



# INDIAN SOCIETY OF AGRONOMY NEWSLETTER

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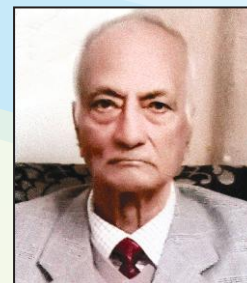
October-December, 2017

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## **Executive Council, ISA**

<b>President</b>	: Dr AK Vyas
<b>Vice-President</b>	: Dr VK Singh
<b>Secretary</b>	: Dr YS Shivay
<b>Joint Secretary</b>	: Dr PS Bodake
<b>Treasurer</b>	: Dr Ashok Kumar
<b>Editor-in-Chief</b>	: Dr TC Jain



## Message

I am delighted to learn that the Indian Society of Agronomy is publishing ISA Newsletter at quarterly intervals. My congratulations to the President and members of the Executive Council of ISA for the long due initiative. Considering the pace of information development, dissemination of information at a greater speed is necessary for harnessing maximum usefulness of any technology. The publication of a Newsletter containing latest information is a much required step in this direction. I am sure that it will benefit all those connected with the research development and management of farm operations.

The science of Agronomy deals with the farm management for a desired farm output with the available resources. Develop a farm production strategy under the available resources for a production goal is the role of Agronomists. Today, this role has attained a much greater importance. Considering the variation in farm and land resources, micro-climate and labour/machine availability, technologies will have to be evolved. This, is what is desired of an Agronomist. For small farms with limited resources, we need to plan production strategies. Our experience with uniform technologies has not been good. The Green Revolution technologies have not been found to be effective equally at different places.

I am sure the Newsletter will keep the Agronomists updated and will enhance their effectiveness.

(G.B. Singh)

Ex. President, ISA

Karmaha House, 3/35, Virat Khand  
Gomti Nagar, Lucknow (U.P.)

### Action Taken/Initiated on the Decisions of EC Meetings of 17<sup>th</sup> May and 25<sup>th</sup> September, 2017

- The pending IT return for the Financial Year 2009-10 has been filed and deposited Rs 4,17,780/-.
- It was decided to release Rs 5,000/- by January, 2018 to Hyderabad, Udaipur and Ranchi ISA-Chapters for the first half of 2018 who have completed all the basic requirements.
- Nine Agronomy Text Books for UG students based on V Deans' Committee Report shall be prepared by the top SAUs of the Country and one book each has been assigned to one of the nine SAUs. The Text Books shall be ready by 31<sup>st</sup> May, 2018.
- Details of about 777 life members of the Society have been updated.
- RNI No. for the ISA Newsletter would be obtained by 31<sup>st</sup> January, 2018.
- Dr Ambika Singh, Chairman and Dr Kalyan Singh, Convener have submitted a note on "*The Employment Opportunities for Agronomists-Past, Present and Future*" and it was decided that Dr TC Jain shall develop an Action Plan based on the note of Dr Ambika Singh for further course of action by 31<sup>st</sup> January, 2018.
- President, ISA has pleaded with DG, ICAR to review Cadre Strength of Agronomy discipline in ICAR with 30% enhancement in posts.
- Out of six newly designed Cover pages for the IJA presented to the EC, one Cover page has been selected for further refinement.
- The consent of the VC, MPUAT, Udaipur has been received to organize the XXI Biennial National Symposium at Udaipur and the first circular has been sent through soft and hard copy to all members.

