

Annual Report

2017-18



INDIAN PHYTOPATHOLOGICAL SOCIETY

Division of Plant Pathology

Indian Agricultural Research Institute

New Delhi 110012, India

www.ipsdis.org

ANNUAL REPORT

2017-18



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Division of Plant Pathology
Indian Agricultural Research Institute
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PREFACE

Dear members of the Indian Phytopathological Society (IPS)

I wish to convey my gratefulness to all the esteemed members of the Indian Phytopathological Society for electing me as President of this prestigious society.

It is my great pleasure, privilege and honour to present the Annual Report 2017-18 of the Indian Phytopathological Society (IPS) which has successfully completed its journey of 70 years on February 28, 2017 with keen involvement of past presidents, secretaries, zonal presidents and councillors, members of executive council and editorial board as well as contributions made by each member to achieve an International status linking with American Phytopathological Society (APS).



This year Indian Phytopathological Society organized a Guest Lecture on "*Opportunities through Plant Protection*" which was delivered by Dr.R.K. Khetarpal, Regional Advisor (Strategic Science Partnerships) CABI, India on 29th July 2017 at Division of Plant Pathology, IARI, New Delhi. Society in collaboration with Anand Agricultural University, Anand along with West Zone Meet of IPS has organized special symposium on "*Microbial Antagonists and their role in Biological Control of Plant Diseases*" during October 5-7, 2017. Professor Y.L.Nene's presence during this event and his deliberation on "The Concept and formulation of Kunapajala, World's oldest fermented liquid organic manure" created a memorable inspiration to all of us. Society has also taken initiative to publish scientific documents on Biological control as research articles and critical reviews contributed by the members in the form of two book volumes entitled "*Microbial Antagonists: Role in Biological Control of Plant Diseases*" and "*Biological control of Crop Diseases: Recent advances and perspectives*" which will be useful and widely accepted by students, teachers, researchers, plant pathologists and agriculturists.

Agreement has been signed between Indian Phytopathological Society (IPS) and Springer (India) Private Ltd., New Delhi on November 14, 2017 for co-publication of the Journal *Indian Phytopathology* from January 2018 (Vol. 71, Issue 01, 2018) onwards initially for five years (2018-2022) which is considered to be a milestone in the history of IPS.

I am also delighted to inform you that Zonal Presidents/Councillors of all eight zones of IPS organized successfully zonal meeting and symposium in their respective zones. Two more books entitled "*Diseases of ornamental crops*" and "*Recent approaches for management of plant diseases*" have been published by the society by active involvement of Presidents/Councillors of southern zone and eastern zone respectively.

70th Annual Meeting of the Society and National Symposium on "Plant Health Management: Embracing Eco-Sustainable Paradigm" were jointly organized by Assam Agricultural University, Jorhat, Assam and Indian Phytopathological Society during February 15-17, 2018. Many delegates from almost all parts of the country participated in this symposium. Three special sessions viz. "*Ä Tribute to Dr. Y.L.Nene*", Panel Discussion on "*Strengthening HRD in Plant Pathology*" and special session on "*Wilt diseases of crops*" were included in this event along with award lectures, academic award contest and ten technical sessions, lead lectures followed by oral and poster presentations.

I would like to extend my thanks to the members of the executive council for their involvement and contributions in keeping our society running actively and smoothly. The society will continue to pursue its goal in right direction.

The financial support received from Indian Council of Agricultural Research, New Delhi, SERB, Department of Science & Technology, Department of Biotechnology, Ministry of Science & Technology, Govt. of India towards publication of *Indian Phytopathology* as well as for organizing the scientific programmes during the financial year 2017-18 is gratefully acknowledged.

I express my appreciation to Secretary, IPS for compiling and bringing out this report in time.


(B.N. Chakraborty)
President

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About the Society

The Indian Phytopathological Society (IPS) was established during the year 1947. It is a professional society established for promoting the cause of science of Phytopathology. It was Dr. B.B. Mundkur who felt the need of forming a society and initiated for its establishment. The society focuses in the field of Mycology, Plant Pathology, Bacteriology, Virology, Phytoplasmology and Nematology. During the journey of last seven decades, the society progressed with time. It started with few members and now the total members are above 2000. The society was started when there was no journal dedicated to plant pathology in the country, however, now there are several journals in the subject, but the progress made by Indian Phytopathology is remarkable and un-comparable. The *Indian Phytopathology* become online March, 2011 on ICAR online portal and online access to this journal from 1995 to 2017 are available for the members of the Society. However, I am glad to inform that agreement has been signed with Springer (India) Private Ltd., New Delhi for co-publication of the Journal *Indian Phytopathology* from January 2018 (Vol. 71, Issue 01, 2018) onwards initially for five years (2018-2022).

Not only because of its all India status but also due to dedicated and visionary sincere effort of our seniors, who gave the sound footing to the society and made the law and bylaws so perfect that the society is maintaining its high standard and running perfectly well. The law and bylaws of the society were made so meticulously that there is no major change even after 70 years of its existence. Annual meetings are held

regularly and persons of high dedications are given the responsibility to run the society and journal. During the seven decades society also encouraged members by giving them due honours and awards in the annual and zonal meetings. High standard of presentations and keen contest for the different awards are the special feature of the society. The journey of 7 decades of the Indian Phytopathological Society is really worth appreciation, which organized annual and zonal meetings without fail and chosen the topics of the national seminars for discussion according to the need of the country.

The society was basically formed with the following objectives:

- (i) To advance the cause of Mycology and Plant Pathology in India.
- (ii) To encourage and promote mycological and plant pathological studies and research in the country.
- (iii) To disseminate the knowledge of mycology and plant pathology.
- (iv) To facilitate closer association and relations among members and other scientific workers in India and abroad.

To run the society smoothly, the society is having Executive Council, which takes policy decisions. It consists of 24 members and meets at least twice a year. Following are the members of executive council. The society was earlier having six zones which were later increased to eight zonal chapters, each one having its Zonal President and Councillor elected/nominated every year.



Executive Council (2017)



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Meetings:

Mid-term Executive Council Meeting

The mid-term EC of the Society was held on February 27, 2017 in the Division of Plant Pathology, IARI, New Delhi and following EC members attended the meeting, namely; Drs. B.N. Chakraborty, President; R.N. Pandey, President-elect; Dinesh Singh, Secretary; Robin Gogoi, Joint Secretary; Vaibhav Kr. Singh, Treasurer; Rashmi Aggarwal, Ex-officio; Atul Kumar, Zonal President (DZ); B.M. Bashyal, Zonal Councillor (DZ); Shahid Ahamad, Zonal President (NZ); S.K. Singh, Zonal Councillor (NZ); V. Devappa, Zonal President (SZ); B. Anjaneya Reddy, Zonal Councillor (SZ); M.V. Totawar, Zonal Councillor (WZ); Om Gupta, Zonal President (CZ); Pramod Kr. Gupta, Zonal Councillor (CZ); K.P. Singh, Zonal President (MEZ) and Srikanta Das, Zonal President (EZ). However, other EC members namely, Drs. S.S. Mane, Zonal President (WZ), Narendra Prakash, Zonal President (NEZ), Susheel Kr. Sharma, Zonal Councillor (NEZ); A.K. Tewari, Zonal Councillor (MEZ); Subrata Dutta, Zonal Councillor (EZ) could not attend the meeting due to their pre-occupied schedule.

The following decision were taken:

(i) Springer Collaboration

The detailed discussion was made on the points suggested by President/ President-Elect and the following points were further suggested for development of the proposal:

1. Reference should not more than 5-8 years old in Research Articles.
2. Editorial compositions should be minimum in the ratio of 60:40 (Indian: Foreign).
3. One good research article of each foreign editors should be published in every issue of the journal and they should also invite their colleagues for submission of research article.
4. The submission of the article from foreign author is not there in the journal and hence it was

suggested to first complete the above minimum requirement to fulfil the criteria of the Springer.

(ii) CSR (Company Society Responsibility) Project

The Society received proposal from two companies (i) **FIINOVATION** and (ii) **Unique Welfare Foundation**, which facilitates funds from CSRs, PSUs and other agencies according to the requirement and eligibility of the organization. They also provides services such as resource mobilization, assessment services, proposal customization, mentoring, donor mapping as well as legal assistance to NGOs, CBOs, NPOs, corporate etc. All EC members agreed to submit the proposal for CSR fund.

(iii) Enhancement of Salary of IPS Staff

The EC members agreed to enhance the salary w.e.f. April 2017, as Business Manager: 32,000.00; Editorial Assistant: Rs. 13,000.00 and Office Assistant: Rs. 10,000.00

(iv) Raising the membership of IPS through young scientists, PG students, other sources:

All the EC members were requested to motivate students and plant pathologists to become the member of the Society and they all agreed for the same.

(v) Initiation of new journal and IPS Newsletter

It was discussed and agreed by the EC for **IPS Newsletter** to introduce with the help of all 8 Zonal Presidents and Zonal Councillors. However, a new journal may be initiated after agreement with Springer for publication of *Indian Phytopathology* and status of research papers being submitted by the authors.

(vi) Enhancement of the impact factor of the journal

The Society is continuously making efforts to enhance the impact factor of the journal *Indian Phytopathology*. The suggestions given by Springer will be taken care for its betterment.



(vii) Mechanisms for prompt publication of the articles in the journal.

It was informed the EC members that the publication of the article is done online and it's a fast process. The manuscripts are now being published within 6 months of its submission. No back log of the articles is exist.

(viii) Publication of books and manuals for the UG & PG plant Pathology.

The suggestion of publication of books and manuals for the UG & PG plant Pathology was discussed and agreed by the EC members. A separate committee will be constituted to take this responsibility and the information will be sent to members of the Society with request to contribute chapters/articles for the same.

(ix) Encourage young researchers to have global exposure

Recently APS-IPS MoU has been signed in which young researchers (Ph.D. students) are being offered Travel Grant to participate in APS Annual Meeting every year

(x) Institution of more awards for students and young scientists

EC members agreed to institute awards related to students, Young scientist. Besides, the above point, EC also suggested having a award for woman, preferably “**IPS Women Scientist Award**”, in which a **citation and TA** will be given. Dr. R. N. Pandey agreed to generate endowment fund for this award. A committee of the following members was constituted for the same, viz., Drs. B.N. Chakraborty, R.N. Pandey, Dinesh Singh, Rashmi Aggarwal and Om Gupta.

(xi) Updating of web page and Editorial Board

The necessary information updated within 15 days.

(xii) Creation of more sections viz. seed pathology, epidemiology, biocontrol, etc. in the journal

It was discussed thoroughly but not agreed by EC members.

(xiii) Enhancement of number of applicants for “IPS Travel Sponsorship for young scientists/students”

The proposal to enhancement of number of applicants for “**IPS Travel Sponsorship for young scientist (Ph. D)**” was discussed and agreed with the following conditions.

- One application from one zone
- If no application received from some zones, candidates from other zones can be considered, but it should not more than 2 to a particular zone. The maximum number of awards will be 8 only.
- This grant will only be given to those who are not getting any fellowship/scholarship from any source.
- To and fro 3rd AC train fare.
- Waving off the registration fee.
- Award of certificate for presenting their research findings.
- He/she should be below 30 years of age.
- He/she should be a member of IPS prior to the submission of application.

(xiv) Online banking: Not agreed

(xv) Video sketch for all awards (2-3 min):

EC agreed on the point to make a video of 2-3 minutes for the awards instituted in IPS. The same will be shown before the presentation of award lecture.

The meeting ended with vote of thanks by Dr. Robin Gogoi, Joint Secretary, IPS

Editorial Board Meeting

Meeting of Editorial Board Meeting was held at on February 14, 2018, 4.30 PM at Assam Agricultural University, Jorhat, Assam. The meeting started with a brief welcome by the Chief Editor. The meeting was attended by the following members: Prof. B.N. Chakraborty : President, IPS; Dr. R.N. Pandey : President-Elect, IPS; Dr. Dinesh Singh : Secretary, IPS; Dr. M. Anandaraj : Chief Editor; Dr. S.C. Dubey : Sr. Editor; Dr. V.K. Baranwal : Sr. Editor; Dr. V. Celia Chalam : Editor; Dr. Ramesh Chand : Editor; Dr. Usha Chakraborty : Editor; Dr. S.S. Vaish : Former Editor and Dr. Mamta Kapila : Sr. Editor (Life Science), Springer India Pvt. Ltd.

