

PRESENTATION OF SEED SCIENCE AND TECHNOLOGY SECTION

Seed Science and Technology
section started during 1983

PRESENTER

DR. J.P. SRIVASTAVA

S. No.	Name of Scientists	Designation	Department
1.	Dr. R.D.S. Yadav	Seed Research Officer/ Professor	Seed Technology Section
2.	Dr. R.B. Singh	Assistant Professor/ Assistant Seed Research Officer	Seed Technology Section
3.	J.P. Srivastava	SRA/ Asstt. Professor	Seed Technology Section
4.	Dr. S.C. Vimal	Asstt. Professor / Asstt. Seed Res. Officer	Seed Technology Section
5.	Dr. K.K. Srivastava	Assistant Seed Production Officer	Seed Technology Section

Research Work (2015 onwards)

- **Name of the project with funding agency:**

AICRP on NSP (Crops), ICAR

- **Project submitted (Name and communication status) - Nil**

- **Publications:**

1. Yadav, R.D.S. *Int. J. Appl. Pure Sci.Agric.1(11)*:19-21, 2015 ISSN 2394-5532 **Impact Factor 1.25**
2. Singh, R.B.; Yadav, M.K.; Giri, S.P.; Verma,D.K.,Chaudhary, R.K.and Yadav,R.D.S. *Progressive Res.- An Intl.Journal* 10(Spl-III):1287-1288, 2015. **(NAAS Rating 3.84)**
3. Singh,R.B.: Yadav, M.K.:Yadav, R.D.S.: Chaudhary, R.K.; Giri, S.P.Verma, D.K. and Verma, Saurabh. *Intl. J. Pl.Protec.* 9(1): 275-278, 2016. **(NAAS Rating 4.59)**
4. Chaudhary, R.K.; Kumar, Pradeep; Yadav, R.D.S.; Kushwaha, G.D.;Yadav, H.C; and Singh, R.B. *Progressive Research – An International Journal*, Print ISSN: 0973-6417, Online ISSN: 2454-6003, 11 (Special- iii) 173-174. **(NAAS Rating 3.84)**
5. Kumar, Mahesh; Yadav, R.D.S.;Kumar, Neeraj; Sarvjeet and Vimal, S.C. *Res. Env. Life Sci.* 9(4):493-486, 2016. **(NAAS Rating 3.74)**
6. Kumar, Mahesh,; Yadav, R.D.S.; Sarvjeet; Kumar, Neeraj and Chaudhary, R.K. *Res. Env. Life Sci.* 9(5): 613-616, 2016. **(NAAS Rating 3.74)**
7. Yadav, R.D.S.; Srvastava , J.P. In: Proc. Intl. Cong. , Nov. 10-1: pp164-167, 2016
8. Kumar, J.; Srivastava, K.K. Yadav, R.D.S. *Progressive Research*, 12 SpecialII): 836-843, 2017. **(NAAS Rating 3.84)**
9. Singh, Priyanka; Chourasiya, V.K.;; Bajpai, Ruchi; Pandey, Manish and Yadav, R.D.S. *Res. Environ. Life* 10(10): 836-841, 2017. **(NAAS Rating 3.74)**
10. Yadav, R.D.S. *Int. J. Curr. Microbial App. Sci.* (Special Issue), 7: 3539-3541, 2018 **(NAAS Rating 5.38)**
11. Singh, R.B.; Verma, S.K.; Nishad and Yadav , R.D.S. *Int. J. Curr. Microbial App. Sci.* (Special Issue, 7: 2319-7706, 2018 **(NAAS Rating 5.38)**

- **Any Recommendations/ Product development**

Teaching Work (2015 Onwards)

S. No.	Semester	Course No.	Course Title	Credit	Self Credit Load
1	I st	SST-611	Hybrid Seed Production	2(1+1)	1.0
2.		SST-612	Planning, Seed Movement and Quality Control	3(2+1)	1.0
3.		SST-614	Testing for Genuineness and Purity of Cultivars	2(1+1)	1.0
4.		SST-591	Seminar	1(0+1)	0.5
5.	II nd	SST 521	Seed Legislation & Certification	3(2+1)	1.5
6.		SST -621	DUS Testing for Plant Variety Protection	3(2+1)	1.5
7.		SST 622	Advances in Seed Science Research	1(1+0)	0.5
8.		CEL421(N) I-6	Seed Processing in Cereals Pulses and Oilseeds crops including Bio-Diesel	3(1+2)	
9.		SST-691	Seminar	2(0+2)	0.5

No. of Students guided.

M.Sc.- 4

Ph.D. -4

No. of Students guiding.

