

Seed Tech News



ISST:
**Disseminating Knowledge of
Seed Science & Technology**

**Volume: 46, No. 1&2,
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Indian Society of Seed Technology
in collaboration with
**Department of Agriculture, Cooperation
and Farmers Welfare**

**Announces to Organize
XIV National Seed Seminar
During January 28-30, 2017**

***“Food Security Through Augmented
Seed Supply Under Climate
Uncertainties”***

at

**ICAR-Indian Agricultural Research Institute
New Delhi 110 012**

**Details would be soon available at
www.nssiari2017.in**

Secretary : Shiv K Yadav
Chief Editor : PK Agrawal
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XIX Annual Breeder Seed Review Meeting

[January 27, 2016, ICAR-National Bureau of
Plant Genetic Resources, New Delhi]

Seed Division, ICAR organized XIX Annual Breeder Seed Review Meeting at ICAR-NBPGR, New Delhi on 27 Jan. 2016. Hon'ble Dr. S. Ayyappan, Secretary DARE and DG ICAR inaugurated the meeting. Dr. J.S. Chauhan, ADG (Seed) conveyed the meeting attended by Dr. J.S. Sandhu, DDG (CS), ICAR; Sh. R.K. Singh, Joint Secretary (Seed), DoAC & FW; Dr. B.B. Singh, ADG (O&P), ICAR; Dr. K. C. Bansal, Director, ICAR-NBPGR; Dr. S. Rajendra Prasad, PD, ICAR-IISS, Mau and over 100 stake holders from SAUs, ICAR-Institutes, State Departments of Agriculture, DoAC & FW, State Seed Certification Agencies, National / State Seed Corporations. During the technical session, in-depth deliberations were undertaken for the various issues like non-lifting of breeder seeds and conversion of Breeder Seed into Foundation/Certified Seed; complaints of stakeholders about quality of Breeder Seed produced at some centres; shortfall and varietal mismatch in seed production; revising calendar of operations and fixation of Breeder Seed price. The breeder seed production in field crops has touched 104766.68q during 2014-15 and expected to reach 110706.15q during 2015-16. The proceeding of XIX ABSRM is available in official website of ICAR-IISS, Mau (www.seedres.in). Fig. Dr S Ayyappan, Secretary DARE & DG ICAR addressing the participant scientist; on the dias Dr JS Chauhan ADG (Seeds), ICAR and Dr S Rajendra Prasad, Director, IISS, Mau.



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Proceedings of the XIX Annual Breeder Seed Review Meeting held on January 27, 2016 at ICAR-National Bureau of Plant Genetic Resources, New Delhi

XIX Annual Breeder Seed Review Meeting was inaugurated by the chief guest, Hon'ble Dr. S. Ayyappan, Secretary DARE and DG ICAR on 27th January 2016 at ICAR-National Bureau of Plant Genetic Resources, New Delhi. In his opening remarks, he highlighted the role of Breeder Seed in sustaining the seed chain and stressed upon breeding institutes and scientists to take an important responsibility for bringing new crop varieties into seed chain. Dr. J.S. Chauhan, ADG (Seed), ICAR welcomed the dignitaries and the delegates. He informed the audience about the efforts and actions taken to augment the breeder seed production to vitalize the seed chain. He also suggested exploring the possibility of utilizing state department farms to meet the seed requirement and taking seed production in non-traditional areas during off-season especially of pearl millet and maize in Rajasthan. Dr. J.S. Sandhu, DDG (CS), ICAR chaired the inaugural session, in his opening remarks, he emphasized for revisiting Seed Multiplication Ratio of various crops to address the concerns of decreasing indents especially wheat, maize, lentil, chickpea and groundnut and suggested a comprehensive analysis pertaining to state wise adoption of new varieties, Seed and Variety Replacement Rates. He called for review of seed rolling plans of various states for increasing indents for abating varietal mismatch in era of changing climate. He called upon National Seed Corporation and other public sector seed giants for promoting hybrids through Front Line Demonstrations for popularizing and inclusion of public sector bred hybrids in seed chain. Sh. R.K. Singh, Joint Secretary (Seed), DoAC & FW, Co-Chairman of the meeting echoed issues with respect to Breeder Seed labelling, BSP centres failing to part package of practices to indenters, major shortfalls in breeder seed production particularly of oilseeds and pulses during 2014-15, Breeder Seed pricing and stressed upon possible replacement of GOT with DNA finger printing for quick and reliable method of genetic purity assessment. Dr. S. Rajendra Prasad, Project Director, ICAR-DSR, Mau presented Action Taken Reports on issues emerged in the previous meeting held