However, other Editors of Indian Phytopathology could not attend the meeting due to their pre-occupied schedule.

Dr. Mamta Kapila made a presentation on publication process followed in Springer. She opined, faster the publication of the manuscripts better its impact in the field. Dr. M. Anandaraj, Chief Editor presented the report for the year 2017-18 and inform the house that all the four issues of the journal has been published timely.

Chief Editor's Report

In 2017, all the four issues published timely, which contains total 55 Research Articles, 22 Short Communications, 10 Award Lectures, 5 New Reports and 1 Review Article.

In the year 2017, total 219 manuscripts received online, out of which 78 rejected, 69 published, 46 are in review and 26 accepted for next issue.

In 2018, 15 manuscripts received through ICAR Portal, all manuscripts sent back author to submit Springer Indian Phytopathology portal.

In Springer, Indian Phytopathology portal received 15 manuscripts, all manuscripts under process.

After the Journal has become online, published papers in Indian Phytopathology are accessible to a very large group of scientists and academicians across the world.

The efforts rendered by Editors/Senior Editors, especially helped in refereeing and evaluation of the manuscripts were appreciated.

A detailed discussion regarding the progress and process of the publication of manuscripts was held.



Presentation by Dr. Mamta Kapila, Sr. Editor (Life Science), Springer India Pvt. Ltd. on publication process followed in Springer



The following points were suggested in the meeting for further processing of manuscripts for publication:

1. All the manuscripts should directly submitted to Chief Editor's Inbox after preliminary screening by the Springer's editorial office. Then the submitted manuscripts will be further screened by Chief Editor of its suitably for further review process and will be assigned to the Sr. Editors for further assigning to concerned subject Editors or directly to reviewers for getting it reviewed.
2. Dr. S.C. Dubey, Sr. Editor will take care the manuscripts of Mycology, Fungal Pathology and Nematology disciplines, and Dr. V.K. Baranwal, Sr. Editor will take care the manuscripts of Virology, Bacteriology and Phytoplasma.
3. Final decision (either acceptance or rejection) on the manuscripts will be sent by Chief Editor only.
4. Language editing of the acceptance manuscripts will be taken care by the Springer Editorial Team.
5. Details about the cover page photograph (name of the disease) of the journal *Indian Phytopathology* and its source shall be informed to the Indian Phytopathological Society by Dr. Mamta Kapila.
6. There was a suggestion to change the colour of the volume number from black to white as the clarity is less under green background.
7. It was suggested to publish one Special issue every year and for the purpose, one guest or senior editor can be assigned the responsibility to request the authors for invited articles.
8. A commendation letter may be sent to the referees who have been very meticulous and prompt in reviewing the manuscripts by the Springer on behalf of Chief Editor.

Annual General Body Meeting

The 70th Annual General Body Meeting (AGBM) of the Society was held on February 16, 2018 at Assam Agricultural University, Jorhat, Assam, under the chairmanship of Prof. BN Chakraborty, President-IPS. The meeting was attended by more than 300 members of the Society.

As per agenda, Dr. Dinesh Singh, Secretary-IPS presented the detailed report in the General Body meeting of the Society.

Declaration of results of award

General Body approved the following names recommended in the EC meeting for following awards:

1. **A.P. Misra Lifetime Achievement Award** : Dr. M.N. Khare, Jabalpur
2. **S.P. Raychaudhuri Memorial Award** : Dr. B.P. Singh, former Director, CPRI, Shimla
3. **IPS Recognition Award**
 - i. Dr. O.M. Bambawale, Nagpur, M.S.
 - ii. Dr. Kamal, Gorakhpur, U.P.
 - iii. Dr. N. Samajpati, Kolkata, W.B.
 - iv. Dr. Udit Narain, Kanpur, U.P.
 - v. Dr. S.M. Reddy, Warangal, A.P.
4. **Mundkur Memorial Award**: Dr. M.R. Khan, Aligarh Muslim University, Aligarh, Uttar Pradesh
5. **Jeersannidhi Award**: Dr. R. Selvarajan, ICAR-NRC for Banana, Tiruchirapali, Tamil Nadu
6. **K.C. Mehta and Manoranjan Mitra Award**: Dr. M.P. Thakur, IGKV, Raipur, Chhattisgarh
7. **M.K. Patel Memorial Young Scientist Award**: Dr. P.L. Kashyap, ICAR-IIWBR, RS, Shimla, Himachal Pradesh
8. **J.F. Dastur Memorial Award**: Dr. Usha Chakraborty, University of North Bengal, Siliguri, West Bengal
9. **J.P. Verma Memorial Award**: Dr. A.K. Gupta, Dr. YSPUH&F, Solan, Himachal Pradesh
10. **Sharda Lele Memorial Award**: Dr. Virendra Kumar Baranwal, ICAR-IARI, New Delhi
11. **S. Sinha Memorial Award**: Dr. Atul Kumar, ICAR-IARI, New Delhi



Dignitaries on dais in Annual General Body Meeting of the Society



12. Fellow of Indian Phytopathological Society (FPSI)

- i. Dr. Pankaj Baiswar, ICAR RC for NEH Region, Umiam, Meghalaya
- ii. Dr. T. Prameela Devi, ICAR-IARI, New Delhi
- iii. Dr. Sanjeev Kumar, JNKVV, Madhya Pradesh
- iv. Dr. Jayanta Tarafdar, BCKV, Kalyani, West Bengal
- v. Dr. Srikanta Das, BCKV, Mohanpur, West Bengal
- vi. Dr. A.I. Bhat, ICAR-IISR, Calicut, Kerala
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- viii. Dr. Nasim Ahmad, ICAR-NCIPM, Pusa Campus, New Delhi
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- x. Dr. B.K.M. Laxmi, Vegetable Res. Station, Hyderabad, Telanganan
- xi. Dr. K.B. Pun, ICAR-National Rice Research Station, Hajo, Assam
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- xv. Prof. Asha Sinha, Banaras Hindu University, Varanasi, Uttar Pradesh

13. “M.J. Narasimhan Medal Award” for best research paper published in Indian Phytopathology

On the basis of marks given by Award Screening Committee the award recommendation committee has also recommended the following papers as **“M.J. Narasimhan Medal Award” for best research paper published in Indian Phytopathology during the year 2012-16** (Table 1).

14. Prof. M.J. Narasimhan Academic Merit Award

This year total **12** contestant participated in this contest from different zones. The judging committee recommended the name of **Mr. V. Kavi Sidharthan**, Division of Plant Pathology, ICAR-IARI, New Delhi as winner for Prof. M.J. Narasimhan Academic Merit Award for presentation of the paper entitled **“Selection of a compatible biocontrol consortium for the management of Fusarium wilt of tomato”**

However, the following names were recommended for Commendation award:

1. **Mr. Nandan, M.**, College of Agriculture University of Agricultural Sciences, GKVK, Bengaluru for the paper entitled “Isolation, characterization and evaluation of fungal endophytes as potential bio control agents on *Sclerotium rolfsii* Sacc. Infecting *Capsicum annum* L.”

Table 1: List of awardees - M.J. Narasimhan Medal Award

Year	Title of the paper	Authors	Vol./Page No.
2012	In planta distribution, accumulation, movement and persistence of Citrus tristeza virus in citrus host	A. Tarafdar, P.D. Ghosh and K.K. Biswas	65(2): 184-188
2012	Utilization of plant growth promoting bacillus strains isolates for the management of bacterial wilt incidence in tomato caused by <i>Ralstonia solanacearum</i> race 1 biovar	Dinesh Singh, D.K. Yadav, Shewta Singh and B.K. Upadhyay	65(1): 18-24
2013	Molecular detection of begomoviruses associated with a new yellow leaf crumple disease of cucumber in Maharashtra, India	L.M. Suresh, V.G. Malathi and M.B. Shivanna	66(3): 294-301
2014	Epidemiological analysis of the damage potential of Pgt-Ug99 in Central East, North East Africa, Iran and Punjab (India)	S. Nagarajan, K.H. Kogel and J.C. Zadoks	67(1): 26-32
2015	Characterization of phytoplasmas associated with sesame (<i>Sesamum indicum</i>) phyllody disease in North India utilizing multilocus genes and RFLP analysis	Sajah Un Nabi, Madhupriya, Durgesth Dubey, G.P. Rao, V.K. Baranwal and P. Sharma	68(1): 112-119
2016	Characterization and genetic diversity of <i>Xanthomonas campestris</i> pv. <i>Campestris</i> causing black rot disease in crucifers in North India	Priyanka Singh Rathour, Dinesh Singh and Richa Raghuvanshi	69(2): 114-118



Delegates attending the Prof. M.J. Narasimhan Academic Merit Award contest



Mr. V. Kavi Sidharthan receiving Prof. M.J. Narasimhan Academic Merit Award

2. **Mr. Prabu Gnanasekaran**, Molecular Virology Laboratory, School of Life Sciences, JNU, New Delhi for the paper entitled "A geminivirus betasatellite encoded β C1 protein interacts with PsbP and subverts PsbP-mediated antiviral defense in plants".

15. APS Travel Sponsorship Award

The following 5 names were been recommended for this travel grant sponsorship. The abstract and biodata of the selected candidates were sent to APS for final recommendation.

1. **Miss. Ranima Mishra**, Department of Plant Pathology Assam Agricultural University Jorhat 785013, Assam, India for the paper entitled "Purification, electron microscopy, antisera production, serodiagnostics and molecular characterization of Potato virus Y (PVY) causing severe mosaic of potato".
2. **Ms. Savita V. Patil**, Department of Biotechnology, School of Sciences, Jain University, Bengaluru for the paper entitled "Antioxidant-mediated survival strategy in primed ragi plants against blast disease".
3. **Mr. Devanshu Dev**, Department of Plant Pathology, College of Agriculture, G.B. Pant University of Agriculture & Technology, Pantnagar, Uttarakhand for the paper entitled "Pathogenic Characterization of *Albugo candida* isolates the cause of White Rust Disease in Rapeseed-Mustard".
4. **Mr. Suraj Goldar**, Department of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, West Bengal for the paper entitled "Effect of soil abiotic factors and

cropping system on *Sclerotium rolfsii* disease conducive/suppressiveness".

5. **Ms. Sarbani Das**, Department of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, West Bengal for the paper entitled "Characterization and expression of Fungicides induced novel Pathogenesis Related Protein 1 (PR1) gene in tomato (*Solanum lycopersicum*) cv. Pathar Kuchi".

The name of **Ms. Savita V. Patil**, Department of Biotechnology, School of Sciences, Jain University, Bengaluru, Karnataka, has been selected by American Phytopathological Society (APS) for **APS Travel Sponsorship Award (2018)**. She has been invited for presentation in **International Congress of Plant Pathology (ICPP) 2018** to be hosted by APS in Boston, Massachusetts, USA during July 29-August 3, 2018.

16. K.P.V. Menon Best Poster Award

The judging committee recommended the following names for KPV Menon Best Poster Award (Table 2):

Institution of New Awards

i. For institution of new award in the name of Late Dr. S. Nagarajan

A meeting of the following committee members namely, Drs. B.N. Chakraborty (Chairman), Pratibha Sharma, R.N. Pandey, Robin Gogoi and Dinesh Singh (Member Secretary) was held in the Library, Division of Plant Pathology, ICAR-IARI, New Delhi on 29.07.17 at 11.00 AM to discuss and develop the guidelines for institution of new award in the name of Late Dr. S. Nagarajan, Former Chairman, PPVFRA, Govt. of India;

**Table 2:** List of awardees - K.P.V. Menon Best Poster Award

Rank	Name & Address	Title of Poster
Winner	Dr. Kuldeep Talukdar and L.C. Bora	Arsenic bioremediation using Arsenic resistant bacteria from agricultural soil of Assam
Commendation award	Vinod Upadhyay, K.P.S. Kushwaha and Puja Pandey	Management of <i>Uromyces viciae-fabae</i> (Pers.) J. Schrot. in <i>Pisum sativum</i> L. through alteration in sowing time
Commendation award	P. Akash, Shinde Nikhil D., Toshya Agrawal, Anil S. Kotasthane, Najam Waris Zaidi and U.S. Singh	Identification of potential Fluorescent <i>Pseudomonas</i> isolates inducing drought tolerance in rice and wheat

and former Director, IARI, New Delhi. However, Drs. R.K. Jain, K.D. Srivastava and V. Prakasam could not attend the meeting.

