

## BRIEF BIODATA OF Dr. Parbodh Chander Sharma



1.	<b>Name</b>	Dr. Parbodh Chander Sharma
2.	<b>Date of birth</b>	07-04-1961
3.	<b>Present Position and (postal, phone &amp; email) address</b>	Principal Scientist (Plant Physiology) and OIC (Research Management Unit) Central Soil Salinity Research Institute KARNAL 132 001 (Haryana) INDIA  Email: <a href="mailto:pcsharma@cssri.ernet.in">pcsharma@cssri.ernet.in</a> <a href="mailto:pcsharma.knl@gmail.com">pcsharma.knl@gmail.com</a> ,  Phone +91-184-2291218, 2291119, Ext 179 (Office) +91-184-2230571 (Res) +91-184-2290480 (Fax)

### 4. Academic record (Bachelor's degree onward)

Degree	University/ Institution	Year	Distinction, if any
B.Sc.	Panjab University, Chandigarh	1979	
M.Sc.	Punjab Agricultural University, Ludhiana	1982	
Ph.D.	Punjab Agricultural University, Ludhiana	1986	

### 5. Research Experience:

(a) Total (yrs): 22

(b) Year wise breakup with position

Sr No	Position	Institute	Period
1	Scientist (Plant Physiology)	Central Arid Zone Research Institute, Jodhpur (Rajasthan)	12.5. 1986 to 31.12.1988
		Central Soil Salinity Research Institute, Karnal (Haryana)	1.1.1989 to 11.5.1991
2	Scientist Sr Scale (Plant Physiology)	- do -	12.5.1991 to 26.7.1998
3	Senior Scientist (Plant Physiology)	- do -	27.7.1998 to 26.7.2006
4	Principal Scientist (Plant Physiology)	- do -	27.7.2006 tp continue

## 6. Specialization:

a) **Scientific capabilities and interests** (3-5 Key words) : Salt tolerance, Growth regulation, Marker assisted selection

b) **Salient Accomplishments** (3 to 5 in bullet form)

- Mechanism of salt tolerance in *Brassica juncea*, *Cajanus cajan*, gram, different vegetable crops, forages and grasses elucidated
- Enhancement of variability for salt tolerance in Indian mustard through radiation and chemical mutagenesis
- Identification of better performing mutants of Indian mustard
- Development of recombinant inbred lines for salt tolerance in Indian mustard
- Standardization of rapid screening methodology for screening of large number of genotypes at germination stage for salinity tolerance in laboratory conditions
- Development and release of two salt tolerant genotypes of Indian mustard CS 52 and CS 54 and one genotype CS 234-2 for late sown irrigated conditions (collaborative)

c) **International Exposure**

- Research Attachment with Prof T.J. Flowers, School of Biological Sciences, University of Sussex, UK from July to Oct 1993
- Visiting Research Fellow at School of Biological Sciences, University of Sussex, UK from Jan to June 1997
- Participation in 1<sup>st</sup> Research Coordination Meeting of the IAEA CRP at IAEA, Vienna in March 2005
- Participation in 2<sup>nd</sup> Research Coordination Meeting of the IAEA CRP at University of Ghana, Accra, Ghana in Nov. 2006
- Consultancy project under IAEA TC project at University of Makassar, Indonesia during Dec. 2007

## 7. Publications

- a) (i) Research (Journals) : 35  
(ii) Books : 2  
(iii) Book Chapters : 5  
(iv) National/ International Seminar/ Symposia : 33  
(v) Bulletins/ Technical Reports : 20

Total : 95

### 1. Best 5 publications of last 10 years (to be appended)

1. Singh, G.B., **Sharma, P.C.**, Ambast, S.K., Kamra, S.K. and Khosla, B.K.. 2006. *CSSRI- A Journey to Excellence*. Central Soil Salinity Research Institute, Karnal. pp. 156.
2. **Sharma, P.C.**, Mishra, B., Singh, R.K. and Narayan, S. 2006. Adaptability of garlic (*Allium sativum*) genotypes to alkali stress. *Indian Journal of Agricultural Sciences*, 76 (2) : 71-76.
3. Singh, K.N. and **Sharma, P.C.** (Eds.) 2005. *Crop Improvement for Management of Salt Affected Soils*. Central Soil Salinity Research Institute, Karnal. pp. 221.
4. **Sharma, P.C.** 2003. Salt tolerance of Indian mustard (*Brassica juncea* L.): Factors affecting growth and yield. *Indian Journal of Plant Physiology*, **8, special issue (N.S.)**: 368 -372.
5. **Sharma, P.C.** and Kumar, P. 1999. Alleviation of salinity stress during germination in *Brassica juncea* by pre-sowing chilling treatments to seeds. *Biologia Plantarum* : **42 (3)** : 451-455.

**c) Best 10 publication of whole career (to be appended)**

1. Singh, G.B., **Sharma, P.C.**, Ambast, S.K., Kamra, S.K. and Khosla, B.K.. 2006. *CSSRI- A Journey to Excellence*. Central Soil Salinity Research Institute, Karnal. pp. 156.
2. **Sharma, P.C.**, Mishra, B., Singh, R.K. and Narayan, S. 2006. Adaptability of garlic (*Allium sativum*) genotypes to alkali stress. *Indian Journal of Agricultural Sciences*, 76 (2) : 71-76.
3. Singh, K.N. and **Sharma, P.C.** (Eds.) 2005. *Crop Improvement for Management of Salt Affected Soils*. Central Soil Salinity Research Institute, Karnal. pp. 221.
4. **Sharma, P.C.** 2003. Salt tolerance of Indian mustard (*Brassica juncea* L.): Factors affecting growth and yield. *Indian Journal of Plant Physiology*, **8**, special issue (N.S.): 368 -372.
5. **Sharma, P.C.** and Kumar, P. 1999. Alleviation of salinity stress during germination in *Brassica juncea* by pre-sowing chilling treatments to seeds. *Biologia Plantarum* : **42** (3) : 451-455.
6. **Sharma, P.C.**, Mishra, B., Singh, R.K., Singh, Y.P. and Tyagi, N.K. 2000. Adaptability of onion (*Allium cepa* L.) genotypes to alkali and salinity stresses. *Indian Journal of Agricultural Sciences*, **70** (10) : 674-679.
7. Rao, D.L.N. and **Sharma, P.C.** 1995. Alleviation of salinity stress in chickpea by *Rhizobium* inoculation or nitrate supply. *Biologia Plantarum* **37** (3) : 405-410.
8. **Sharma, P.C.** and Gill, K.S. 1992. Effect of salinity on yield and ion distribution in pearl millet genotypes. *Arid Soil Research and Rehabilitation*. **6** (3): 253-260.
9. **Sharma, P.C.**, Mali, P.C., Garg, B.K., Vyas, S.P., Kathju, S. and Lahiri, A.N. 1989. Interactive effects of soil fertility and salt stress on the activities of certain enzymes of nitrogen metabolism in mustard. *Current Science*. **58**: 390-392.
10. Sandhu, S.S., **Chander, P.**, Singh, J. and Sidhu, A.S. 1987. Effect of insecticidal sprays on the plant and secondary pest inductions in *Hirsutum* cotton in Punjab. *Agriculture Ecosystems Environment*. **19**: 169-176.

8. Awards/ Special recognitions (Limit to the best five)