### Important Decisions of Executive Council Meeting of 22<sup>nd</sup> December, 2017

- In order to improve the financial status of the Society, it was decided to constitute a committee to generate funds from time to time without waiting for organization of Symposium/Congress:

**Chairman** : Dr SD Singh, APCCF  
**Convener** : Dr Ashok Kumar, Treasurer  
**Members** : Dr BS Phogat, Dr Shiva Dhar,  
Dr Rajiv Kumar Singh and  
Dr Soumitra Das

- The recommendations of the Committee for Review of guidelines for the ISA Awards under the Chairmanship of Dr TC Jain were discussed and approved. The complete recommendations are placed on the Website in the proceedings. The Committee has tried to rationalize the number of awards and the prize money with other related guidelines for the Award system.
- For smooth organization of XXI Biennial National Symposium, the National Organizing Committee, Technical Programme Committee, Publication Committee and Fund Raising Committee were finalized as:

#### National Organizing Committee

**Patron** : Dr T Mohapatra, Secretary, DARE & DG, ICAR  
**Chairman** : Dr AK Vyas, President, ISA and ADG (HRM), ICAR, New Delhi  
**Co-Chairman** : Prof. US Sharma, Vice Chancellor, MPUAT, Udaipur  
**Convener** : Dr VK Singh, Vice-President, ISA and Head, Agronomy, ICAR-IARI, New Delhi

#### Technical Programme Committee

**Chairman** : Dr TC Jain, Editor-in-Chief, IJA and Ex-Senior Agriculturist, World Bank, Gurugram  
**Co-Chairman** : Dr RP Singh, Executive Secretary, IAUA and Ex-Head, Agronomy, IARI, New Delhi  
**Convener** : Dr DS Rana, Co-Editor-in-Chief, IJA and Emeritus Scientist, ICAR-IARI, New Delhi

#### Publication Committee

**Chairman** : Dr RL Yadav, Ex-Director, IISR, New Delhi  
**Co-Chairman** : Dr PK Ghosh, National Coordinator, NAHEP, ICAR, New Delhi  
**Convener** : Dr Shiva Dhar, Principal Scientist, ICAR-IARI, New Delhi

#### Fund Raising Committee

**Chairman** : Dr Sain Dass, Ex-Director, IIMR, New Delhi  
**Co-Chairman** : Dr RK Rai, Ex-Professor & Head, Agronomy, IARI, New Delhi  
**Convener** : Dr Ashok Kumar, Treasurer, ISA, New Delhi

Dr YS Shivay, Secretary, ISA will be Organizing Secretary and Dr V Nepalia, Head, Department of Agronomy, Udaipur will be Local Organizing Secretary. The Local Organising Committees shall be constituted by MPUAT, Udaipur. The details of the committees have been placed on the ISA website in the proceedings.

- It was decided that ISA can partner to provide technical support in the organization of ISTRO International Conference to be held at New Delhi in 2024 and there should not be any financial liability on ISA for this Conference.
- It was decided to publish IJA quarterly and previous decision was deferred till 2019.
- It was also decided to publish ISA Newsletter Quarterly and previous decision was deferred till 2019.
- It was also decided to print 400 copies of 4<sup>th</sup> Issue of ISA Newsletter.
- A committee comprising the following members was constituted to screen the applications of ISA Travel Grant.

**Chairman** : Dr SK Pareek  
**Convener** : Dr VK Singh  
**Members** : Dr Rajendra Lakpale; Dr Ashok Kumar;  
 Dr YS Shivay

- It was decided to facilitate the potential Chapters like – Jobner, Indore, Hisar, Dharwad, Rahuri, Coimbatore, Jorhat, Bhubaneswar, Navsari, Anand, Jabalpur, Raipur, Varanasi, Palampur, Jammu, Srinagar, Parbhani, Akola, Ludhiana, Bengaluru, Thrisur, Meerut, Pantnagar and Kalyani to initiate the Chapter and undertake activities.