After thorough discussion, the committee members suggested that the award can be instituted only after raising/generating the endowment fund by voluntary contribution from the IPS members/industries or from other sources.

EC has requested that Dr. Rashmi Aggarwal, Head & Ex-Officio, IPS to take lead to generate endowment fund for new award in the honour of Dr. S. Nagarajan with the help of Dr. M.S. Saharan, Principal Scientist, IARI, New Delhi

ii. For institution of new award in the name of “IPS Women Scientist Award”

EC has recommended and General Body approved the name of the Award as “**D.P. Mishra & R.N. Pandey IPS Best Women Scientist Award**”. The eligibility criteria will be as follows:

- i. Candidate should have atleast 10 years of Life Membership of the Society
- ii. Holding permanent position
- iii. There will be no age limit for the candidate
- iv. TA/DA, certificate and memento will be offered to awardee
- v. Biodata will be called through EC as well as by open nomination
- vi. The award will be annual and presentation will be made at the Annual Meeting /National Symposium of the Society.

The award will be executed subjected to receiving endowment fund of Rs. 5 Lakh from donor Dr. R.N. Pandey, Head (Plant Pathology), AAU, Anand before April 2018.

iii B.N. Chakraborty and Usha Chakraborty Plant Pathology Best Teacher’s Award

General Body also approved the institution of new award for best teacher as “**B.N. Chakraborty and Usha Chakraborty Plant Pathology Best Teacher’s Award**”

The endowment fund of Rs. 5 Lakh for this award will be donated by Prof. B.N. Chakraborty and Prof. Usha Chakraborty in 2 installment before April 2018.

The award will be executed subjected to receiving endowment fund of Rs. 5 Lakh from donor Prof. B.N. Chakraborty and Prof. Usha Chakraborty, (Retd. Professor, NBU, Siliguri), Upohar Condoville, Flat - 1001, Tower - 052052, Chak Garia, Kolkata, West Bengal.

iv. Withdrawal of cash award in A.P. Misra Memorial Lifetime Achievement Award

The General Body agreed that the cash prize amount of Rs. 15,000.00 under A.P. Misra Memorial Lifetime Achievement Award may be withdrawn from 2018 due to enhancement of expenditures in airfare, local hospitality, registration etc. The awardee will get citation, memento and shawl.

III. Nomination of Honorary Fellow and Advisory Board

General Body approved the names recommended for Honorary Fellows and Advisory Board members of the Society

Honorary Fellow (new addition): **Dr. B.L Jalali, India, Dr. U.P. Singh, BHU, Varanasi, UP, India**

Advisory Board members (new addition): **Dr. D.V. Singh, New Delhi, India; Dr. Casiana M. Vera Cruz, IRRI, Philippines/Dr. G.S. Dubey, Ranchi**



Declaration of results of President-Elect 2018 and composition of Executive Council 2018

The election for the President-Elect (2018) was held between Dr. M.P. Thakur, IGKV, Raipur and Dr. J. Kumar, GBPUAT, Pantnagar as per schedule. The election result was declared during the General Body Meeting on 16th Feb 2018 and Dr. M.P. Thakur won the election as President Elect. On the basis of election result, the composition of new Executive Council (2018) will be as follows.

Executive Council (2018)

President	: Dr. R.N. Pandey, Anand Agricultural University, Anand, Gujarat
President Elect	: Dr. M.P. Thakur, Indira Gandhi Agricultural University, Raipur, Chhattisgarh
Secretary	: Dr. Dinesh Singh, ICAR-Indian Agricultural Research Institute, New Delhi
Joint Secretary	: Dr. Robin Gogoi, ICAR-Indian Agricultural Research Institute, New Delhi
Treasurer	: Dr. Vaibhav K. Singh, ICAR-Indian Agricultural Research Institute, New Delhi
Chief Editor	: Dr. M. Anandaraj, 48A "Madhoovan" 2nd Main, Railway Men Layout, Thanisandra, Bangalore, Karnataka
Senior Editors	: Dr. S.C. Dubey, ICAR-National Bureau of Plant Genetic Resources, New Delhi Dr. Dr. V.K. Baranwal, ICAR-Indian Agricultural Research Institute, New Delhi
Ex-officio	: Head (Plant Pathology), Dr. Rashmi Aggarwal, ICAR-Indian Agricultural Research Institute, New Delhi

Zonal Chapters

Zonal President (CZ)	: Dr. S. Girisham, Kakatiya University, Warangal, Telangana
Zonal Councillor (CZ)	: Dr. D. Nagaraju, Government Degree College, Warangal, Telangana
Zonal President (DZ)	: Dr. D. Bahukhandi, ICAR-Indian Agricultural Research Institute, New Delhi
Zonal Councillor (DZ)	: Dr. Lakshman Prasad, ICAR-Indian Agricultural Research Institute, New Delhi
Zonal President (EZ)	: Dr. Gireesh Chand, Bihar Agricultural University, Bhagalpur, Bihar
Zonal Councillor (EZ)	: Dr. Chanda Kushwaha, Bihar Agricultural University, Bhagalpur, Bihar
Zonal President (MEZ)	: Dr. M.R. Khan, Aligarh Muslim University, Aligarh, Uttar Pradesh
Zonal Councillor (MEZ)	: Dr. M.A. Siddiqui, Aligarh Muslim University, Aligarh, Uttar Pradesh
Zonal President (NZ)	: Dr. S.K. Sharma, Dr. Y. S. Parmar University of Horticulture and Forestry, Solan, HP
Zonal Councillor (NZ)	: Dr. Meenu Gupta, Dr. Y.S. Parmar University of Horticulture and Forestry, Solan, HP
Zonal President (NEZ)	: Dr. Amar Bahadur Singh, College of Agriculture, Agartala, Tripura
Zonal Councillor (NEZ)	: Dr. Durga Prasad Awasthi, College of Agriculture, Agartala, Tripura
Zonal President (SZ)	: Dr. R. Selvarajan, ICAR-National Research Centre for Banana, Tiruchirapall, TN
Zonal Councillor (SZ)	: Dr. R. Thangavelu, ICAR-National Research Centre for Banana, Tiruchirapall, TN
Zonal President (WZ)	: Dr. K.D. Thakur, College of Agriculture, Nagpur, Maharashtra
Zonal Councillor (WZ)	: Dr. S.B. Bramhankar, College of Agriculture, Nagpur, Maharashtra



The following decision were taken and approved by the General body:

1. National Symposium 2018-19

Proposal for IPS next Annual Meeting and National Symposium 2018-19 submitted by Dr. Rakesh Pandey, CSIR-CIMAP, Lucknow was discussed in the General Body. Moreover, Dr. R.N. Pandey, President-Elect also proposed the Junagadh Agricultural University, Junagardh as venue for next Annual Meeting and National Symposium of the Society. However, GB decided that IPS next Annual Meeting and National Symposium 2018-19 will be held at CSIR-CIMAP, Lucknow and Dr. Rakesh Pandey, CSIR-CIMAP, Lucknow will be the organizing secretary of the symposium.

2. Special Symposium on Extension Plant Pathology

Proposal from Vice Chancellor, IGKV, Raipur for holding Special Symposium on “**Extension Plant Pathology: Technological Backstopping to the Farmers/State Officials**” at IGKV, Raipur in September 2018 was approved by the General Body. However, the date of the symposium will be finalized in the Mid-term EC meeting.



3. General Body agreed to organize **International Conference on “Role of Soil and Plant Health in Achieving Sustainable Development Goals”** in Bangkok, Thailand (2018) in collaboration with APAARI, Bangkok, Thailand in the third week of November 2018.

4. International Symposium on Plant Pathology by the Society

General Body also agreed to organize 7th International Conference of the Society in February 2020 at Division of Plant Pathology, IARI, New Delhi

5. Brain Storming Session on wheat blast

Proposal for conducting Brain Storming Session on “Transboundary wheat diseases threats in Asia and our preparedness” by Dr. D.P. Singh, IIWBR, Karnal was approved by the General Body.

6. Fixation of the salary of IPS staff

EC has recommended that the salary of IPS Staff will be enhanced by 8% annually and to be fixed based on existing salary w.e.f. from April 2018 and it will be for the 3 years as Business Manager: 32,000.00; Editorial Assistant: Rs. 13,000.00 and Office Assistant: Rs. 10,000.00



70th Annual General Body Meeting of the Society held at Assam Agricultural University, Jorhat, Assam, February 16, 2018



Activities

Zone	Date	Topic	Venue	Organizers	No. of Participants
Guest Lecture	July 29, 2017	Opportunities through Plant Protection	Division of Plant Pathology	IPS, New Delhi	85
Special Symposium	Oct. 5-7, 2017	Microbial Antagonists and Symposium their Role in Biological control of Plant Diseases	AAU, Anand,	Dr. R.N. Pandey Gujarat	320
Southern 2017	Sept. 12-13,	Emerging trends in plant health management in relation to climate change	College of Hort., UHS Campus, Bengaluru	Dr. V. Devappa Dr. Anjaneya Reddy	250
Western	Oct. 06, 2017	Zonal symposium held with special symposium	AAU, Anand, Gujarat	Dr. S.S. Mane Dr. M.V. Totawar	300
North Eastern	Oct. 10-11, 2017	Emerging and Re-emerging Plant Diseases in North East India: Challenges and Strategies	ICAR Research Complex for NEH Region, Manipur Centre, Imphal	Dr. N. Prakash Dr. Susheel Sharma	77
Northern	Nov. 13-14, 2017	Ecologically Sustainable Plant Diseases Management under Diversified Farming Situation	SKUAUS-J, Jammu	Dr. Shahid Ahmad Dr. S.K. Singh	128
Eastern	Nov. 23-24, 2017	Challenges and perspective in plant health management under climate change scenario	BCKV, Mohanpur	Dr. Srikanta Das Dr. Subrata Dutta	150
Delhi	Dec. 19, 2017	Innovative strategies for the management of plant disease under climate change scenario	Division of Plant Pathology, IARI, New Delhi	Dr. Atul Kumar Dr. Bishnu M. Bashyal	105
Central	Dec. 14-15, 2017	Challenges and opportunity: Management of plant disease under weather chan	JNKVV, Jabalpur	Dr. Om Gupta Dr. P.K. Gupta	314
Mid-Eastern	Dec. 21-23, 2017	Sustainable disease management: Approaches and applications	GBPUAT, Pantanagr	Dr. K.P. Singh Dr. A.K. Tewari	276
National Symposium 2018	Feb. 15-17,	Plant Health Management: Embracing Eco-Sustainable Paradigm	AAU, Jorhat Assam	Dr. Ashok Bhattacharyya	405
Total delegates					2410



Guest Lecture: Opportunities through Plant Protection

A Guest Lecture on “**Opportunities through Plant Protection**” was organized by the Society on 29th July 2017 at 3.00 PM in the Auditorium, Division of Plant Pathology, IARI, Pusa Campus, New Delhi. The lecture was delivered by Dr. R.K. Khetarpal, **Regional Advisor (Strategic Science Partnerships) CABI, India** under the Chairmanship of Prof. Anupam Varma, **Adjunct Professor & INSA Emeritus Scientist and former President, IPS**. The lecture was attended by 85 delegates including students, faculties and IPS members.



Guest Lecture by Dr. R.K. Khetarpal



Group photograph of delegates in the Guest Lecture

Special Symposium

Special Symposium on “Microbial Antagonists and their Role in Biological control of Plant Diseases” held at Anand Agricultural University, Anand, Gujarat, October 5-7, 2017

The Special Symposium on “**Microbial Antagonists and Their Role in Biological Control of Plant Diseases & West Zone Meet of IPS (2017)**” was organized jointly by *Indian Phytopathological Society*, IARI, New Delhi and Anand Agricultural University, Anand at Department of Plant Pathology, B.A. College of Agriculture, Anand, Gujarat during October 5-7, 2017.

