519. **Singh, Ratan, Verma, B., Prakash, C. and Prasad, S.N. 1992.** Effect of irrigation on yield and water use of Indian mustard (*Brassica juncea*), rocket Salad (*Eruca sativa*), safflower (*Carthamus tinctorius*) and pigeonpea (*Cajanus cajan*). *Indian J. Agrl. Sci.*, 62(4): 254-257.

The paper discusses the results of a field experiment conducted at Kota (Rajasthan) during 1986-89 to study the effect of 3 irrigation levels on yield, water use and water-use efficiency of Indian mustard [*Brassica juncea* (L.) Czemj. & Cosson], rocket Salad or *taramira* (*Eruca sativa* Miller) and safflower (*Carthamus tinctorius* L.). Three levels of irrigation were : 10 cm at pre-sowing (I1), I1+5 cm at branching (I2) and I2 + 5 cm at flowering (I3). The same irrigation treatments were also applied to intercropped pigeonpea [*Cajanus cajan* (L.) Millsp.] after the harvest of sorghum [*Sorghum bicolor* (L.) Moench.]. Indian mustard and rocket Salad gave the maximum yield with 2 irrigations (I2), whereas safflower and pigeonpea gave the maximum yield with 3 irrigations (I3). Total water use by the crops increased with an increase in the level of irrigation. Among the crops, safflower showed the highest water use (26.4 cm), whereas rocket Salad the lowest (20.8 cm). Water use efficiency was the maximum with 2 irrigations in Indian mustard (82.9 kg/ha-cm) and rocket Salad (61.1 kg/ha-cm), and with 3 irrigations in safflower (77.9 kg/ha-cm) and pigeonpea (82.8 kg/ha-cm).