### Revival/Initiation of Local Chapters

#### ISA–Varanasi Chapter

In a meeting held on 09.12.2017 at the Institute of Agricultural Sciences, BHU, Varanasi, the following Executive Committee has been unanimously nominated:

President : Prof. JS Bohra  
 Vice-President : Prof. Avijit Sen  
 Secretary : Prof. MK Singh  
 Treasurer : Dr MK Singh  
 Executive members : Dr SK Singh  
 Dr SK Prasad  
 Mr Dev Narayan Singh

#### ISA–Dharwad Chapter

The following New Executive Committee has been unanimously nominated:

President : Dr CP Mansur  
 Vice-President : Dr SB Kalaghatgi  
 Secretary : Dr VS Kubsad  
 Joint Secretary : Dr AK Guggari  
 Treasurer : Dr SS Hallikeri  
 Executive members : Dr SA Gaddanakeri  
 Dr SS Nooli  
 Dr GB Shashidhar  
 Dr MB Patil

#### ISA–Jammu Chapter

The following New Executive Committee has been unanimously nominated:

President : Dr Anil Kumar  
 Vice-President : Dr Ashok Kumar  
 General Secretary : Dr Vijay Bharti  
 Treasurer : Dr RPunia  
 Executive members : Dr Meenakshi Gupta  
 Dr AP Singh  
 Dr Vikas Sharma  
 Dr Rohit Sharma

### Research Highlights/Agro-technologies Developed

#### System of Wheat Intensification enhances productivity and profitability of wheat

(Ramesh K. Singh, Shiva Dhar, Anchal Dass, Vinod K. Sharma, Amit Kumar, Gaurendra Gupta and Bipin Kumar; ICAR-IARI, New Delhi)

Significantly higher yield attributes *viz.*, effective tillers/m<sup>2</sup>, grains/spike, test weight; grain (7.2 t/ha) and straw yields (11.4 t/ha), net returns and B: C ratio of wheat were obtained under SWI (20×20 cm) compared to



Wheat planted with SWI

conventional method of sowing. Amongst wheat varieties, yield attributes, yield and economic returns were higher with HD 2967 over the other varieties.

#### Nitrogen management in rabi sorghum in mungbean-rabi sorghum cropping system

(VS Kubsad, Dharwad)

Legumes are known to fix / enhance the nitrogen



Rabi sorghum with 34:25 kg N and P<sub>2</sub>O<sub>5</sub>/ha in mungbean-rabi sorghum sequence cropping

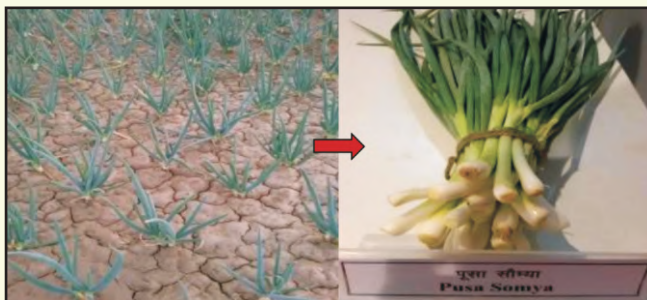
Rabi sorghum with 50:25 kg N and P<sub>2</sub>O<sub>5</sub>/ha in mungbean-rabi sorghum sequence cropping

status of the soil and soil organic matter. Thus helps to reduce the nitrogen requirement of the component / succeeding crops. Mungbean-rabi sorghum cropping system recorded significantly higher net returns (Rs 81101/ha) and B:C (1.81) followed by cowpea-rabi sorghum. Among N levels, application of 50 kg N/ha to rabi sorghum, being at par with 34 kg N/ha, recorded significantly higher net returns (Rs 42,883/ha) and B:C (3.01) compared to others. Application of 50 kg N/ha to rabi sorghum recorded on par grain and fodder yields and economics with 34 kg N/ha when the preceding crops were either cowpea or mungbean or sunhemp. Thus, about 33% of nitrogen to rabi sorghum can be saved along with cost on nitrogen fertilizer.