The symposium begins with inaugural function on 5th October 2017. The dais was shared by Dr. N.C. Patel, Hon’ble Vice Chancellor, AAU, Anand as President of the function; Dr. Y.L. Nene, Former DDG, ICRIASAT, Hyderabad, Emeritus Chairman, AAHF, Hyderabad, as Chief guest of the function; Dr. C.D. Mayee, President, South Asia Biotechnology Centre, New Delhi, Chairman, AFC Ltd., Mumbai and Former Chairman, ASRB, New Delhi; Agri. Commissioner, Gol, Vice Chancellor, MAU, Parbhani; Director, CICR, Nagpur as Guest of Honour; Dr. B.N. Chakraborty, as President, IPS; Dr. Dinesh Singh, Secretary, IPS; Dr. K.B. Kathiria, Director of Research & Dean Faculty of Post-graduate studies, Dr. K.P. Patel, Dean, Agriculture & Principal, B. A. College of Agriculture, AAU, Anand; Dr. A.M. Shekh, Former Vice Chancellor, AAU, Anand;

Dr. S.S. Mane, Zonal President IPS (West Zone) and Prof. (Dr.) R.N. Pandey, Professor & Head (Plant Pathology) and Organizing Secretary of Special Symposium.

Dr. K.P. Patel warmly welcomed the dignitaries on the dais and the delegates from different parts of the country as well as abroad i.e. Austria, Hungary and Sudan. He briefly highlighted about B.A. College and the researches being carried out by the Department of Plant Pathology particularly on Plant Viruses and *Trichoderma*. He highlighted the contributions made by dignitaries on dais and welcomed invited guests, and all the participants in the symposium. Dr. Dinesh Singh briefed the participants about the IPS, the third largest society of Plant Pathology, having eight zonal chapters to carry out different activities of the society. He highlighted the activities being carried out by the society for the cause of students, scientists, farmers, etc in the area of plant disease management. He explained about the symposium programmes and extended sincere thanks to the participants. The floral welcome was also given to dignitaries on the dais and the invited guests. The symposium was inaugurated



Inauguration of the Special Symposium



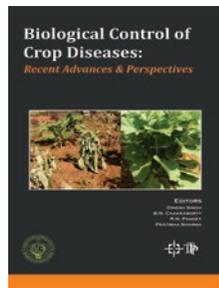
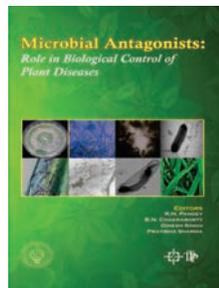


Release of Books in Inaugural Session



by Dr. N.C. Patel, Hon'ble Vice Chancellor, AAU, Anand and other dignitaries by lighting the lamp.

During the inauguration Souvenir of the Symposium and two Books entitled “*Microbial Antagonists: Role in Biological Control of Plant Diseases*” and “*Biological Control of Crop Diseases: Recent Advances & Perspectives*” were released by the dignitaries. During the symposium the eminent scientists and guests were felicitated by Dr. N.C. Patel, Hon. VC by presenting a shawl and memento. The scientists who received the honour were, Dr. Y.L. Nene, Dr. C.D. Mayee, Dr. A.M. Shekh, Dr. Apparao Podile, Dr. A.N.



Mukhopadhyay, Dr. B.L. Jalali, Prof. A.J. Patel, Dr. D.J. Patel, Dr. J.G. Patel, Dr. G.S. Saharan, Dr. Satish Lodha, Dr. S.R.S. Dange, Dr. K.S. Amin, Dr. A.K. Misra, Dr. Pratibha Sharma, Dr. Kredics from Hungary, Dr. Monica Schemoll, from Austria, Shri Eldoma from Sudan, Dr. G.B. Valand, Dr. D.N. Yadav, etc.

In general, there was great enthusiasm for the symposium. About 320 participants including scientists, entrepreneurs, students, etc. attended the symposium from different parts of India and 3 from abroad.

Technical Sessions

The theme-wise abstracts received in different sessions for presentation. Total 5 Plenary lectures, 23

lead, 35 oral and 44 posters were presented in the symposium. Total 44 posters were presented in the symposium (39 posters in different session plus 5 posters in west zone session). The oral and poster presentations were adjudged for the oral and poster presentation award in the symposium and total 29 oral and 13 posters were awarded during the symposium.

Panel Discussion: Future strategies on biological control of plant diseases

The panel discussion on “Future strategies on biological control of plant disease” was conducted under the Chairmanship of Dr. C. Manoharachary and Co-Chairman Dr. R.N. Pandey. Total 18 panelist took part in the session namely, Drs. C.D. Mayee, M.H. Mehta, B.N. Chakraborty, B.L. Jalali, C. Manoharachary, Pratibha Sharma, S.C. Dubey, H.B. Singh, S.R.S. Dange, M. Anandaraj, D.J. Patel, G.S. Saharan, J.G. Patel, László Kredics, Monica Schmol, R.B. Vyas, Arun Arya and Virendra Dhingra.

West Zone Session

The west zone session was conducted under the Chairmanship of Dr. S.R.S. Dange and Co-Chairman Dr. Prashant P. Jambhulkar. One lead and two oral papers were presented in the session.

Prof. M.J. Narasimhan Academic Merit Award Session

The Prof. M.J. Narasimhan Academic Merit Award contest was held conducted under the Chairmanship of Dr. M. Anandaraj and Co-Chairman Dr. Anju Kamra. Total four contestants participated in the completion.

Out of the above four presentations, the judging committee has recommended names of Ms. Janki P.



Delegates of the symposium

Pandya and Dr. V.P. Prajapati for national level contest to be held in the IPS National Symposium.

Visit of Trichoderma Production Unit of Dept. of Plant Pathology, BA College of Agriculture, AAU, Anand

The Dignitaries and participants also visited Trichoderma Production Unit of Dept. of Plant Pathology, BA College of Agriculture, AAU, Anand and gathered information of production of Anubhav Trichoderma and transfer of technology of Biological control of plant diseases through *Trichoderma viride*.



Dignitaries visit Trichoderma Production Unit of Dept. of Plant Pathology, AAU, Anand

Post symposium tour/ Field visit

Visit to see different research centre on biological control like Agriland Biotech, Savli, Vadodara, Nico Orgo Dakor, Anand and College of Food Processing Technology & Bioenergy, AAU, Anand was also organized.

Outcome/Gain

In general the lectures delivered in the plenary sessions and lead lectures and oral presentations of different sessions and panel discussions were quite useful to the participants. The lectures delivered by Dr. Nene i.e. Concept and formulation of Kunapajala, World's oldest fermented liquid organic manure; Dr. M.H. Mehta i.e. "New Developments in Microbial and Organics and their Role in Eco-Agri Revolution; Dr. Mayee on "Biopesticides for biocontrol of crop diseases: Problems and prospects" Dr. László Kredics on "Development of Trichoderma-based means of biological control: from the field to the laboratory and back again"; Dr. Pratibha Sharma on "Endophytism in Trichoderma spp.: An overview; Dr. Lodha on "Managing soil borne plant pathogens by native bio agents in Indian arid region"; Dr. Monica on "Sensing of plants, microbes and nutrients by Trichoderma and Dr. Mukhopadhyay lecture of Trichoderma a boon to Mankind were of special significance which will be of very much helpful in researches on Biological Control of Plant Diseases.

Private stake holders engaged in production of bioagents and farmers participated in the symposium and interacted with the scientists. It was felt that there is a need to bring all stake holders together to share their knowledge and over the problems for better transfer of technology for the benefit of all the stake holders.

Recommendations

Many diseases caused by fungi, bacteria, viruses, etc, cause huge qualitative and quantitative yield losses in crops. Injudicious use of chemical pesticides have many deleterious effects on crops and environment. Biological control of plant pathogens/ insect pests are eco-friendly and sustainable management of these pests and have gained the importance in present days due to their various benefit over the chemical pesticides. In the symposium the deep discussions in various sessions have emerged the recommendation as follows:

1. The different biocontrol agents viz. *Trichoderma* spp., *Pseudomonas fluorescens*, *Bacillus subtilis*, etc. which have been found quite effective need to be popularized among the farmers. "Kunapajala", World's oldest fermented liquid organic manure the method of preparation available with the Asian Agri-History Foundation should be popularized among the farmers by SAU's and NGO's for the benefit of agriculture and the bioagents efficiency.
2. The biotechnological interventions viz. studies on metagenomics, proteomics, molecular technique, etc. need to be utilized to identify more bioagents useful in the management of biotic and abiotic stresses and integrated nutrient management in crop.
3. We are experiencing the global warming and adverse climate change which effects the crop and its yield. The bioagents should be tested to ward off the ill effect due to climate change.
4. The bioagents from different host crops and different cropping systems should be isolated and characterized for their growth in respect of root exudates, colonizing capacity in the rhizosphere, effect of soil pH, carbon status, soil properties need to be studied to ascertain their role in various aspects of crop production and plant protection.
5. The behaviour of the bioagents against abiotic stresses viz. temperature, humidity i.e. soil wetness, soil alkalinity, soil salinity, etc. should be studied.
6. The delivery of the bioagents through seed treatment, seed biopriming, bioagent enriched farm yard manures and different cakes should be studied and improved upon.
7. Packing materials as well as carriers for better shelf life of the bioagents should be investigated.
8. Liquid fermentation technology and use of the liquid culture of the bioagents in the disease management should be worked out.
9. The biopesticides are quite effective only when their quality in terms of proper concentrations ie. CFU, proper shelf life is maintained. Presently due to lack of proper production technology and cost the bioagents in the market do not perform upto the expectation of the farmers, which need to be monitored by govt. agencies to keep the faith of farmers for the bioagents.
10. The proper funding should be provided by the govt. in the form of projects to improve the quality of the bioagents and commercial formulations.
11. The efficient bioagents viz. *Trichoderma* spp. and *Pseudomonas fluorescens*, *Bacillus* and other fungal and bacterial bioagents should be identified and registered by CIB &RC for the use of the farmers.



Group photograph of the Special Symposium



12. The endophytic bioagents need to be explored which can be supplemented along with the Mycorrhiza for better efficiency in the disease control of the plants.
13. The consortium of the bioagents along with the biofertilizers should be developed and commercialized for the use of the farmers.
14. Demonstrations of the bioagents for the disease management should be conducted and success stories should be published to encourage the farmers to use the biological control technology.
15. There is a great potential market in the biopesticides and bioagent business and therefore the govt. should allocate much money under start-up business and Make in India programmes to prepare out youth an entrepreneurs.
16. There should be an association consisting of scientists, and private stake holders, government agencies for promotion of the biopesticides for wide use in agriculture and particularly organic farming of crops.
17. Such special symposiums on Biological Control need to be organized frequently for the benefit of all those who are associated with the bioagents business and farmers particularly organic producer.

Zonal Activities: Southern Zone

Zonal President: Dr. V. Devappa
Zonal Councillor: Dr. B. Anjaneya Reddy

Southern Zone Meeting and National Symposium on “Emerging Trends in Plant Health Management in Relation to Climate Change” held at College of Horticulture, UHS Campus, GKVK, Bengaluru, September 12-13, 2017

The National Symposium of IPS (Southern Zone)-2017 on “Emerging Trends in Plant Health Management in Relation to Climate Change” was held during 12th - 13th September 2017 at quadrangle of College of Horticulture, UHS Campus, GKVK, Bengaluru. The inauguration of the two days function was performed by Dr. K. Ramaswamy, Vice-chancellor of TNAU, Coimbatore; Dr. Dinesh Singh, Secretary, IPS; Dr. D.L. Maheswar Vice Chancellor, UHS, Bangalore and Dr. B.L. Jalali, Former Director of Research, HAU, Haryana. The programme was attended by more than 250 delegates. Twenty eight lead lectures and oral presentation and more than 150 posters were presented covering the nine major theme areas of the symposium.

Themes of the symposium

1. Recent advances in detection and diagnosis of plant diseases.
2. Host plant resistance.
3. Epidemiology and disease forecasting.
4. Role of Extension plant protection in agriculture.
5. PGPR, bio-inoculants and its role in the management of diseases.
6. Impact of changing climate on plant diseases.
7. Bio and Nano technological approaches in plant disease management.
8. Management of plant diseases through chemicals.
9. Integrated disease management approaches.



