

Wild relatives of cool season food legumes in Turkey

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Wild relatives of cool season food legumes are very important as a part of genetic diversity, and provide lots of breeding benefits such as resistance to biotic and abiotic stresses. In this review, wild species of cool season food legumes including *Cicer*, *Lens*, *Lathyrus*, *Lupinus*, *Pisum*, *Vicia*, *Vavilovia*, and their ecogeography and distribution in Turkey were presented. The genus *Cicer* L. includes of *C. arietinum* L. (the cultivated species), *C. bijugum* K.H. Rech., *C. echinospermum* P.H. Davis, *C. judaicum* Boiss., *C. pinnatifidum* Jaub. & Sp., *C. reticulatum* Ladiz. (wild progenitor) as annual wild relatives and *C. anatolicum* Alef., *C. floribundum* Fenzl, *C. heterophyllum* Contandr et al., *C. insicum* (Willd.) K. Maly, *C. isauricum* P.H. Davis, *C. montbretti* Jaub. & Sp., and *C. uluderensis* Donmez as perennial species are distributed in Turkey's flora. The genus *Lens* Miller contains *L. culinaris* ssp. *culinaris* Medik. (the cultivated species), *L. culinaris* ssp. *orientalis* (Boiss.) Handel-Mazetti (wild progenitor), *L. culinaris* ssp. *tomentosus* Ladiz., *L. culinaris* ssp. *odemensis* Ladiz., *L. ervoides* (Brign.) Grande, *L. lamottei* Czefr. and *L. nigricans* (Bieb.) Godron. All taxa are grown in Anatolian region. The genus *Lathyrus* L. is one of the largest genera and included 64 species distributed in Turkey (Guner 2012). The genus *Lupinus* L. includes of *L. albus* L., *L. anatolicus* W.Swiecicki & W.K.Swiecicki, *L. angustifolius* L., *L. hispanicus* Boiss. and Reut., *L. micranthus* Guss. and *L. pilosus* Murr. are found in Turkey. The taxa *Pisum* comprises distinctly different two species, *P. sativum* L. and *P. fulvum* Subth & Smith and all taxa are distributed in the flora of Turkey as well. The taxa of *Vicia faba* L. including *V. faba* ssp. *paucijuga* Murat., *V. faba* ssp. *faba* L. var. *minor*, *V. faba* ssp. *faba* L. var. *equina*, *V. faba* ssp. *faba* L. var. *faba* are grown in Turkey. *Vavilovia* Fed. is represented by only one species, *Vavilovia formosa* (Steven) Fed. and distributed in Turkey. Archeological remains, variation in cultivated species, wild endemic species and progenitors grown in Turkey suggested that Turkey is one of the most important variation centers and cradle of cool season food legumes and also origin center.

References:

Guner A (2012) Türkiye Bitkileri Listesi, Damarlı Bitkiler (Plant list in Turkey). Publisher: Hacettepe University