



Dr. O. P. Premi

Principal Scientist
(Agronomy)

- 1 Date of birth : 04-09-1969
- 2 Educational Qualification : Ph.D (Agronomy) (1996); M.Sc. (Agronomy), HPKV, Palampur (1992)
- 3 Joining Date in ICAR : 22-12-1997
- 4 Joining Date in DMR : 22-12-1997
- 5 Discipline /Specialization : Agronomy and Mineral nutrition
- 6 Research Experience : 17 Years
- 7 Training/ advance exposure : Nil
in the area of work
- 8 Contribution to the Scientific advancement
 - Sesame (crop/green manure)-mustard rotation reduces orobanche infestation upto 40%. *Sesbania* green manuring in fallow-mustard system is recommended to increase the mustard seed yield by 40.0%.
 - Two drops of soybean oil/young *orobanche* shoot is potent killer of the parasite.
 - Low cost technology of PSB seed dressing (100g/kg seed) could improve mustard seed yield upto 15% in calcareous semi-arid tropics.
 - Basal application of 5 kg Zn/ha along with recommended nitrogen rates enhanced the productivity of irrigated mustard by more than 15%. Foliar spray of 0.5% P to mustard crop at 35DAS improve the seed yield upto 26.9% and apparent P recovery by 23.8%.
 - Incorporation of 2.5 t/ha mustard straw along with *Sesbania* green manure gradually build up soil organic carbon pool (active and stable), and improve productivity of mustard by 60% through resilient soil health.
- 9 Future planning of research
 - Enhancing soil resilience under mustard based systems through integrated crop management practices
- 10 Publications (best five)
 - **Premi, OP;** Kandpal, BK; Rathore, SS; Kapila Shekhawat and Chauhan, JS. 2013. Green manuring; mustard residue recycling and fertilizer application affects productivity and

sustainability of Indian mustard (*Brassica juncea* L.) in Indian semi-arid tropics. *Industrial Crops and Products* 41: 423–429.

- **Premi, OP;** Kandpal, BK; Rathore, SS; Kapila Shekhawat; and Bhogal, NS. 2012. Phosphorus use efficiency of Indian mustard (*Brassica juncea*) under semi arid conditions in relation to phosphorus solubilizing and mobilizing microorganisms and P fertilization. *National Academy Science Letters* 35 (6): 547-553.
- **Premi, OP;** Kandpal, BK; Sandeep Kumar; Kapila Shekhawat; Bhogal, NS; Rathore, SS and Chauhan, JS. 2012. Performance of Indian mustard (*Brassica juncea*) as influenced by phosphate solubilizing mobilizing micro-organism and phosphorus fertilization in semi-arid region. *Research on Crops* 13(3):944-951.
- **Premi, OP;** Rathore, SS; Kapila Shekhawat; Kandpal, BK and Chauhan; JS. 2012. Sustainability of fallow - Indian mustard (*Brassica juncea*) system as influenced by green manure; mustard straw cycling and fertilizer application. *Indian Journal of Agronomy* 57(3): 229-234.
- Kandpal, BK; **Premi, OP** and Mertia, RS.2012. Seasonal variation and low-cost agronomic practices effect growth and yield of moth bean (*Vigna aconitifolia*) in the extreme arid Thar desert *Archives of Agronomy and Soil Science* 2012, 1–16

11. Professional membership

- Indian Society of Agronomy, IARI, New Delhi
- Indian Society of Oilseed Research, DOR, Hyderabad
- Society for Rapeseed-Mustard Research, DRMR, Bharatpur