Inauguration of the Southern Zone Symposium



Recommendations

1. Stressed on the changes needed in the system of agriculture policy and research
2. He opined that the plant nutrition or the plant health management should be a holistic approach and also stressed on the controlled nutrient package delivery for higher productivity.
3. Stressed on the adoption of cutting edge technologies without overlooking the basic technologies.
4. Stressed the need for development of in-house technologies to meet the local needs and also linking of Ph.D research to end with a product.
5. Stressed on the need to adopt the IPM practices in the changed climatic conditions
6. Stressed on the strategies to mitigate the crop losses due to climate change and the need to work on the climate change factors by staff and students.
7. Role of ICAR, SAU and central government in curtaining the introduction of exotic insect pest and pathogens.
8. For rust resistance in wheat the germplasm can be screened in places like Wellington where the temperature will be low to moderate throughout the year.
9. Wild tomatoes possess promising resistant genes against early blight of tomato should be utilized.
10. The immediate attention of policy makers and scientist to work on the reduction of negative impact of climate change on the crop production and crop protection.
11. Assessing the genotype and race profiling of the pathogens and adoption of IDM practices including transgenic practices for sustainable food production.
12. Proper survey to assess the damage, diseased plants and measures for aforestration to restore the ecological balance.
13. Utilization of multiple diagnostic techniques like PCR, RPA, CPA, NASBA, NEAR, HAD, SDA, RCA, SMART in the diagnosis of plant pathogens.
14. Utilization of only certified planting material to avoid the introduction and spread of new plant pathogens.
15. For the effective extension functioning proper utilization of media, information management and ICT methods.
16. Use of Tebuconazole@0.1% for effective control of leaf rust of wheat.
17. Need to give more emphasis on arecanut diseases like inflorescence dieback, ganoderma wilt, bacterial leaf blight and yellow leaf diseases in South India.
18. For management of pomegranate wilt, along with all other practices application of bioagents at the early stage is effective.
19. Region specific advisories for the nematode free planting material and certified nurseries.



Delegates attending Southern Zone meeting

North-Eastern Zone

Zonal President: Dr. Narendra Prakash

Zonal Councillor: Dr. Susheel Kumar Sharma

North-Eastern Zone Meeting and National Symposium on “Emerging and Re-emerging Plant Diseases in North East India : Challenges and Strategies’ held at ICAR Research Complex for NEH Region, Manipur Centre, Imphal, Manipur, October 10-11, 2017

Two-day National Symposium was organized by ICAR Research Complex for NEH Region, Manipur Centre in collaboration with Indian Phytopathological Society, New Delhi during 10-11 October, 2017 at Imphal, Manipur. The event was inaugurated by Shri Y. Joykumar Singh, Deputy Chief Minister of Manipur at ICAR Research Complex for NEH Region, Manipur Centre on 10 October, 2017. The occasion was also graced by Prof. M. Premjit Singh, Vice Chancellor, CAU, Imphal. Chief Guest stressed upon the need to undertake concerted efforts to develop durable strategies for managing emerging and re-emerging economically important plant diseases in North East region of India. He also urged the scientists to undertake research in the area of organic farming with special emphasis on organic options for plant disease management. The Zonal President, Dr. N. Prakash in his address mentioned that the NE region shares geographical boundaries with neighbouring

countries and therefore is porous to the transboundary entry of new pathogens. He called upon the Plant Pathologists to come together and devise strategies to combat the menace of exotic and transboundary pathogens. Welcome address was delivered by Dr. I. Meghachandra Singh and vote of thanks was delivered by Dr. Susheel Kumar Sharma, Zonal Councillor (IPS-NEZ).

During the two days deliberations were held under six sessions viz.,

1. Emerging and re-emerging plant diseases
2. Recent advances in diagnosis of plant diseases
3. Recent understandings in plant health management
4. Changing scenario and innovations in plant disease research
5. Taking plant pathology to the farmers field
6. Epidemiology and disease forecasting
7. Innovative approaches in plant health management



Inaugural session of the North-Eastern Zone Symposium



A total of 77 delegates from North Eastern and others parts of the country participated in the Symposium. Several lead talks, oral and poster presentations covering wide arenas of Plant Pathology were delivered. Dr. Dinesh Singh, Secretary, Indian Phytopathological Society also delivered a lead talk and a comprehensive presentation on the innovative initiatives of society for the cause of Science of Plant Pathology at National and International level. The prestigious Prof. M.J. Narasimhan Merit Academic Award Contest APS Travel Grant Contest was also organized and two candidates under each category were recommended for National level contest.

The valedictory function on 11 October, 2017 was chaired by Prof. Adya Prasad Pandey, Hon'ble Vice Chancellor, Manipur University, expressed the hope that the recommendations coming out of deliberations will helpful in the formulation of policies in doubling the farmers' income.

Recommendations

The major recommendations emerging out of different session in the Symposium are as follows:

- The climate change imposes various threats in terms of emerging and re-emerging diseases in various crops, hence a crop-wise and location specific integrated approach (IDM/IPM) needs to be developed and adopted for the tackling of such kind of challenges rather than focusing on a single pathogen.
- Long term repository of microbes plays a significant role in an identification and development of management strategies for disease control. To conserve the microbial resources of NE region, the researchers should deposit the microbial culture in recognized repositories like ICAR-NBAIM, Mau.
- Virus and virus-like pathogen are major constraint in the production and productivity of crops in the NE region. There is a need for focussing the research efforts on virus indexing of planting materials of horticultural crops before making it available to the farmers and growers.
- Accurate disease detection and prevention through the use of improved diagnostic techniques needs to be adopted widely for combating of new, exotic and transboundary plant diseases. The efforts on developing eco-friendly management modules thereby minimizing excessive pesticide use should be the first priority in the region. In addition, weather based disease forecasting complemented and supplemented with molecular and immunological detection methods are some of solutions and strategies to overcome emerging and reemerging diseases.
- Biological control has long been recognized as the emerging area of pathogen management. More focused efforts on mass production of the biocontrol agents like *Trichoderma* with the locally available agricultural wastes which is easily available, needs to disseminated and popularized.
- It was opined that organic farming alone cannot be sustainable for feeding the population hence organic farming coupled with and integrated crop management approach can be undertaken.
- Research efforts needs to be focused on characterization and management of reemerging diseases like false smut of paddy, downy mildews in vegetables poty-viruses in different horticultural crops, etc.



Group photograph of delegates of North-Eastern Zone Symposium

Northern Zone

Zonal President: Dr. Shahid Ahamad

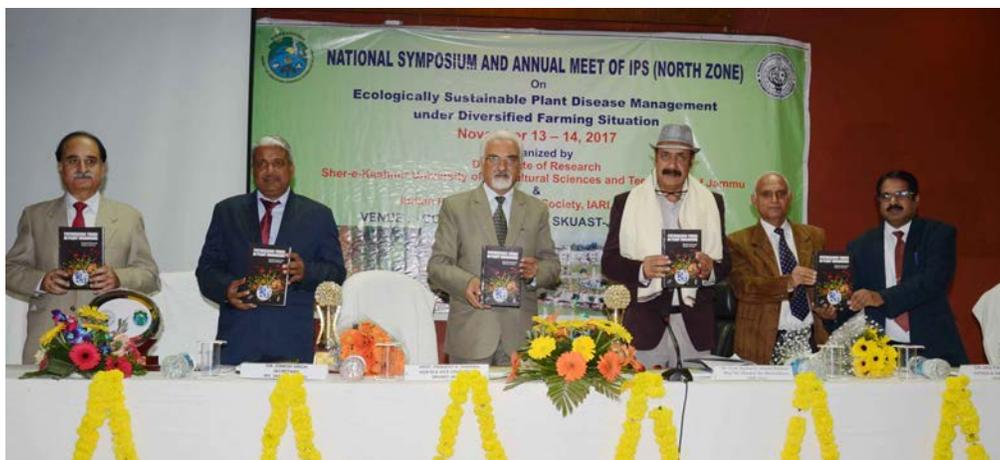
Zonal Councillor: Dr. S.K. Singh

Northern Zone Meeting and National Symposium on “Ecologically Sustainable Plant Diseases Management under Diversified Farming Situation” held at Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu at Main Campus, Chatha, Jammu & Kashmir, November 13-14, 2017

National Symposium of Indian Phytopathological Society & Annual North Zone Meet-2017 on “Ecologically Sustainable Plant Diseases Management under Diversified Farming Situation” was held during November 13-14, 2017 at Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (J&K) at Main Campus, Chatha. The National Symposium was inaugurated by Chief Guest Hon’ble Minister for Horticulture J&K State Jb. Syed. Basharat Ahmed Bukhari and Guest of Honour Hon’ble Vice Chancellor SKUAST-Jammu Prof. Pradeep K. Sharma on 13th November 2017. Dr J P Sharma, Director Research, SKUAST-J, Dr. T.A.S. Ganai, Director Education, Dr Deepak Kher, Director, P&M, Dr. D.P. Abrol, Dean Faculty of Agriculture, Dr. S.A. Mallick, Dean, Faculty of Basic Sciences, Dr. M.M.S. Zama, Dean, Faculty of Veterinary Science, Sh. Istiyak Hussain Chauhan, Comptroller, Dr. Dilip Kachroo, Registrar, SKUAST-J, Dr.Y.S.Paul, Ex. Dean, College of Agriculture, CSKHPKV,

Palampur, H.P., Dr. Dinesh Singh, Secretary, I.P.S., Division of Plant Pathology, IARI, New Delhi, Dr. Ali Anwar, Prof. & Head, Division of Plant Pathology, SKUAST-K, Srinagar, Dr. Sudhir Kumar, Principal Scientist, IIWBR Karnal, Haryana, Dr. Dr. R.K.Salgotra, Coordinator, SBT, SKUAST-Jammu, Mrs. Anuradha Gupta, Director Horticulture, S Tarvinder Singh, Joint Director Horticulture, Sh Dharam Vir Gupta, Nodal Officer (CSS) Floriculture, Head of Divisions of Faculty of Agriculture, Dr.A.K.Sharma, Associate Director Research, Poonch; Sr Scientist and Head of Krishi Vigyan Kendras, Incharge Stations participated in the symposium.

Dr. V.K. Razdan, Convenor welcomed the Chief Guest Hon’ble Minister for Horticulture J&K State Jb. Syed. Basharat Ahmed Bukhari and Guest of Honour Prof. Pradeep K. Sharma Hon’ble Vice Chancellor, SKUAST-Jammu, distinguished guests, officers of University and other participants to the symposium and expressed



Release of Abstract & Souvenir in the Inaugural session of the Northern Zone Symposium



gratitude to the Chief Guest and Hon'ble Vice Chancellor for sparing their valuable time to the symposium despite their busy schedule and extending all help in the organization of the meeting. He further emphasized that deliberations made during the symposium will prove fruitful while making scientific recommendations by the scientists of the North zone of India.

Themes of the Symposium

1. Technical Session I: Integrated Disease Management in important vegetable, fruit and field crops
2. Technical Session II: Role of Epidemiology in Effective Disease Management
3. Technical Session III: Effect of soil ecology upon disease management
4. Technical Session IV: Molecular approaches in plant disease diagnosis and management
5. Technical Session V: Inevitable role of biological control for plant disease management

During two days symposium twenty presentations including eight lead papers were presented by eminent speakers viz Dr. Dinesh Singh, Principal Scientist, Division of Plant Pathology, IARI, New Delhi, Dr. Ali Anwar, Prof. & Head, Division of Plant Pathology, SKUAST-Kashmir, Srinagar, Dr. Y.S. Paul, Ex. Dean, College of Agriculture, CSKHPKV, Palampur, H.P., Dr. Sudhir Kumar, Principal Scientist, IIWBR, Karnal and Dr. R.K. Salgotra, Coordinator, SBT, SKUAST-Jammu were presented in the symposium. There were 6 sessions in two days. Around 128 Scientists and students participated in the symposium and presented their research papers in the form of lead, oral and poster in different sessions.

Five presentations for Narasimhan Academic Merit Award Contest and APS Travel Grant Contest were presented in the session. Two name of the students i.e. Mr. Gurvinder Singh and Mr. Mudasir Ahmad Bhat were recommended for Narasimhan Academic Merit Award Contest and one name Mr. Sajad Ahmed Azad was recommended for APS Travel Grant Contest from this zone to the Secretary, IPS, New Delhi.