### Nutrient and weed management in newly introduced bunching onion (*Allium fistulosum* L.)

(Anil K Choudhary, TK Das, Anil Khar and Sabina Islam, ICAR-IARI, New Delhi)

Application of NPK@ 100:40:60 kg/ha + FYM @ 10 t/ha + S @ 20 kg/ha + Zn foliar spray @ 0.5% at 45 DAT led to significantly higher bunching onion productivity and net returns over other nutrient management levels. Likewise, Pendimethalin @ 0.75 kg/ha as pre-emergence + quizalofop-p-ethyl @ 0.025 kg/ha as post-emergence 30 days after transplanting (DAT) resulted in higher bunching onion productivity, net returns and weed control efficiency (WCE) over other herbicide combinations.



Bunching onion variety Pusa Soumya

### Nitrogen and weed management in conservation agriculture based maize-wheat cropping system

(Kapila Shekhawat, TK Das, Rishi Raj, R Kaur, Raj Singh and SS Rathore: ICAR-IARI, New Delhi)

Under conservation agriculture-based maize-wheat cropping system, weed management through brown manuring in maize fb post emergence application of tank mixed clodinafop-propargyl (60 g/ha) + carfentazone (20 g/ha) herbicides in wheat was found to produce highest yield with minimum weed infestation under residue retained plots. Among the N management schedule, maximum weed dry weight was observed where 100% N was applied as basal at both 30 and 45 DAS in maize and wheat. Also, N application through Green Seeker saved 34 and 67 kg N in maize-wheat cropping system where 75% N was applied as basal+ rest through Green seeker and 50% N basal + rest through Green seeker, respectively as compared to 100% basal application.



Green Seeker guided N applied maize and wheat crops

### Honours/Awards and Recognitions

1. Dr Janardan Singh, Professor, Department of Agronomy, Forages & Grassland Management, COA, CSK HPKV, Palampur was awarded with



Yashawi Samman by the Royal Association for Science-led Socio-cultural Advancement, New Delhi for his significant contribution to Science and Society on 29<sup>th</sup> October 2017 at Baba Saheb Bhimrao Ambedkar, University, Lucknow, UP.

Dr Singh was also conferred **ISPRD Fellow Award 2016** by the Indian Society of Pulses Research and Development, Kanpur for his significant contribution in field of pulses research and development.

2. Dr Rakesh Kumar Rana, CSIR-IHBT, Palampur was selected as an **Expert Member of DST** for assessment and evaluation of project under DST CORE support scheme.
3. Shri Harish Shenoy, Assistant Professor of Agronomy, ICAR-Krishi Vigyan Kendra, Dakshina Kannada, District -Mangaluru, Karnataka received prestigious Bharat Ratna Dr Abdul Kalam Gold Medal Award by Global Economic Progress and Research Association, New Delhi



4. Dr Dharam Singh, Senior Scientist, ICAR-National Bureau of Soil Survey and Land Use Planning Regional Centre, IARI Campus, New Delhi has been awarded Bharat Ratan Dr Abdul Kalam Gold Medal Award by Global Economic Progressive Research Association (GEPRA).



5. Dr Guriqbal Singh, Senior Agronomist (Pulses), Department of Plant Breeding & Genetics, PAU, Ludhiana, Punjab received ISPRD Excellence Award 2017 from the Indian Society of Pulses Research and Development (ISPRD) for his outstanding contributions in the field of natural resource management in pulses, at the National Symposium on “Pulses for Nutritional Security

and Agricultural Sustainability” held at ICAR-IIPR, Kanpur during 2–4 December, 2017.

Dr Singh also received Dr Harcharan Singh Sandhu Memorial Award of the PAU, Ludhiana, Punjab for his outstanding contributions in agronomic research on pulses, at the Annual Convocation of the university held on 15<sup>th</sup> December, 2017.

### Conference/Seminar/Workshop/ Events Organised

1. Short Course Training Programme on ‘*New Frontiers of Biotic Stress Management for Doubling Farmers Income*’ sponsored by ICAR was held at the ICAR-National Institute of Biotic Stress Management, Raipur during 11–20 Sept., 2017 (Course Director: Dr Anil Dixit).
2. A Ministry of Agriculture, Cooperation & Farmers Welfare (GOI) sponsored 8-days Model Training Course entitled, ‘*Integrated crop management practices for enhancing productivity, resource-use efficiency, soil health and livelihood security*’ (3–10 October, 2017) was successfully organized at the Division of Agronomy, ICAR-IARI, New Delhi during (Course Director: Dr Anil K Choudhary; Course Coordinators: Dr RS Bana & Dr V Pooniya).

