds (average seed mass 4.3 g 100 seeds⁻¹), and brown testa color without pattern. It has a protein content of 24.6% and a cooking time of 39 min. Averaged over 19 trials in Syria, ILL 5582 flowered in 120 d and matured in 168 d; plants attained a height of 32 cm.

The seed of ILL 5582 is maintained by the Germplasm Program of ICARDA at Aleppo, Syria, and is available in small quantities on written request.

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Registration of ILL 5588 Lentil Germplasm Resistant to Vascular Wilt and Ascochyta Blight

ILL 5588 lentil (Lens culinaris Medikus) (Reg. no. GP-6, PI 592999) was developed and released by the International Center for Agricultural Research in the Dry Areas (ICARDA) at Aleppo, Syria. ILL 5588 has combined resistance to lentil vascular wilt [caused by Fusarium oxysporum Schlechtend.:Fr. f. sp. lentis (Vasudeva & Srinivasan) W.L. Gordon] and ascochyta blight (caused by Ascochyta lentis Vassiljevsky; syn. A. fabae Speg. f. sp. lentis Gossen et al.). It was released in Lebanon as ‘Talia 2’ in 1990.

ILL 5588 is a single-plant selection, 78S26013, made by ICARDA at Tel Hadya, Syria, in 1978 from landrace NEL 16 collected at Salt, Jordan, by the Arid Land Agriculture Development Program of the Ford Foundation in 1972. It was entered into the ICARDA germplasm collection as ILL 5588 in 1984.

ILL 5588 was artificially inoculated in the plastic house at Tel Hadya with A. fabae f. sp. lentis. Seedlings of ILL 5588 were rated 1.0 in 1984 and 2.8 in 1992 on a scale of 1 to 9, where 1 = free from ascochyta blight damage and 9 = highly susceptible and killed. Resistance was verified in the growth chamber. Resistance of ILL 5588 to both foliar and seedborne ascochyta infection was confirmed in the field in western Canada and in Australia (1).

ILL 5588 is resistant to vascular wilt in trays artificially inoculated with F. oxysporum f. sp. lentis grown in ICARDA Ontario Canada in 1993, where 4% of the plants of ILL 5588 wilted, compared with 100% for the susceptible check (ILL 4605). In Lebanon, ILL 5588 wilted 1501 kg ha⁻¹ with 1191 kg ha⁻¹ for the local check, in the Beqaa valley from the 1980-1981 to the 1988-1989 seasons. ILL 5588 wilted 1382 kg seed ha⁻¹, compared with 1982 kg seed ha⁻¹ for the local check, in 57 on-farm trials from 1987-1988 seasons. ILL 5588 has seeds (average seed mass 2.8 g 100 seeds⁻¹), and a cooking time of 35 min.

The seed of ILL 5588 is maintained by the Germplasm Program of ICARDA at Aleppo, Syria, and is available in small quantities on written request.

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References and Notes

3. W. Erskine and M.C. Saxena, International Center for Agricultural Research in the Dry Areas (ICARDA), P.O. Box 5466, Aleppo, Syria. Registration of ILL 5588 lentil germplasm resistant to vascular wilt and ascochyta blight. CROP SCIENCE, VOL. 36, JULY-AUGUST 1996.