Recommendations

- Identification and diagnosis is the only key for successful management of plant diseases.

- Host resistance, biological control, cultural practices and chemical management are integrated approaches for disease management.
- The disease severity of powdery mildew in mango ranges from 8.5 to 42.5 per cent. However, hexaconazole (0.1 %) was found to be most effective followed by dinocap (0.1 %) against powdery mildew of mango.
- Endophytes isolated from the *Allium sativum* can be used for biocontrol agents for the particular host plant and has antimicrobial property against human pathogens.
- The cultivar TM-108, RH-1202, RL-JEB-84 and SBJ-64 of Indian mustard were moderately resistant against *Alternaria* blight under Jammu conditions.
- Biological control agents such as *Trichoderma viridae* and *T. harzianum*; and plant extracts of marigold and neem are effective for rice blast management.
- There is significant and positive correlation of maximum and minimum temperature and negative correlation minimum relative humidity with wheat stripe rust severity.
- Adoption of plant protection activities recommended by SKUAST-J increases production and leads to improvement in socio-economic status of farmers.
- Timely irrigation, maintenance of proper spacing, pruning, mulching, sanitation, etc. reduce the initial inoculums as well as disease development in crops.
- Varieties which shows resistance under organic eco-system should only be planted in organic agriculture.
- Strip cropping row crops with perennial legumes leads to better disease control
- Botanicals or plant based inputs such as neem oil, neem products, asphoetida, eupatorium extracts can be prepared on farms and effective against many diseases.
- It is important to manage the crop husbandry practices effectively than to manage the plant diseases.
- Molecular diagnostics methods like PCR, LAMP, Microarray and Biomarkers are helpful for early detection of plant pathogens for proper



management of plant diseases under the changing global scenario. These diagnostics are very useful in quarantine and import, export of agricultural commodities.

- Identification of races of yellow rust of wheat are helpful for the deployment of resistant genes against the disease. 46S119 race of yellow rust has been emerged predominant race in North Western plains of India

- For sustainable management of plant diseases, biological control is an important alternative for synthetic pesticides.

The Symposium concluded with vote of thanks by Dr. Shahid Ahamad, President, IPS (North Zone) & Organizing Secretary of the Symposium.



Delegates attending the Northern Zone Symposium

Eastern Zone

Zonal President: Dr. Srikanta Das
Zonal Councillor: Dr. Subrata Dutta

Eastern Zone Meeting and National Symposium on “Challenges and Perspective in Plant Health Management under Climate change Scenario” held at Department of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal, November 23-24, 2017

The Indian Phytopathological Society, East Zone Meet cum National Symposium on “**Challenges and Perspective in Plant Health Management under Climate change Scenario**” was jointly organized by Department of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal & IPS (EZ) during 23-24th November, 2017. The symposium was organized with the twin objectives of understanding the present scenario in **plant protection** and to encourage young scientists to participate and compete with the goal of encouraging them to higher levels of **understanding** and **research**. More than 150 delegates participated in the symposium.

Symposium was formally inaugurated by Hon’ble Vice-Chancellor of Bidhan Chandra Krishi Viswavidyalaya, Dr. D.D. Patra and Chief guest Prof. S. Ghosh, Hon’ble Vice-Chancellor of Kalyani Viswavidyalaya, Dr. P.K Chakraborty, ADG, Plant Protection, ICAR, Prof. B.K Senapati, Director of Research, BCKV, Prof. B.N.

Chakraborty, President of IPS and Dr. Dinesh Singh, Secretary of IPS, Prof. S. Das, Dean Faculty of Agriculture, BCKV. All the dignitaries present in the Inaugural Session emphasized the need for such a Symposium in the context of good plant protection practices under globalization and changing climate scenario.

Themes of the Symposium

- i. Taxonomy of plant Pathogen, Pathogen diversity and Plant disease diagnosis.
- ii. Technical Session II: Survey, surveillance and epidemiology of major and emerging diseases of crops.
- iii. Chemicals/ Non- chemicals in plant disease management
- iv. Biotechnological Approach for Plant Disease Management
- v. Host pathogen interaction
- vi. Recent trends in management of post-harvest disease in protected cultivation



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There were 6 technical sessions in the symposium, in which total 12 lead and 17 oral presentations were delivered under different themes.

Prof. S.B. Chattopadhyay Memorial Lecture

Dr. P.K. Charabarty, ADG, Plant Protection presented the Prof. S.B. Chattopadhyay Memorial Lecture. He pointed out that although crop production in India has increased in an unprecedented rate during post green revolution; there still exists large gap in food security due to chronic, emerging and invasive pests and diseases. The problem is intensified by transboundary migration of invasive insect pests and diseases in new locations. Head blight of wheat and barley and blast of wheat are two major examples causing a havoc globally. A balanced prevention and preparedness acts by improvement in diagnostic infrastructure and early warning system and secured local and global communication system needs to be adopted to ensure crop biosecurity of the country.

Prof. A. K. Sinha Memorial Lecture

Dr. Tapas K. Kundu, JNCASR, Bangalore has presented Prof. A. K. Sinha Memorial Lecture. He emphasized the role of small chemical modifications of gene and its associated proteins, such as DNA methylation, histone methylation, acetylation, phosphorylation etc. in gene regulation and changes in gene expression keeping DNA sequences almost same. It is termed as 'epigenetics'. Since pathogens and abiotic factors induce epigenetic modifications in plant system, there are enormous scope to intervene the epigenetic health for better plant protection and crop production.

Prof. S. Mukhopadhyay Memorial Lecture

Dr. Bikash Mandal, Principal Scientist, Division of Plant Pathology, IARI has presented the Prof. S. Mukhopadhyay Memorial Lecture. He emphasized that begomo viruses exclusively vectored by *Bemisia tabaci* is the largest group of plant viruses out of 1390 plant virus and viroid species recognized all over the world and 25% of the begomovirus species have been documented in India. Due to difficulty in management using conventional approaches and lack of resistant cultivars, international trade, climate change, resurgence of vector and intensive cultivations of crops throughout the seasons are important factors of

outbreaks of begomo virus diseases in India and other countries.

Farmers/ Scientist/ Industrialist meet IPS (EZ) 2017

Session was started with felicitation of Chairman and Co Chairman. Farmers introduced themselves and are coming from different region of Nadia. Mr. P. Ghosh asked about the selection of chemicals and crops. Farmers are mainly guided by the input pesticide dealers. One of the farmers replied that they selected the crops based on neighbor advices or after seeing neighbor's crops. They also notice the return from previous crop. Mr. P. Ghosh also informed the house that sale of hybrid vegetables has been reduced to 40%. Mr. P.Ghosh also tells that around 30% of research product arrives to the farmers. He also suggested reducing the cost of cultivation. Mr. P. Ghosh also said the prospects and problems of marketing of organic cultivation. He gave the example of banana cultivation of Keveator. Sirazul Mondal, Nadia asked how off type cultivation should be done. He told the house that he is interested in cultivation of pear and cauliflowers, however, seed is not available and Prof. Jayanta Tarafdar gave suggestion to the farmers. Mr. Agamananda Roy suggested that University should make a set up to address the current issue of farmers. He also suggested that Farmers'-Scientist interaction session should be commenced in future just after completion of the Inaugural session. Two of the progressive farmers, Sumit Parivar and Swapan Nandi asked about the recent approaches for management banana wilt. Prof. B.N. Panja gave the suggestion, he told the house that the plantlet should be collected from authenticated and genuine source. Treatment of root of banana plant with carbendazim @ 2 g/lit of water is beneficial. Dr. S. Dutta suggested the house about collar rot disease of chilli, brinjal, tomato etc. He also suggested the house about soil testing and application of bio-fertilizers. One farmer asked about canker of *ber*. Prof. B.N. Panja gave the suggestion. Thus, the interaction session was very lively and a lot of information related to field problem was identified by the plant pathologists for future work.

Recommendations

1. Diagnostic infrastructure and proper quarantine measures should be strengthened to check



- introduction and spread of new pests and diseases
2. Researches on development and application of biocontrol agents and nanotechnology for plant biotic stress management in large scale should be encouraged
 3. Models developed for disease and pest forecasting to be evaluated in different regions for validation.
 4. The technologies developed or the innovations of the progressive farmers should be evaluated or fine-tuned for large scale commercial use.
 5. More research emphasis should be given for non-conventional plant biotic stress management
 6. In the changing climatic scenario, research should be performed in conservation of crop biodiversity and biosafety using novel approaches
 7. IPS should take initiative for conducting series of lectures in different Universities of eastern zones for strengthening research and education in the field of Plant Pathology.
 8. Application of ICT for e-advisories to farmers for biotic/abiotic stress forecast and management.
 9. IPS should take initiative for preparation of Manuals for crop specific IDM in consultation with ICAR, SAUs, KVKs and Private sectors.



Group photograph of delegates in the Eastern Zone Symposium



Delhi Zone

Zonal President: Dr. Atul Kumar

Zonal Councillor: Dr. Bishnu Maya Bashyal

Delhi Zone Meeting and National Symposium on “Innovative strategies for the management of plant diseases under climate change scenario” held at Division of Plant Pathology, ICAR-IARI, New Delhi, December 19, 2017

National symposium and Delhi chapter meeting of Indian Phytopathological society on “**Innovative strategies for the management of plant diseases under climate change scenario**” was organized on December 19, 2017 at ACPV auditorium, Division of Plant Pathology, ICAR-IARI, New Delhi. It was a whole day programme including inauguration and 4 Technical sessions with valedictory-cum-prize distribution session. Abstracts of all the technical sessions were published in “Abstracts and Souvenir” and total 105 delegates registered for the symposium.

Inaugural Programme

Inaugural session started at 10:00 am. Dr. N. S. Rathore, DDG (Education) ICAR, was the chief guest and Dr. S. S. Solanki, ADG (F&FC) ICAR, Dr. R. K. Singh, ADG (Commercial Crops) ICAR, were the guest of

honor for the function. Inauguration of symposium was started with the lightening of lamp followed by welcome address which was delivered by Dr. Rashmi Aggarwal, (Head, Division of Plant Pathology, IARI). Dr. Atul Kumar (Zonal President and organizing secretary) delivered about the symposium and technical sessions to be conducted during the symposium. Dr. Dinesh Singh (Secretary, IPS) presented about the society, its establishment, zonal chapters, awards, etc. He also informed that IPs started one new award for women scientists and he explained its eligibility. Dr. B. N. Chakraborty gave remarks for the IPS. Dr. R. K. Singh ADG (CC) ICAR and Dr. I. S. Solanki ADG (F&FC) ICAR emphasized on need for the integrated disease management approach for the farmers. Chief guest Dr. N.S. Rathore felicitated Dr.



Inauguration of the symposium



Saroj Singh and Dr. B.K. Goswami for their immense contribution in Plant Pathology and addressed the gathering. He emphasized on integrated approach to mitigate the climate change effects and need to sensitize the students for the challenging problems. Inaugural function ended with vote of thanks by Dr. Bishnu Maya Bashyal (Zonal councilor and co-organizing secretary).

Technical Session 1: Presidential address and award lecture

The session was chaired by Dr. Rashmi Aggarwal and Co-Chaired by Dr. Celia Chalam with Dr. Deeba Kamil as Rapporteur. Two lectures were delivered in this session. First lecture was Presidential address which was delivered by Dr. Atul Kumar, Zonal President and Principal Scientist, Division of Seed and Technology, ICAR-IARI, New Delhi on the topic entitled "Management of plant diseases under conditions of climate change using combination approach". The lecture was well presented and it was mainly based on the holistic approach of diseased management.

Second lecture was M. K. Patel Young Scientist Award Lecture which was delivered by Dr. Bishnu Maya Bashyal, Zonal Counsellor and Scientist, Division of Plant Pathology, ICAR-IARI, New Delhi on the topic entitled "Understanding the complex etiology of an emerging disease- bakanae of rice in India". This lecture was very informative with respect of bakanae of rice. She explained the diversity, genomics and management of this important disease.