#### Integrated Crop Management Practices for Enhancing Productivity, Resource-use Efficiency, Soil Health & Livelihood Security

Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi

October 03 to 10, 2017



3. A Training Programme on “*Layout and Maintenance of Field Experiments and Recording Observations*” was held during October 03-12, 2017 for **Technical staff** of ICAR and Non-ICAR Institutes at Division of Agronomy, ICAR-IARI, New Delhi (Course Director: Dr VK Singh, Course Coordinators: Drs Amal Ghosh, RK Singh and Kapila Shekhawat).



4. Training Programme on “*Good Agricultural Practices (GAPs) for enhancing resource-use efficiency and farm productivity*” sponsored by ICAR was held during December 05-18, 2017 for **Technical staff** of ICAR and Non-ICAR Institutes at Division of Agronomy, ICAR-IARI, New Delhi. (Course Director: Dr VK Singh, Course Coordinators: Drs SS Rathore, Teekam Singh and K Shekhawat).



## Foreign Visits/Fellowship

- Dr Rakesh Kumar Rana, CSIR-IHBT, Palampur was awarded **Scholarship** by the Asian Productivity Council, Japan for attending the conference on ‘Smart Agriculture’ held at Tokyo, Japan.

## Appointment

- ISA family Congratulates Dr VM Bhale, for his appointment as Vice-Chancellor, Dr. PDKV, Akola, Maharashtra. Dr Bhale has served the Society as Vice President.



## Upcoming Events

1. XXI Biennial National Symposium of Indian Society of Agronomy on “*Doubling Farmers’ Income Through Agronomic Interventions Under Changing Scenario*”



Past strategy for development of the agriculture sector in India has focused primarily on raising agricultural output and improving food security. This strategy involved (a) an increase in productivity through better technology and varieties, and increased use of quality seed, fertiliser, irrigation and agrochemicals; (b) incentive structure in the form of remunerative prices for some crops and subsidies on farm inputs; (c) public investments in agriculture; and (d) facilitating institutions. The strategy paid dividends as the country was able to address ever food shortage that emerged during mid-1960s. During the last half a Century (1965 to 2015), since the adoption of green revolution, India’s food production multiplied 3.7 times while the population multiplied by 2.5 times. The net result has been a 45% increase in per person food production, which has made Indian to only food self-sufficient at aggregate level, but also a net food exporting country.

The strategy did not explicitly recognize the need to raise farmers’ income and did not mention any direct measure to promote farmers’ welfare. The experience shows that in some cases, growth in output brings similar increase in farmers’ income but in many cases farmers’ income did not grow much with increase in output. The net result has been that farmers’ income remained low, which is evident from the incidence of poverty among farm households. The NSSO data on Consumption Expenditure Survey for year 2011–12 reveals that more than one fifth of rural households with self-employment in agriculture as their principal occupation’ were having income less than the poverty line.

The proportion of farm-households suffering from poverty was quite high in some states. The highest incidence was observed in Jharkhand where 45.3% of farm households, the lowest in Punjab where 0.5% farm

households were underpoverty and at National level 22.5%.

The low and highly fluctuating farm income is causing detrimental effect on the interest in farming and farm investments, and is also forcing more and more cultivators, particularly younger age group, to leave farming. This can cause serious adverse effect on the future of agriculture in the country.

It is apparent that income earned by a farmer from agriculture is crucial to address agrarian distress and promote farmers welfare. In this background, the goal set by the Hon'ble Prime Minister Sh.Narendra Modi to double farmers' income by 2022-23 is central to promote farmers 'welfare, reduce agrarian distress and bring parity between income of farmers and those working in non-agricultural professions.

