REGISTRATION OF CROP CULTIVARS

REGISTRATION OF LYONS AND AZTEC
CHICKPEAS

‘LYONS’ CHICKPEA (Cicer arietinum L.) (Reg. no. 45) is a Kabuli type chickpea selected from a landrace introduced into the Pacific Northwest prior to the turn of the century. This landrace which has been grown continuously in local gardens as a pulse crop and a coffee substitute was obtained from Mr. George Lyons of Kendrick, ID. Plants of Lyons were phenotypically selected for uniform seed coat color, seed size and rapid emergence. Lyons produces an upright, branched plant that is approximately 56 cm in height with pinnately compound leaves. The white flowers produce inflated pods which usually bear a single seed. The seeds are rough and have the bleached white color necessary for Kabuli type chickpeas sold in export markets. In seven trials conducted in northern Idaho, Lyons has produced an average seed yield of 2390 kg ha⁻¹, 25% more seed than ‘UC-5’, the chickpea cultivar currently grown commercially in this area. One hundred seed weight of Lyons has averaged 31.2 g. Lyons emerges rapidly from the cool soils characteristic of this area in the early spring and matures approximately 15 days earlier than UC-5. Seed of Lyons will initially be sold to export markets in the Middle East and Near East. This cultivar has the potential to be utilized domestically as a pulse crop, coffee extender, and petite salad bean.

‘AZTEC’ chickpea (Reg. no. 46) was introduced into the Pacific Northwest by Dr. Matt Silbernagel, USDA-ARS, Prosser, WA. Dr. Silbernagel obtained this line from Dr. Gurdip Singh of Punjab Agriculture University of Ludhiana, India. Dr. Singh obtained the line as ICC 8521 from the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). The exact origin of this line prior to ICRISAT is not known.

The small seed of Aztec has a rough, dark brown seed coat, a characteristic required of the Desi type chickpeas which are used as a pulse crop in India. Aztec has pinnately compound leaves and is only 33 cm in height. Aztec produces purple flowers and small pods containing an average of 1.4 seeds.

In seven trials conducted in northern Idaho, yields of Aztec have been equivalent to those of UC-5, averaging 1800 kg ha⁻¹. One hundred seed weight of Aztec has averaged 15.3 g. Aztec matures approximately 7 days before UC-5. Seed of Aztec will be initially sold to export markets on the Indian subcontinent or to ethnic markets in the USA. Dehulled seed and flour of Aztec could be utilized in a wide variety of domestic products.

Lyons and Aztec were released to increase the potential markets for chickpeas grown in northern Idaho. Seed production of both cultivars will be limited to one generation each of foundation, registered, and certified seed. A limited supply of breeder seed will be maintained by the Idaho Department of Agriculture for the initial sales.