Technical session 2: Invited Lectures

The session was chaired by Dr. S.C. Dubey, Head, Division of Plant Quarantine, ICAR-NBPGR, New Delhi and Co-chaired by Dr. O.P. Sharma, Principal Scientist, ICAR-NCIPM, New Delhi. After welcoming the participants, the Chairman requested invited speakers to deliver their lectures. This session had three invited lectures namely, Changing climate, extreme weather events and crop diseases delivered by Dr S. Desai from ICAR-CRIDA, Hyderabad, Innovative strategies for biotic and abiotic stress alleviation in wheat plants by Dr. B.N. Chakraborty from University of North Bengal, West Bengal and Genomic-assisted Genetics: mQTL-seq mapping implicates the role of a transcription regulator gene in *Ascochyta* blight resistance of

chickpea by Dr. Parveen Kumar Verma from National Institute of Plant Genomic Research, New Delhi.

Technical session 3: Prof. M.J. Narsimhan Merit Academic Award Contest for Delhi Zone

Dr. V.K. Baranwal chaired the session and given brief about Prof. M.J. Narasimhan contributions in the field of Mycology & Plant Pathology. 7 contestations were participated for Prof. M.J. Narsimhan Merit Academic Award Contest in Delhi Zone.

Prof. M.J. Narsimhan Merit Academic Award Contest for Delhi Zone

1. First place: Prabu Gnanasekaran, Molecular Virology Laboratory, School of Life Sciences, JNU, New Delhi
2. Second place: V. Kavi Sidharthan, Division of Plant Pathology, ICAR-IARI, New Delhi

Technical session 4: Poster Presentations

The poster session was chaired by Dr. Atul Kumar and co-chaired by Dr. Bishnu Maya Bashyal. More than 24 abstracts were received for this session from Delhi, Andhra Pradesh, Jammu and Kashmir, Haryana, Jharkhand, Uttar Pradesh, Chhattisgarh, Maharashtra and Himachal Pradesh. Out of them thirteen posters were displayed. Poster evaluation committee was constituted and evaluated the posters. Students received best poster awards in different theme area. Abstracts are also published in "Abstracts and souvenir".

Plenary cum prize distribution session was started at 4.p.m. Dr. Anupam Varma was the chief guest of the session. Dr. Atul Kumar presented the summary of the symposium. Chief guest Dr. Anupam Varma, Dr. Dinesh Singh (Secretary, IPS), Dr. B.N. Chakraborty (President, IPS), Dr. Rashmi Aggarwal (Head, Division of Plant Pathology), Dr. Atul Kumar (President, Delhi Zone and organizing secretary, IPS) presented the best poster awards to the students. Further, chief guest Dr. Anupam Varma addressed the gathering and motivated the students for the good research. Finally, session ended with the vote of thanks by Dr. Atul Kumar.

Recommendations

1. Along with weather microclimate change needs to be also monitored and assess their impacts



- on plant pathogens as well as their natural enemies.
2. Impact of biocontrol agent to mitigate the climate change needs to be addressed.
3. Development of new IPM methodologies for resource poor farmers should be given thrust.
4. Government regulations on sowing and transplanting time and use of seed treatment other than rice crop could be helpful for the management of some diseases.



Group photograph of the delegates

Central Zone

Zonal President: Dr. Om Gupta
Zonal Councillor: Dr. Pramod Kr. Gupta

Central Zone Meeting and National Symposium on “Challenges and Opportunities: Management of Plant Diseases under Weather Change” held at College of Agriculture, JNKVV, Jabalpur, Madhya Pradesh, December 14-15, 2017

Inaugural Session

Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur in collaboration with Central Zone Chapter, Indian Phytopathological Society, New Delhi organized National Symposium on “**Challenges and Opportunities: Management of Plant Diseases under Weather Change**” at College of Agriculture, Jabalpur on December 14-15, 2017 with eight symposium themes. The symposium was attended by more than 300 delegates.

Prof. Pradeep Kumar Bisen, the Hon’ble Vice Chancellor, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur, Dr. P.K. Mishra, Dean Faculty of Agriculture, Dr. Dharendra Khare, Director Research Services, Dr Robin Gogoi, Joint Secretary, Indian Phytopathological Society, New Delhi, Dr. Pratibha Sharma, Emeritus Scientist, ICAR, Dr. M.P. Thakur, Director Extension Services, IGKVV, Raipur, Dr. O.K. Sinha, IISR, Lucknow, Dr R K Chourasia, Dr. N. D. Sharma and Dr. R. L. Keshwal (Retd. Professors) graced the occasion. Dr. M.N.

Khare, Former Dean, College of Agriculture, was the Chief Guest.

Professor Pradeep Kumar Bisen Hon’ble Vice Chancellor, JNKVV, Jabalpur, in his presidential address emphasized that tremendous challenges are being put forth by biotic stresses before the agricultural scientists to meet the ever-growing demands of food and nutritional security with a climate change scenario. Plant diseases are posing a major threat to agricultural crops in several parts of the country. Development of sustainable plant disease management strategies offers one of the best options to enhance the production, as land water and other natural resources are depleting. The major constraint in effective disease management are the quick development of new races and strains of pathogens that leads to altered host pathogen interactions with climate change.

Dr. S.N. Singh, Professor and Head, Plant Pathology, proposed vote of thanks.



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Themes

1. Strategies for plant disease management under changing climate condition
2. Role of green technologies and biotechnological interventions
3. Post harvest management of diseases and agricultural commodities including mushroom
4. Agricultural extension education challenges and solution for adoption of effective management
5. Plant disease management strategies under organic farming situations
6. Molecular approaches in disease diagnosis and management
7. Integrated management
8. Epidemiology and forecasting in effective disease management

Technical programme

The technical programme was started with keynote lecture by Dr. M.N. Khare entitled “**Strengthening of teaching, research and extension activities in Plant pathology**”. He emphasized on the importance of biotic and abiotic stresses on crops and the role of weather on initiation of disease development and severity. It is essential to impart basic and applied knowledge to the students. The teachers teach courses at B.Sc. (Ag.), M.Sc. (Ag.) and Ph.D. level as per course curriculum for which they should be well prepared. The problems for curricular research should be of local or regional importance. The extension plant pathology is of great importance as one has to identify the crop problems on the spot and inform the cultivators about their management.

Technical staff was sent earlier to the countries like USA and UK for advanced training like PL-480 scheme, Commonwealth Scholarships etc. Now there is a huge gap. Fellowships are available in other countries. The authorities should have dialogue with embassies for fellowships, call forms and send staff for training in specialized areas. Similarly staff should also try. The University should allow study leave in such cases. This will help in improvement of standards. Centers of excellence should be established in different institutions in Plant Pathology in various fields of specialization where staff of other universities may be got trained.

In the technical sessions, total 7 lead and 27 oral presentations were delivered under different themes of the symposium. Total 64 posters were presented during the symposium under different themes.

Prof. M.J. Narsimhan Academic Merit Award Competition

The award contest was organized under chairmanship of Dr. Praribha Sharma, Ex. Head Division of Mycology & Plant pathology IARI, New Delhi and Co-Chairman Dr. Robin Gogoi of IARI New Delhi.

There were four papers received for presentation in the competition, out of which only two presentations were made and selected for national level contest.

1. Ms. Afreen Khan, Jabalpur: In silico analysis of BLB resistance genes (*s*) x *a4*, x *a7*, x *a21* provide the basis for time mapping of introgressed gene (*s*) in Karma Mahsuri.
2. Mr. Gyanendra Pratap Tiwari, Jabalpur: Genetic variations among *Alternaria* spp. collected from different host plants.

Panel discussion was held after presentation of papers in all the eight themes. The chairman Dr. MN Khare, summarized the papers presented under each theme followed by discussion with participants. This was a lively review and was highly appreciated.

Dr. Pramod Gupta, Co-Convener of the symposium, proposed vote of thanks to Prof. Pradeep Kumar Bisen Hon'ble Vice Chancellor, JNKVV, for his continuous support, guidance and encouragement to organize the mega event. Dr. P.K. Mishra, Dean Faculty of Agriculture and Dr. Dharendra Khare Director Research Service and Director Instructions for their support in all directions. The Chief Guest, Guests of honor and the dignitaries on the dais notably Dr. M.N. Khare, Dr. Om Gupta, Dr. Robin Gogoi, Dr. Pratibha Sharma, Dr. N.D. Sharma and Dr. S.N. Singh for active participation and giving valuable presence and guidance. Special thanks to Dr. M.N. Khare, for accepting as chief guest and delivering the key note address, Dr. Jayant Bhatt associating with conference and addressing the delegates. Special mention was made about invited speakers, delegates, KVK Scientists, committee members, farmers, sponsors, media and print for their active participation and support.



Recommendations

- Climate change in terms of high or low available moisture and temperature, high wind velocity, high tides in ocean forcing sea water into crop field, hail storms increased atmospheric CO₂; clouds influence the activity of plant pathogens and severity of diseases caused by them. Disturbed abiotic factors also negatively influence low crops growth.
- The challenges put forth by climate change are to be met strongly and carefully to meet the ever growing demand of food and nutritional security.
- The climate influences the host – pathogen interactions resulting in untimely occurrence of diseases and insect pests in crops causing losses in quantity and quality of crop produced.
- The pathogens are also affected by climate change leading to creation of new races and biotypes attacking the crops. The resistant cultivars also lose their resistance to the pertinent diseases.
- The host and the pathogen should be selected based on their influence on disease severity leading to epidemic situation.
- Each factor like relative humidity, temperature, CO₂ level, Photoperiod, hail storms needs consideration. The yield parameters of the crop need to be properly understood to know which parameter is influenced by which factor of climate change.
- Genes should be searched in crops which have capacity to stand extremes of weather factors, If need the cloning of genes should be done and biotechnological methods may be tried.
- Cultural practices like planting date, plant population, furrow and raised bed system based on the time when usually the change in weather occurs need critical evaluation.
- Biological and chemical approaches should be made to mitigate the negative influence of weather change on crop health and yield.
- It is felt that a coordinated project may be initiated to understand the influence of weather change on the growth of crops, their disease, insect pests and weeds.
- In states the Project should include various agro-ecological zones.
- The magnitude of climate change parameters need to be analyzed from 1988 to 2018, 30 years to establish the trend for future possibilities in the form of a project.



Group photograph of delegates in the Central Zone Symposium



Mid-Eastern Zone

Zonal President: Dr. K.P. Singh
Zonal Councillor: Dr. A.K. Tewari

Mid-Eastern Zone Meeting and National Symposium on “Sustainable disease management: Approaches and applications” held at Department of Plant Pathology, College of Agriculture, G.B. Pant University of Agriculture & Technology, Pantnagar, Uttarakhand, December 21-23, 2017

In the backdrop of the majestic Himalayas the National Symposium spanning in 3 working days, had been designed to cover areas that fall under the development of strategies and technology in plant protection. There were about 276 delegates representing more than 12 states in the IPSMEZ symposium. The IRRI, CSIR, SERB and GBPUAT established with the assistance of the National symposium was “**Sustainable disease management: Approaches and applications**” as held successfully during 21st to 23rd December 2017 at Department of Plant Pathology, College of Agriculture, G.B. Pant University of Agriculture & Technology, Pantnagar, Udham Singh Nagar, Uttarakhand. The symposium was inaugurated by U.S. Singh, Director, IRRI South Asia Regional Centre (VNS), IRRI and Hon’ble Vice Chancellor of the Gobind Ballabh Pant University of Agriculture and Technology Pantnagar. The proceedings were initiated by K. Vishunavat, Head of

Department of Plant Pathology, College of Agriculture, Pantnagar, highlighted the fact that the scientists of the department were the first to detect the Khara and apple scab disease in the Uttarakhand state and standardized its management strategies including disease forecasting system periodically broadcast through All India Radio and Television programmes. He placed on record that apart from developing several Integrated Pest Management (IPM) techniques for major hilly and plain crops the Plant Pathology department has a major role in the development of several bio-villages.

The Presidential address was then delivered by K.P. Singh, Zonal President of IPS said that the status of apple diseases in Uttarakhand and the strategies to manage them. He emphasized on the role of disease forecasting and integrated pest management strategies to curb the losses in apple production in Uttarakhand.



Release of Abstract & Souvenir in the Inaugural session of the Mid-Eastern Zone Symposium



IPS President, B.N. Chakraborty, University of North Bengal, Siliguri, WB stressed that the study of plant diseases and their management because of the direct losses they cause to the grower. The losses can occur in the field or in the store and at any time between sowing and consumption of the harvest.