at ICAR-Regional centre for NEH, Umiam, Meghalaya during January 7-8, 2015 and also suggested about the setting up a national network of seed grid for Breeder Seed in select locations for soybean, chickpea, groundnut etc. Dr. B.B. Singh, ADG (O&P), ICAR, New Delhi stressed upon issues related to seed production of protected varieties, wherein he requested all SAU's/ICAR institutes to share Nucleus Seed of licensed variety for Breeder Seed production for the best interest of farming community. He also informed the participants about the Cabinet's decision to assign the responsibility to ICAR and DAC & FW for establishing 'Seed Hubs' for production of seeds of pulses and advised them to submit suitable proposals for consideration. He was of the opinion that International Year of Pulses-2016 should duly be celebrated in a befitting manner and there should not be any short-fall of breeder seeds of pulses. Dr. K. C. Bansal, Director, NBPGR, New Delhi while welcoming the Chief Guest and other dignitaries spoke about wealth of germplasm at NBPGR, a treasure trove for present and future Crop Improvement to mitigate the challenges of climate change, and threats from prevalent and new emerging disease and pests. He called the participating crop breeders to deposit with NBPGR samples of all the released varieties for conservation. During the technical session, in-depth deliberations were undertaken for the various issues like non-lifting of breeder seeds and conversion of Breeder Seed into Foundation/Certified Seed; complaints of stakeholders about quality of Breeder Seed produced at some centres; shortfall and varietal mismatch in seed production; revising calendar of operations and fixation of Breeder Seed price. Some of the stakeholders such as MSSC, RSSC, MPSSC and NSC expressed concerns regarding the quality pertaining to occurrence of off-types leading to rejection of subsequent generation of seed crop. Further, these public sector seed producing agencies requested the house to bring the Breeder Seed into the purview of seed certification. NSC requested DoAC & FW for funding all states to organize FLD's for proper utilization of test stock seeds. Over 100 stake holders from SAUs, ICAR-Institutes, State Departments of Agriculture, DoAC & FW, State Seed Certification Agencies, National/State Seed Corporations participated in the meeting.

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The following issues action plan emerged after in depth deliberations for further strengthening Breeder Seed production and its monitoring

- DoAC should issue a directive to the indenting agencies for strictly adhering to the earlier decision of paying 25% advance of breeder seed production to ICAR-DSR, Mau, otherwise no breeder seed indent will be taken up for production [Action: JS (Seed), DoAC & FW; ADG, (Seed), ICAR and PD, DSR, Mau]
- For compensatory seed production during off-season especially of soybean, groundnut and pulses, separate breeder seed price should be fixed to mitigate the increased cost of production [Action: JS (Seed), DoAC & FW; ADG, (Seed), ICAR and PD, DSR, Mau]
- All the centers shall abide in ensuring the timely supply of breeder seed of allocated varieties to indenters well before the due as prescribed in the operation of calendar. In case of exigency, the BSP centres should advice the allottee for the suitable date not more than a week from the cut-off date. The centre should also communicate the lifting and non-lifting position by the allottees to ICAR-DSR Mau and DoAC & FW for timely action. [Action: JS (Seed), DoAC & FW; ADG, (Seed), ICAR and PD, DSR, Mau]
- Sale rate of breeder seed of special quality traits such as QPM maize hybrid, sweet corn hybrid may be fixed separately other than the normal varieties of the same crop. [Action: JS (Seed), DoAC & FW; ADG, (Seed), ICAR and PD, DSR, Mau]
- Dual pricing policy for breeder seed to the public and private indenters to be implemented from next year. [Action: JS (Seed), DoAC & FW; ADG, (Seed), ICAR and PD, DSR, Mau]
- DoAC & FW should issue directives to the Department of Agriculture of Bihar, UP, MP and some other states to make pending payment towards the cost of breeder seed supplied to them earlier to avoid audit objections and funds for continuing the effective production of breeder seed. [Action: JS (Seed), DoAC & FW; ADG, (Seed), ICAR and PD, DSR, Mau]
- Form of BSP-VI should invariably be furnished by concerned agency to know the conversion of Breeder Seed to foundation seed and certified seed. [Action: JS (Seed), DoAC & FW; ADG, (Seed), ICAR and PD, DSR, Mau]
- The Breeder Seed price of chickpea, field pea, garden pea, wheat soybean and groundnut was reduced by 10% and for rest of the crops, the price remains the same as fixed in the XVIII Annual Breeder Seed Review Meeting held during January 7-8, 2015, at Umiam, Meghalaya. It was also agreed that the price of breeder seed will be reviewed and revised during 2018 only. The revision of price of breeder seed should be based on cost of production. Accordingly, all the nodal officers should workout the cost of production of breeder seed as well as seed multiplication rate (SMR). [Action: BSP Centres and PD, DSR, Mau]
- The breeder seed production centres should continue to abide by the extant guidelines of Council concerning the licensing of varieties for commercialization. [Action: BSP Centres and PD, DSR, Mau]
- Jodhpur Agricultural University and MPUAT, Udaipur should organize off-season hybrid seed production of Pearl Millet and Maize respectively during the current Rabi/Summer season and also organize field days and awareness programmes for taking up hybrid seed production in large scale in new areas. [Action: BSP Centres and PD, DSR, Mau]