Doubling real income of farmers till 2022-23 over the base year of 2015-16, requires annual growth of 10.41% in farmers' income. This implies that the on-going and previously achieved rate of growth in farm income has to be sharply accelerated. Therefore, strong measures will be needed to harness all possible sources of growth in farmers' income within as well as outside agriculture sector. The major sources of growth operating within agriculture sector related to "Doubling Farmers' Income" are:

- Improvement in productivity,
- Reduction in cost of cultivation
- Increase in cropping intensity,
- Diversification towards high value crops,
- Increase in production of livestock
- Improved price realisation by farmers

The proposed symposium on "Doubling Farmers' Income Through Agronomic Interventions Under Changing Scenario" will provide platform for interaction among the scientists, industrialists, policy makers, research scholars and farmers, working on various aspects of Doubling Farmer's Income and will come out with concrete recommendations for solving the emerging challenges of Indian Agriculture.

### THEMATIC AREAS

1. Efficient Management of Low- or no-cost Inputs and Bio-resources Utilisation
2. Efficient Rain and Irrigation Water Management
3. Diversification for Sustainable Resource Use & Farm Income Under Changing Scenario
4. IFS and ICM for Different Agro-ecosystems and Resourcefulness
5. Conservation Agriculture and Climate Resilient Agronomy
6. Organic, Precision and Contractual Farming

7. Farm Mechanisation, Post-harvest Management, Processing, Value Addition and Marketing
8. Agronomy Education, Training, Technology Transfer and Enabling Policies to support income generating activities

### DATE AND VENUE

**Venue:** Rajasthan College of Agriculture, MPUA&T, Udaipur

**Date:** 24-26 October, 2018

### REGISTRATION FEE AND MODE OF PAYMENT

	Upto 14-8-2018	After due date
Members	₹ 6,000/-	₹ 7,000/-
Non-members	₹ 8,000/-	₹ 9,000/-
RA/JRF	₹ 5,000/-	₹ 6,000/-
Students	₹ 4,000/-	₹ 5,000/-

*Mode of payment shall be through A/C payee DD/Multicity cheque in favour of Secretary, Indian Society of Agronomy, New Delhi or through NEFT.*

### IMPORTANT DATES

**May 31, 2018:** Last date for submission of Extended Summary through email to [secretary\\_isa@hotmail.com](mailto:secretary_isa@hotmail.com)

**August 14, 2018 :** Last date of registration with normal fee.

### Address for correspondence

Dr YS Shivay, Organizing Secretary, Indian Society of Agronomy, Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi 110 012, [secretary\\_isa@hotmail.com](mailto:secretary_isa@hotmail.com)

### Contact person at Udaipur

Dr V Nepalia, Local Organizing Secretary, Department of Agronomy Rajasthan College of Agriculture, Udaipur 313 001, Rajasthan, [vnepalia@gmail.com](mailto:vnepalia@gmail.com)

2. An ICAR-sponsored training programme on "Conservation agriculture for enhancing resource-use efficiency and farm productivity" will be organised by the Division of Agronomy, ICAR-IARI, New Delhi during 8-28 March, 2018 (*Course Director: Dr Vinod Kumar Singh; Course Coordinators Drs SS Rathore, Rajiv K Singh and Kapila Shekhawat*)

### Expansion of ISA since January, 2017

- 1 Hemlatha, S., Tirupati, AP
- 2 Nagamani, C., Tirupati, AP
- 3 Reddy, A. Pratap Kumar, Tirupati, AP
- 4 Kalita, Mukul Chandra, Guwahati, Asom