Ph.D. -3

Work Plan for 2018-19

- Execution of experiments decided during annual group meeting of AICRP-NSP (Crops) allotted for the centre.
- Teaching- The courses assigned will be taught.
- The students allotted will be guided.

Research work (2015- Onwards)

Name of the Project with funding agencies: AICRP on National Seed Project (Crops). Funded by ICAR.

Project submitted (Name and communication status): Nil

Publications:

1. Singh, S. K.; **Singh, R. B.** and Singh, V. K. (2015). *Annals of plant and soil Research* **17**(Special issue):29-30. (NAAS Rating-4.39)
2. **Singh, R. B.**; Singh, V. K.; Dixit, S.; Giri, S. P. and Yadav, R. D. S. (2015). *Annals of plant and soil Research* **17**(Special issue):290-291. (NAAS Rating-4.39)
3. Singh, V. K.; Gupta, P.K.; **Singh, R. B.** and Singh, J.P. (2015). *Annals of plant and soil Research* **17** (Special issue):565-567. (NAAS Rating-4.39)
4. Singh, V. K.; Gupta, P.K.; **Singh R. B.** and Singh, J.P. (2015). *Annals of plant and soil Research* **17** (Special issue):568-569. (NAAS Rating-4.39)
5. **Singh, R.B.**; Yadav, M.K.; Giri, S.P.; Verma, D.K.; Chaudhary, R.K.; Verma, Saurabh.; and Yadav , R.D.S. (2015). *Progressive Research – An International Journal*, Print ISSN: 0973-6417, Online ISSN: 2454-6003, **10** (Special- iii) 1287-1288. (NAAS Rating-3.84)
6. **Singh, R.B.**; Yadav, M.K.; Yadav , R.D.S.; Chaudhary, R.K.; Giri, S.P.; Verma, D.K.; and Verma, S. (2016). *International Journal of Plant Protection*, **9** (1): 275-278. (NAAS Rating-4.59)
7. Chaudhary, R.K.; Kumar, Pradeep.; Yadav , R.D.S.; Kushwaha, G.D.; Yadav, H.C.; and **Singh, R.B.** (2016). *Progressive Research – An International Journal*, Print ISSN: 0973-6417, Online ISSN: 2454-6003, **11** (Special- iii) 173-174. (NAAS Rating-3.84)
8. Verma, D.K.; Pandey, Alok.; Giri, S.P.; Verma, Saurabh. and **Singh, R.B.** (2016). *Progressive Research – An International Journal*, Print ISSN: 0973-6417, Online ISSN: 2454-6003, **11** (Special- iii) 82-84. (NAAS Rating-3.84)
9. Verma, D.K.; Pandey, Alok.; Giri, S.P.; Verma, Saurabh.; **Singh, R.B.**; Prakash, Nitendra and Singh, Janardan . (2015) *Progressive Research – An International Journal*, Print ISSN: 0973-6417, Online ISSN: 2454-6003, **10** (Special- iii) 1177-1178. (NAAS Rating-3.84)
10. Vishwakarma, S.R.; Chaudhary, R.K.; Verma, O.P.; Kushwaha, G.D.; Yadav , R.D.S.; Yadav , C.B.; Verma, G.P.; Yadav, H.C.; **Singh, R.B.** and Yadav, Ramkalp (2016). *Progressive Research – An International Journal*, Print ISSN: 0973-6417, Online ISSN: 2454-6003, **10** (Special- iii) 1569-1572. (NAAS Rating-3.84)
11. **Singh, R.B.**; Singh, Gurdeep and Nishad R.N. (2016). *Progressive Research- An international Journal* . **11**(Special-v):2997-2998. (NAAS Rating-3.84)
12. Nishad, R. N. and **Singh, R. B.** (2017). *Bull. Env. Pharmacol. Life Sci.*, Vol **6** Special issue [1] 2017: 316-318. (NAAS Rating-4.95)
13. **Singh, R. B.** ; Nishad, R. N. and Singh, R. P. (2017). *Bull. Env. Pharmacol. Life Sci.*, Vol **6** Special issue [1] : 333-336 . (NAAS Rating-4.95)
14. Singh, R. K.; Pandey, A. K.; **Singh, R. B.** and Nishad, R. N. (2017) . *Bull. Env. Pharmacol. Life Sci.*, Vol **6** Special issue [1] 2017: 337-341. (NAAS Rating-4.95)
15. Nishad, R.N., **Singh, R.B.**; Singh , A.K.; Singh, S.P. and Yadav, S.K. (2017) *Journal of Pharmacognosy and Phytochemistry* SP1: 423-426 (NAAS Rating- 5.21)
16. **Singh, R. B.**; Verma, S. K.; Nishad, R. N. and Yadav, R. D. S. (2018). *Int.J.Curr.Microbiol.App.Sci* ., ISSN: 2319-7706 Special Issue-7: xx-xx (NAAS Rating -5.38)

