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Singh, Gurmel and Bhushan, L.S. 1980. Water use, water use efficiency and

yield of dryland chickpea as influenced by P fertilization, stored soil water and crop season rainfall. *Agri. Wat. Manage.*, Netherlands. 2(4):299-302.

In a field experiment carried out for 3 years on silty loam soil, water extraction pattern, water use and its efficiency by chickpea in relation to P application, stored soil water and crop season rainfall have been investigated. Stored soil water varied from 182 to 246 mm in a meter profile and the CSR varied from 72 to 184 mm. Response of P application increased with increasing initial water storage in the soil profile. The first 60-100 days of crop growth appeared to be the most critical. Water stress during this period severely affected the yield. Rainfall after 100 days did not appear to have been fully utilized by the crop, especially when the crop had already suffered from water stress between 60 and 100 days. Compared with the control, P application increased yield, water use and water-use efficiency. Soil water depletion was 25% greater for the fertilized crop than for the unfertilized crop.