Mandates of the Division of Seed Science and Technology

ICAR-Indian Agricultural Research Institute, New Delhi

- Development of seed production technology
- Basic, strategic and applied research on seed quality assessment, maintenance and enhancement
- Standardization of seed testing procedures
- Facilitating implementation of Seeds Act, Plant Variety Protection and Farmers Act and issues related to seed marketing
- Strengthening human resource development in seed science and technology
- Enhancing quality seed availability through Farmers' participation

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DIVISION OF SEED SCIENCE AND TECHNOLOGY

ICAR- Indian Agricultural Research Institute, New Delhi 110 012

LIST OF PG STUDENTS IN SEED SCIENCE AND TECHNOLOGY AND THEIR RESEARCH TOPIC DURING 2015-16

S.No.	Name of the Student	Roll No	Email-ID	Chairperson	Topic of Research
PhD					
1.	Prarveen Kumar Singh	10046	praveen.agrbhu@gmail.com	Dr SK Yadav	Assessment of genetic purity and enhancement of seed longevity in rice (<i>Oryza sativa</i> L) hybrids
2.	Sumeet Kumar Singh	10186	sumitiasbhu@gmail.com	Dr BS Tomar	Optimization of seed production technology in garden pea (<i>Pisum sativum</i> var. <i>hortense</i> L)
3.	Vishwanath Sharma	10348	vishu_77@yahoo.in	Dr Sudipta Basu	Seed composition and its relation with vigour and storage behaviour in maize (<i>Zea mays</i> L)
4.	Hrishikesh Sutradhar	10350	hrishikesh_sutradhar@yahoo.com	Dr VK Pandita	Studies on hybrid seed production in carrot (<i>Daucus carota</i> .L)
5.	C. Kiran Kumar Reddy	10351	kiranreddy.chnnem@gmail.com	Dr SK Jain	Testing hybridity in tomato (<i>Solanum lycopersicum</i> L) using morphological and molecular marker
6.	Archana Sanyal	10527	archana0811bhu@gmail.com	Dr Monika A Joshi	Studies on hybrid seed production of wheat (<i>Triticum aestivum</i> L) under different temperature regimes
7.	Niraj Kumar Jha	10529	nirajkumar.jha8@gmail.com	Dr VK Pandita	Studies on enhancement of seed productivity, quality and storability in onion (<i>Allium cepa</i> L)
8.	Murali CN	10551	muralicnagri@gmail.com	Dr SK Jain	Seed development, maturation and characterization in selected marigold (<i>Tagetes</i> sp. L)
9.	Swami Sunil Ramling	10666	swami86.sunil@gmail.com	Dr Sushil Pandey	Morpho-molecular characterization of foxtail millet [<i>Setaria italica</i> (L) Beauv.] conserved in national gene bank*
10.	Sunny Kumar Mundotiya	10667	sunny.mundotiya007@gmail.com	Dr Monika A Joshi	Development and evaluation of mini-core collection for various traits associated with seed longevity in Soybean (<i>Glycine max</i> L)*
11.	Deshmukh Vinod Gulabrao	10668	vinodiari1@gmail.com	Dr Sudipta Basu	Studies on development of hybrid seed production technology in cms based cauliflower (<i>Brassica oleracea</i> var. <i>botrytis</i> L) hybrids*