Any recommendations/ Product development:

- Bee pollination (*A. mellifera*) play major role in improving quality of seed production in berseem.
- Emamectin benzoate (Proclaim 5 SG) @ 40mg /Kg seed and Spinosad (Tracer45 SC) @4.4 mg /Kg seed are effective against Pulse beetle, *C. chienensis* in pigeonpea.

Teaching work (2015- Onwards)

Semester	Course No.	Name of course	Credit hours	Self Credit Load
I	ENT-211(N)	Insect morphology and Systematic	3(2+1)	1.0
	SST-612	Planning, seed movement and quality control	3(2+1)	1.0
II	ENT-322(N)H	Insect pests of Fruits& ornamental plants	3(2+1)	1.5
	ENT-121(v)	Fundamental of Entomology	4(3+1)	1.5
	ENT-527	Storage pests and their Management	2(1+1)	1.0
	SST-524	Seed Entomology	3(2+1)	1.5
	SST-522	Seed Processing and Storage	3(2+1)	1.0
	SST-623	Advances in Seed science in post harvest management	3(2+1)	1.0
	ENT-591	M.Sc. (Ag.) Seminar	1(0+1)	0.5
	ENT-691		1(0+1)	0.5
	ENT-600	M.Sc. Research	Variables	
	ENT-600	Ph.D. Research	Variables	
	SST-600	M.Sc. Research	Variables	

No. of Students guided :

M.Sc. - 9 Ph.D. - Nil

No. of Students guiding :

M.Sc. - 4 Ph.D. - 1

Work Plan for 2018-19 :

- Execution of experiments decided during annual group meeting of AICRP-NSP (Crops) allotted for the centre.
- Teaching- The courses assigned will be taught.
- The students allotted will be guided.

Research Work (2015 onwards)

- **Name of the project with funding agency**

AICRP on NSP (Crops), ICAR

- **Project submitted (Name and communication status) - Nil**

- **Publications:**

1. L.P. Mishra and J. P. Srivastava (2015). *Res. In Environment and Life Sciences*. 8 (3): 459-46. (NAAS Rating-3.74)
2. Mohd. Said, J.P. Srivastava, Kumud Singh and V.P. Dubey (2015). *Ann. of Pl. and Soil Res*. 17:623-626 (NAAS Rating-- 4.39)
3. Priyanka Singh, Ruchi Bajpayee, J.P. Srivastava, Kumud Singh and Poonam Singh (2015). *Ann. Of Pl. and Soil Res*. 17:627-629. (NAAS Rating-- 4.39)
4. J.P. Srivastava Mohd. Said, Deepak Baboo and Kumud Singh. *Progressive Res.-An Intrl. Journal* 11 (Spl):85-87 (NAAS Rating-- 3.84)
5. Deepak Baboo, J.P. Srivastava , Priyanka Singh, Rajesh Saini and Lucky Tiwari (2016). *Progressive Res.-An Intrl. Journal* 11 (Spl): 3937-3939 (NAAS Rating--3.84)
6. H.K. Singh, Indraman, J.P. Srivastava, M.P. Chauhan, K.N. Maurya and M.K. Maurya (2017). *Progressive Res. -An Intrl. Journal* 12 (Spl):731-732 (NAAS Rating-3.84)
7. Shivangi, Abhishek, J.P. Srivastava and Kiran Singh (2017). *Journal of Pharmacognosy and Phytochemistry* Sp.1: 03-05. (NAAS Rating--5.21)

- **Any Recommendations/ Product development: Technique for the detection of *Ascochyta rabiei*, *Bipolaris oryzae* and *Xanthomonas campestris* pv. *campestris* were standardized during 2015-2017.**

Teaching Work (2015 Onwards)