- 
- |   |  |
|---|--|
| 5 Mandal, Devendra, Rohtash, Bihar                | 32 Bairwa, Ramesh Chand, Bikaner, Rajasthan    |
| 6 Bhagel, Jitesh Kumar, New Delhi                 | 33 Chhipa, B.R., Bikaner, Rajasthan            |
| 7 Das, Kajal, New Delhi                           | 34 Jain, Lokesh Kumar, Sumerpur, Rajasthan     |
| 8 Kumar, Ashok, New Delhi                         | 35 Kumawat, Amit, Jaipur, Rajasthan            |
| 9 Singh, Arjun, New Delhi                         | 36 Singh, Bhadur, Udaipur, Rajasthan           |
| 10 Dudhat, Madhukant Savijibhai, Navsari, Gujarat | 37 Baskar, P., Erode, TN                       |
| 11 Vashrambai Rabari, Kiranbahi, Deesa, Gujarat   | 38 Govindan, R., Erode, TN                     |
| 12 Kumar, Mukesh, Hisar, Haryana                  | 39 Kannan, V., Madurai, TN                     |
| 13 Kujur, Amarjeet, Ranchi, Jharkhand             | 40 Kuttimani, R., Coimbatore, TN               |
| 14 Kumari, Sunita, Ranchi, Jharkhand              | 41 P. Kalaimathi, Chidambaram, TN              |
| 15 Kumar, Parshotam, Jammu, J&K                   | 42 Ramadass, S., Coimbatore, TN                |
| 16 Jimsy, V.S., Wayanand, Kerala                  | 43 S., Marimuthu, Coimbatore, TN               |
| 17 Kumawat, Narendra, Jhabua, MP                  | 44 Chauhan, Gautam Veer, Baghpat, UP           |
| 18 Tomar, Sandeep Singh, Morena, MP               | 45 Meena, Ram Swaroop, Varanasi, UP            |
| 19 Chavan, Inderchand, B., Nasik, MS              | 46 Rajiv, Kanpur, UP                           |
| 20 Kamble, Dipali Ramesh, Parbhani, MS            | 47 Singh, Virendra, Moradabad, UP              |
| 21 Kumbhar, Nitin Mukund, Sangli, MS              | 48 Verma, Sudhanshu, Varanasi, UP              |
| 22 Nagrare, Ishwar Mahadeo, Akola, MS             | 49 Kumar, Ajay, Pantnagar, Uttarakhand         |
| 23 Patange, Mamta Jaiwantrao, Parbhani, MS        | 50 Kumar, Sanjay, Kashipur, Uttarakhand        |
| 24 Giri, Kumar Sambhav, Imphal, Manipur           | 51 Pramanick, Biswajit, Pantnagar, Uttarakhand |
| 25 Irungbam, Priyanaka, Imphal, Manipur           | 52 Shukla, Anil, Pantnagar, Uttarakhand        |
| 26 Dwibedi, Sanat Kumar, Khordha, Odisha          | 53 Bera, Soumen, Burdwan, WB                   |
| 27 Lenka, Subhrasini, Sambalpur, Odisha           | 54 Dutta, Sudarshan Kumar, Kolkata, WB         |
| 28 Pradhan, Surajyoti, Bhubaneswar, Odisha        | 55 Mondal, Sanchita, Nadia, WB                 |
| 29 Eajaz, Ludhiana, Punjab                        | 56 Patra, Partha Sarathi, Pundibari, WB        |
| 30 Kumar, Vinay, Chunnikalan, Punjab              | 57 Giri, Utpal, Lembucherra, Tripura           |
| 31 Mal, Todar, Ludhiana, Punjab                   | 58 Ram, Tulasa, New Delhi                      |

### Editorial Board

- Editor-in-Chief** : Dr TC Jain  
**Co-Editor-in-Chief** : Dr DS Rana  
**Executive Editor** : Dr Anchal Dass  
**Editors** : Drs NK Jain, Anil K Choudhary, Rajender Kumar, Rajiv K Singh, Kapila Shekhawat and MD Vyas

**Dear Esteemed Members,**

**We look forward to your valuable contributions and suggestions for improvement of the Indian Society of Agronomy Newsletter at [isanews2017@gmail.com](mailto:isanews2017@gmail.com)**

**Editorial Board**

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