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S.No.	Name of the Student	Roll No	Email-ID	Chairperson	Topic of Research
12.	Venkatesha MG	10669	venkatamg02@gmail.com	Dr Atul Kumar	Studies on impact of sheath rot [<i>Sarocladium oryzae</i> (Sawada) W. Gams & D. Hawksw] of paddy (<i>Oryza sativa</i> L) on seed quality, its diversity and development of management strategy*
13.	Mrinali M Mandape	10670	mrinalimandape@gmail.com	Dr SK Yadav	Understanding the mechanisms of priming induced physio-biochemical and molecular changes under moisture stress in seeds of soybean (<i>Glycine max.</i> L. Merr.)*
14.	Vishwanath Rohidas Yalamalle	10705	vishwanath_yal@yahoo.com	Dr BS Tomar	Studies on application of polymer, polyamines and scape regulation on seed yield and quality in onion (<i>Allium cepa</i> L)*
	MSc				
15	Praveen Patted	20596	praveen.patted24@gmail.com	Dr Atul Kumar	Impact of Ascochyta blight <i>Ascochyta rabiei</i> (Pass.) of chickpea (<i>Cicer arietinum</i> L) on seed quality and development of SCAR marker
16.	Ravi Bhushan Prasad	20597	bhushanravi72@gmail.com	Dr Monika A Joshi	Impact of heat stress on seed quality and its mitigation through seed enhancement in wheat varieties (<i>Triticum aestivum</i> L)
17.	Dhanush KS	20598	vishnudhanu499@gmail.com	Dr Sandeep Kr Lal	Comparative evaluation of different seedpriming techniques for enhancing planting value in onion (<i>Allium cepa</i> L)
18.	Damodar Das	20599	ddm7668@gmail.com	Dr Sangita Yadav	Studies on biochemical variability and seed quality parameters in quality Indian mustard [<i>Brassica juncea</i> (L) Czern & Coss)] genotypes
19.	Sanjay Kumar	20600	sanjayiasbhu@gmail.com	Dr V K Pandita	Assessment of physiological seed quality in cauliflower (<i>Brassica oleracea</i> L var <i>botrytis</i>) and radish (<i>Raphanus sativus</i> L) seed lots
20.	Sunil Kumar	20732	sspatil1550@gmail.com	Dr VK Pandita	Maximizing seed yield and quality in cucumber ((<i>Cucumis sativus</i> L)*)
21	Balachandan Gowda C	20733	balachandangowda@gmail.com	Dr SK Jain	Soybean (<i>Glycine max</i> L) seed coat characteristics and seed quality*
22	Ajay	20734	aj.bhardwaj3@gmail.com	Dr SK Yadav	Studies on seed quality enhancement techniques for improvement of planting value in Tomato (<i>Lycopersicon esculentum</i> L)*
23	Debashis Paul	20735	deba.13.paul@gmail.com	Dr SK Chakrabarty	An assay on hardseededness and germination in mung bean (<i>Vigna radiata</i> L)*
24	Ms Nipa Biswas	20736	biswas.nipa92@gmail.com	Dr Sangita Yadav	Studies on interaction of Ca ²⁺ and ABA on H ₂ O ₂ generation and its detoxification during seed germination of Indian quality mustard [<i>Brassica juncea</i> (L) Czern & Coss)] genotypes*

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BREEDER SEED SELLING PRICE FOR THE YEAR 2016-17

Crop/type	Existing breeder seed price (Rs/qlt)	Breeder seed price for 2016-17	Crop/type	Existing breeder seed price (Rs/qlt)	Breeder seed price for 2016-17
A. Cereal Crops					
Paddy			Barley		
Coarse	5700	5700	Barley	6150	6150
Medium	6150	6150	Malt Barley	6900	6900
Basmati	10050	10050	Small Millets		
Hybrid			Finger Millet (Ragi)	5400	5400
A Line	40000	40000	Foxtail Millet	4500	4500
B and R Line	8000	8000	Kodo Millet	4500	4500
Maize			Proso Millet	4500	4500
Inbred lines	29400	29400	Little Millet	4500	4500
Varieties & Composites	6000	6000	B. Oilseed Crops		
Sorghum			Groundnut	15000	13500
Hybrid			Soybean	11250	10125
A Line	29000	29000	Sesamum	20250	20250
B and R Line	20000	20000	Niger	12000	12000
Varieties & Composites	9750	9750	Mustard		
Bajra (Pearl Millet)			Hybrid Mustard		
Hybrid			A line	30000	30000
A line	46000	46000	B and R Line	14000	14000
B and R Line	16000	16000	Varieties	11250	11250
Varieties and composites	16000	16000	Toria	10500	10500
Wheat	Taramira	10500	10500		
Varieties (Bread wheat)	6300	5670	Linseed	6900	6900
Durum/Dicoccum	7050	6345	Sunflower Hybrid		
Desi Wheat	7050	6345	A Line	62000	62000
			B and R Line	30000	30000
			Varieties	13500	13500