S. No.	Semester	Course No.	Course Title	Credit	Self Credit Load
1.	1 st	PP-511	Plant Pathological Techniques	2(0+2)	1.0
2.		PP-513	Introductory Bacteriology	3(2+1)	1.5
3.		PP-516	Seed Pathology	3(2+1)	1.5
4.		PP-613	Advanced Bacteriology	3(2+1)	1.5
5.		SST-614	Testing for Genuineness and Purity of Cultivars	2(1+1)	1.0
6.		SST- 612	Planning, Seed Movement and Quality Control	3(2+1)	1
7.		SST-515	Seed Pathology	3(2+1)	1.5
8.		SST-591	M.Sc. (Ag.) Seminar	1(0+1)	0.5
9.		SST-691	Ph.D. Seminar	1(0+1)	0.5
9.	2 nd	PP-527	Plant Disease Management	3(2+1)	1.5
10.		PP-528	Plant Disease Clinic	1(0+1)	1.0
11.		PP-591	M.Sc. (Ag.) Seminar	1(0+1)	0.5
12.		PP-621	Plant quarantine and pest risk analysis	1(1+0)	1.0
13.		PP-623	Epiphytology forecasting and assessment of losses	3(2+1)	1.5
14.		PP-691	Ph.D. Seminar	1(0+1)	0.5
15.		SST-622	Advances in Seed Science Research	1(1+0)	0.5
16.		SST-591	M.Sc. (Ag.) Seminar	1(0+1)	0.5
17.		SST-691	Ph.D. Seminar	1(0+1)	0.5

No. of Students guided :

M.Sc.- 5

No. of Students guiding

M.Sc.-7

Ph.D.- 1

Work Plan for 2018-19

- Execution of experiments decided during annual group meeting of AICRP-NSP (Crops) allotted for the centre.. Besides, the local seed borne disease problem will be tackled as and when required.
- Teaching- The courses assigned will be taught.
- The students allotted will be guided.
- Seed health testing .

Research Work (2015 onwards)

- **Name of the project with funding agency: AICRP on NSP (Crops), ICAR**
- **Project submitted (Name and communication status) – Nil**
- **Publications:**
 - 1 .Srivastava, K.K.; **Vimal, S.C.**; Giri, S.P. and Verma, K. (2016). *International Journal of Agricultural Sciences*, 12(2):70-72. **(NAAS rating:4.20)**
 2. **Vimal, S.C.**; Sarvjeet; Gaur. S.C. and Kumar, P. (2016). *Progressive Research-An international Journal*, 11(Special-VI):3779-3781. **(NAAS rating:4.29)**
 - 3.**Vimal, S.C.**; Kumar, P. and Srivastava, K.K. (2017). *Progressive Research-An International Journal*, 12(Special-II):1447-1450. **(NAAS rating:4.29)**
 4. Kumar, S.; **Vimal, S.C.** and Prakash, S. (2016). *Progressive Research-An International Journal*, 11:1056-1058. **(NAAS rating:4.29)**
 - 5.**Vimal, S.C.**; Singh, A.K. and Santosh (2016). *Progressive Research-An International Journal*.11:546-548. **(NAAS rating:4.29)**
 6. Kumar, S.; Srivastava, K.K.; **Vimal, S.C.** and Sarvjeet (2015). *Res. Environ. Life Sci.*, 9(1):46 - 48. **(NAAS rating:3.74)**
 7. Kumar, S.; Srivastava, K.K.; **Vimal, S.C.** and Sarvjeet (2015). *Res. Environ. Life Sci.*, 8(4):809 - 811. **(NAAS rating:3.74)**
 8. Kumar, P.; **Vimal, S.C.**; Sarvjeet and Gupta, J.P. (2017). *Journal of Pharmacognosy and Phytochemistry*, 6(5):22-26. **(NAAS rating:5.21)**
 9. Sarvjeet; **Vimal, S.C.**; Gupta, J.P. and Singh, A. (2017). *Journal of Pharmacognosy and Phytochemistry*, 6(3):835-840. **(NAAS rating:5.21)**
 10. Kumar, P.; **Vimal, S.C.** and Kumar, A. (2017). *Int.. J. Curr. Microbiol. App. Sci.*, 6(9):3260- 3265. **(NAAS rating:5.38)**
 11. Sarvjeet; **Vimal, S.C.** and Kumar, P. (2017). *Int.. J. Curr. Microbiol. App. Sci.*, 6(9):665-679. **(NAAS rating:5.38)**
 12. Prakash, S.; Singh, P.; Singh, K. A. P.; Singh, V.; Singh, R.; **Vimal, S.C.** and Sharma. S. K. (2017). *Int.. J. Curr. Microbiol. App. Sci.*, 6(11):1327-1334. **(NAAS rating:5.38)**
 13. Gupta, J.P.; **Vimal, S.C.**; Kumar, A.; Kushwaha, G.D. and Kumar, P. (2018). *Journal of Pharmacognosy and Phytochemistry*, 7(1):1017-1025. **(NAAS rating:5.21)**
 14. Sarvjeet; **Vimal, S.C.**; and Kumar, A. (2018). *Journal of Pharmacognosy and Phytochemistry*, 6(3):1883-1887. **(NAAS rating:5.21)**
 15. Gupta, J.P.; **Vimal, S.C.**; Kumar, A.; Kushwaha, G.D. and Srivastava, J.P. (2018). *The Pharma Innovation Journal*, 7(3):35-40. **(NAAS rating:5.03)**
- **Any Recommendations/ Product development**

Teaching Work (2015 Onwards)

Times	Semester	Course No.	Course Title	Credit	Self Credit Load
1.	1st	SST-514	Seed Physiology	3(2+1)	1.5
2.		GPB-515	Seed Production, Testing and Certification	3(2+1)	1.5
3.		SST-613	Seed Vigour and Crop Productivity	3(2+1)	1.5
4.	2nd	GPB-221 (V)	Principal of Seed Technology	3(2+1)	1.5
5.		CEL-421 (N)1-6	Processing of Cereals, Pulses and Oil Seed Crops including Biodiesel	3(1+2)	1.5
6.		SST-522	Seed Processing and Storage	3(2+1)	1.5
7.		SST-523	Seed Quality Testing	3 (2+1)	1.5
8.		PGS-503 (E)	Intellectual Property and its Management in Agriculture	1(0+1)	1.0
9.		GPB-624	Advance Seed Technology	3(2+1)	1.5
10.		SST-623	Advances in Post Harvest Management of Seed	3(2+1)	1.5

No. of Students guided :

M.Sc. (Ag): 05
Ph. D.:04

No. of Students guiding:

M.Sc.-05
Ph.D.- 01

Work Plan for 2018-19

- Execution of experiments decided during annual group meeting of AICRP-NSP (Crops) allotted for the centre..
- Teaching- The courses assigned will be taught.
- The students allotted will be guided.
- Seed testing

Research Work (2015 onwards)

- **Name of the project with funding agency**
AICRP on NSP (Crops), ICAR
- **Project submitted (Name and communication status)- Nil**
- **Publications:**
 1. Kumar, J.; Srivastava, K. K.; and Yadav, R. D. S. (2017). *Progressive Research-An International Journal*, vol.12 (Special - I): 836-843. (**NAAS rating-3.84**)
 2. Vimal, S.C.; Kumar, P. and Srivastava, K. K. (2017). *Progressive Research-An International Journal*, 12 (Special-II):1447-1450. (**NAAS rating – 3.84**)
 3. Srivastava, K. K.; Vimal, S.C.; Giri, S.P. and Verma, A. (2016). *International Journal of Agricultural Sciences*, 12(2):70-72. (**NAAS rating- 4.82**)
 4. Kumar, S.; Srivastava, K.K.; Vimal, S.C. and Sarvjeet (2015). *Res. Environ. Life Sci.*, 9(1):46-48. (**NAAS rating:3.74**)
 5. Kumar, S.; Srivastava, K.K.; Vimal, S.C. and Sarvjeet (2015). *Res. Environ. Life Sci.*, 8(4):809-811. (**NAAS rating:3.74**)
- **Any Recommendations/ Product development:** Maintenance breeding of Rapeseed mustard Varieties.

Teaching Work (2015 Onwards)

S. No.	Semester	Course No.	Course Title	Credit	Self Credit Load
1.	I st	SST 511	Floral biology, Seed Development and Maturation	2(1+1)	1.0
2		SST 513	Seed Production in field crops	3(2+1)	1.0
3.		SST 514	Seed Physiology	3(2+1)	1.5
4.		SST 613	Seed Vigour & Crop Productivity	3(2+1)	1.5
5.		G.P.B. 515	Seed Production, Testing and Certification	3(2+1)	1.5
6.	II nd	GPB 221(N)	Principles of Seed Technology	3(2+1)	1.5
7.		SST 521	Seed Legislation & Certification	3(2+1)	1.5
8.		SST 621	DUS Testing for Plant Variety Protection	3(2+1)	1.5
9.		SST 624	Seed Senescence	2(2+0)	1.0
10.		CEL421(N) I-1	Seed Production Technology	3(1+2)	1.5
11..		PGS 503(E)	Intellectual Property and its Management in Agriculture	1(0+1)	0.5

No. of Students guided :

M.Sc.- 4

Ph.D.- 1

No. of Students guiding

M.Sc.-3

Ph.D.- 1

Work Plan for 2018-19

- Execution of experiments decided during annual group meeting of AICRP-NSP (Crops) allotted for the centre.
- Teaching- The courses assigned will be taught.
- The students allotted will be guided.