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Crop/type	Existing breeder seed price (Rs/qlt)	Breeder seed price for 2016-17	Crop/type	Existing breeder seed price (Rs/qlt)	Breeder seed price for 2016-17
Castor			D. Fibre Crops		
Hybrid			Jute	19050	19050
A Line	60000	60000	Sunhemp	9000	9000
B and R Line	22000	22000	Mesta	9000	9000
Varieties	12750	12750			
Safflower			Cotton		
Hybrid			Hybrid :		
A Line	25200	25200	Female Parent	110000	110000
B and R Line	11000	11000	Male Parent	110000	110000
Varieties	8250	8250	Varieties	22500	22500
C. Pulse Crops			<i>G. hirsutum</i>	25500	25500
Moong	18000	18000	<i>G. barbadens</i>	33000	33000
Urd (Black gram)	18000	18000	Hybrid:		
Arhar (Pigeonpea)			A Line	120000	120000
Hybrid			R and B Line	120000	120000
A Line	26000	26000	E. Forage Crops		
B and R Line	18000	18000	Guar	18000	18000
Varieties	16500	16500	Teosinite	3750	3750
Cowpea	11250	11250	Lucerne	46500	46500
Gram (Kabuli)	16500	14850	Berseem	39000	39000
Gram (Desi)	12000	10800	Oat	6300	6300
Lentil	12750	12750	Cowpea	11250	11250
Peas	8400	7560	Maize	6000	6000
Moth	12750	12750	Jowar	Single Cut :	Single Cut :
				12000	12000
Rajmash	12000	12000		Multi Cut :	Multi Cut :
				18000	18000
Horsegram	6000	6000	Bajra	11250	11250
			Dhaincha	7500	7500

Note: 10% reduction has been approved from existing price in crops viz., Chickpea, Field/garden pea, Wheat, Soybean and Groundnut.

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New Delhi - 110012

E-mail Id: isst1971@gmail.com, Telephone No. : 011-25840278 (O)

MEMBERSHIP SUBSCRIPTION FORM

Dated:/...../.....

To

The Secretary/Treasurer
F-5, First Floor, A Block, NASC Complex,
Dev Prakash Shastri Marg, Dasghara,
New Delhi - 110012

Dear Madam/Sir,

I am interested in becoming the **Individual Annual/Individual Life/ Associate Annual/ Corporate Life** member of the Indian Society of Seed Technology. Therefore, I am remitting a sum of INR/USD.

...../- (In words:
.....) by Cash / NEFT / Cheque / Pay Order / DD payable at New Delhi (No.:
..... Dated:) towards Membership Subscription plus one time Registration

Name / Institution (Block Letters):
.....

Highest Degree (if applicable): Profession (if applicable):
.....

Mailing Address:
.....
.....

Membership Fee (Please add one time Registration Fees of Rs. 50/- only along with Membership Fees)

Membership Type	Fee (INR)	Fee (USD)	Membership Type	Fee (INR)	Fee (USD)
Individual Annual	500.00	30.00	Associate Annual	10,000.00	500.00
Individual Life	6000.00	400.00	Corporate Life	75,000.00	1500.00

Details for online transfer/NEFT

Name of Account Holder: Indian Society of Seed Technology	Account No.: 9029 - 201 - 0000640
Address of Branch : Pusa Campus, IARI, New Delhi - 110012	Name of the Bank : Syndicate Bank
IFSC Code : SYNB0009029	MICR No.: 110025041

Kindly note;

1. Kindly submit duly signed completely filled-in membership form along with the prescribed fees to Secretary or Treasurer, Indian Society of Seed Technology, F-5, A Block, NASC Complex, D.P. Shastri Marg, Dasghara, New Delhi-110012.

For Office Use Only

Receipt No.:

Dated:/...../.....

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