Special Invitee Dinesh Singh, IPS Secretary, IARI, New Delhi threw light on the role of Indian Phytopathological Society in the development and dissemination of scientific know how in the country and all around the world. He informed the audience about disease management in organic farming and integrated disease management in the perspective of sustainable crop production and environmental safety also need to be addressed.

A.P. Sharma, Vice Chancellor, GBPUAT, Pantnagar told that Pantnagar University was the first Agricultural University of the country, which was established on land grant pattern of United States of America Universities and continues to be the role model for a number of State Agricultural Universities established afterwards. Nobel Laureate Dr. Norman E. Borlaug rightly called this university as '*Harbinger of Green Revolution in India*'.

Chief Guest of the session Uma Shankar Singh, Director (VNS), IRRI South Asia Regional Centre, said that the importance of plant diseases as they are the major constraints to production of high quality and high yielding crops and cause severe deleterious effects in natural environments.

In session started with keynote address by Uma Shankar Singh, Director, IRRI South Asia Regional Centre (VNS), said that the mission of plant pathology to develop methods for plant disease control as an applied science, and to contribute to plant protection as a basic science through elucidation of principles underlying the expression of pathogenicity of microbes and resistance of host plants.

Themes

1. Host Plant Resistance, Microbial Diversity/Biodiversity for Crop Improvement, Sustainable Utilization and Conservation of Natural Resources

2. PGPR, Bio-inoculants, Nano-technology and Biotechnological Approaches for the Management of Plant Diseases
3. Disease Management in Medicinal and Horticultural Crops and Post-Harvest Diseases
4. Biotic and Abiotic Stress Management Strategies under Changing Climatic Scenario, Disease Dynamics, Epidemiology and Disease Forecasting
5. Integrated Management of Phytopathogens, Plant Clinics and Extension Plant Pathology

Recommendations

1. More emphasis has to be given in microbial exploration, exploitation and conservation for their future use in eco-friendly disease management.
2. Usages of safer and non chemical method to be explored for the effective disease management, both in field and post harvest disease that should include biocontrol agents, botanicals and use of safer and less toxic new plant protection molecules.
3. Bio-pesticide formulations should be carefully studied prior to recommending them to farmers for the disease management. Thorough studies and multi-locational field efficacy trials should be carried out and the product/formulation should be registered.
4. In view of the chronic dependency of the farmers on the chemical pesticides, it was recommended that integrated disease management modules should be worked out on a crop to crop basis for effective disease management.
5. Novel non-chemical interventions such as cultural practices, should be given priority as they are more effective and due to their cost effectiveness and farmer's involvement, are easily adopted by the farmers.
6. In cases where alternative management options are not available fungicides should be applied judiciously and on need based only.
7. There was an exclusive stress on developing mutants of effective bioagents which could be compatible to other chemicals, tolerant to adverse climatic conditions like high temperature.



8. Highly experienced researchers should guide the juniors in research planning and execution.
9. Need for innovative research by the young scientists of the nation rather the copying the works carried out in other nations/ Indian laboratories, was also emphasized.
10. The innovative/ good quality research article to be submit to the journal Indian Phytopathology for publication through Springer.



Group photograph of delegates in the Mid-Eastern Zone Symposium

National Symposium

70th Annual Meeting of Indian Phytopathological Society & National Symposium on “Plant Health Management: Embracing Eco-Sustainable Paradigm” held at Assam Agricultural University, Jorhat, Assam, February 15-17, 2018

The 70th Annual Meeting of the Indian Phytopathological Society (IPS) and a National Symposium on “**Plant Health Management: Embracing Eco-Sustainable Paradigm**” was held at Assam Agricultural University, Jorhat, Assam during February 15 to 17, 2018. Altogether more than 400 delegates participated in the event from length and breadth of the country as well as abroad.

In the inaugural session, Dr. K.M. Bujarbaruah, Honourable Vice Chancellor, Assam Agricultural University graced the occasion as the Chief Guest while Dr. C.D. Mayee, former Chairman, ASRB, New Delhi and Dr. A.N. Mukhopadhyay, former Vice Chancellor, Assam Agricultural University, Jorhat were present as Guests of Honour. The other special guests were Dr. K. Subbarao, Prof. University of California, Davis; Dr. N.K. Krishna Kumar, former DDG (Horticulture), ICAR,

New Delhi, Dr. P.K. Chakrabarty, ADG (PP & B), ICAR, New Delhi, Prof. B.N. Chakraborty, President, IPS and Dr. Dinesh Singh, Secretary, IPS.

While addressing the house, the dignitaries emphasized the importance of shifting of chemo-centric management of plant health to organo-centric management. They have also expressed their concern on indiscriminate use of chemicals in agriculture and proposed to evolve devices to modify the current scenario of plant disease management.

Felicitation of awardees

A.P. Misra Lifetime achievement award was conferred by IPS on Dr. C.D. Mayee in the programme. The IPS recognition award was conferred on Dr. T.S. Thind, Dr. P.C. Trivedi and Dr. V.G. Malathi considering their contribution in the field of plant pathology as well as their dedicated service to IPS.



Inauguration of National Symposium



A.P. Misra Lifetime achievement award received by Dr. C.D. Mayee

Keynote Lectures

Four numbers of keynote lectures were delivered by eminent scientists from India as well as from abroad, namely, Dr. A.N. Mukhopadhyay, Dr. K. Subbarao, Dr. S.S. Chahal and Dr. M.K. Bhattacharyya.

1. Keynote Lecture (1) by Prof. A.N. Mukhopadhyay, former Vice Chancellor, AAU, Jorhat on “Trichoderma for plant disease management a reality or myth”



Keynote Lecture (1) by Prof. A.N. Mukhopadhyay

2. Keynote Lecture (2) by Prof. S.S. Chahal, Punjab University, Chandigarh, Punjab on the “Food Security, Food Production and GM Crops”.



Keynote Lecture (2) by Prof. S.S. Chahal



IPS Recognition Award received by Dr. T.S. Thind

3. Keynote Lecture (3) by Dr. K.S. Subbarao, University of California, Davis, California, USA on “Can Indigenous Microbiomes Deliver the Promise of Biocontrol?”



Keynote Lecture (3) by Prof. K.S. Subbarao

4. Keynote Lecture (4) by Dr. Madan Kumar Bhattacharyya, Iowa State University, USA on “Isolation and Utilization of Arabidopsis Non host Resistance Genes in Enhancing Disease Resistance In Soybean”



Keynote Lecture (4) by Prof. M.K. Bhattacharyya



Technical sessions

The Symposium was organized under 10 different sessions with a special session on wilt disease management. In addition another special session on strengthening HRD in Plant Pathology was also organized wherein the gap in HRD in plant pathology was thoroughly discussed and devised the future strategies.

Session I : Integrated plant disease management

Session II : Protected cultivation, PGPR, mycorrhizae and biological management

Session III : Climate change, epidemiology and disease forecasting

Session IV : Extension plant pathology

Session V : Biosafety, biosecurity and bioterrorism

Session VI : Nano and biotechnological approaches for plant disease management

Session VII : Mushroom, wood rotting fungi

Session VIII : Etiology and microbial taxonomy

Session IX : Deficiency diseases and angiospermic parasites

Session X : Nematodes, arthropods and insects in relation to plant pathology

Special Session : Wilt diseases of crops

The valedictory function was organized on Feb. 17, 2018 and Dr. D.K. Bora, Dean, Faculty of Agriculture,

AAU acted as the chief guest and Dr. M.K. Bhattacharyya, Prof. Iowa State University, USA acted as the cochairman.

Recommendations

1. Ecologically sustainable plant health management strategies should be given priority.
2. Climate change impact- on plant health should be given more emphasis. In this regard two diseases were specially mentioned are - Cercospora diseases and spot blotch in wheat.
3. Certain diseases like smut of wheat and powdery mildew diseases earlier considered to be of minor importance has become major ones needs special attention.
4. Emphasis should be given for prevention of viral diseases than that of detection. For management of viral diseases coordination between pathology, entomology, biochemistry and biotechnology was emphasized.
5. Domestic and international quarantine regulatory measures should be strengthened.
6. Morphological taxonomy should go hand in hand with chemo - and molecular taxonomy.
7. Commercialized microbial formulations need to be strictly covered under Regulatory measures to maintain qualitative standards.
8. Regarding nano-technological approaches for plant health management, the opinion was that the biosafety issues need to be addressed prior to the open applications.



Group photograph of delegates in the National Symposium

Special Session 1

Panel Discussion on “Strengthening HRD in Plant Pathology”

Special Panel Discussion session on “**Strengthening HRD in Plant Pathology**” was held on February 15, 2018 under the chairmanship of Prof. S.S. Chahal, Co-Chairman - Dr. M. Anandaraj, Convener, Prof. B.N. Chakraborty; Co-convener: Dr. Dinesh Singh and Rapporteur, Dr. A.K. Chowdhury.

The session started with the introductory remarks of the Chairman Prof. S.S. Chahal followed by the panelists. The salient points mentioned by the panelists are given below. After discussion the overall points crystallized as resolution are presented as action points.

1. Prof. C. Manoharachary, Former Dear, Osmania University, Hyderabad, Telengana talking on “Is Mycology sufficient in present day plant pathology (PP) instructions” opined that the mycology syllabus is not structured adequately. He lamented that the latest developments in fungal taxonomy are not followed. The history of mycology taught is from old literature and Indian history of mycology also needs to be included. He urged that Melbourne Code of Nomenclature needs to be followed in place of International Code of Nomenclature and the new concept of one organism one name should be the criteria taking into account the teleomorphic stage of the fungus. Taxonomy has
2. Dr. R.K Mittal, Former VC, RAU talked on “Do we have competent faculty in Plant pathology – Capacity building”. He reiterated the lack of competent faculty in Agricultural universities and the problem of inadequate faculty. He stressed the need for modern infrastructure facilities for technology generation and dissemination. He pointed out the poor status of Agricultural University farms and the proliferation of Agricultural Universities without concomitant increase in funds and facilities. He also stressed the importance of leadership in establishing and building institutions. The recruitment policies of ICAR also affects the Universities as the personnel move from Universities to ICAR affecting teaching. He also mentioned about the 5th Deans’ Committee recommendation and revision of curricula in 2009. He stressed the need for E-learning; PG Research, and need for text book writing and HRD in KVVs. Adequate importance is required to tackle the problems associated with climate



Special Panel Discussion session on “Strengthening HRD in Plant Pathology”



- change and the need for information system on national scale.
3. During the Panel Discussion, Mr Palik Kumar Baruah, Chairman, Assam State Marketing Board joined and made a few points. He mentioned that there are 25 KVKs in Assam and six more to be added but farmers are not taking advantage of these facilities. He mentioned about the importance of soil health and pointed out that about Rs 600 crores are earmarked for organic Agriculture. He sought the help of the experts and assured that he would implement all recommendations that would help farmers.
 4. Prof. A.N. Mukhopadhyay, former VC, Assam Agricultural University, Jorhat elaborated the contributions made by earlier eminent mycologists and falling standards in the education system especially the reduced practical training. In depth teaching and learning are essential to build competent faculty and students to face the field problems. He highlighted to find out solutions of certain national problems which have not been addressed fully and to give challenging problems to students to solve all such long standing problems. He stressed the need for basic research and maintenance of fungal cultures and proposed the submission of fungal cultures mandatory along with the submission of theses.
 5. Prof. Ramesh Chand, Head Department of Plant Pathology, BHU, Banaras spoke on "Students diversity: shortcomings and remedies". Dr. Ramesh Chand mentioned that when the student communities are diverse from various backgrounds like, rural, urban, agricultural families, the knowledge sharing is immense and the development is inclusive. He cited the experience of BHU in having quota for various categories including 20% for ICAR and the successful implementation of the policies. Important shortcoming pointed out by him is non-inclusive development.
 6. Prof. R.N Pandey, Head, Department of Plant pathology Anand Agricultural University, Gujarat, spoke on "Area specific future needs of human resources in Plant pathology". Prof. Pandey listed the specializations available in plant pathology like mycology, taxonomy, virology etc and the role played by IMI/CABI in taxonomic identification. As Biocontrol organisms are being increasingly employed in disease management, there must be expertise in BCAs, post-harvest management of produce and in sanitary and phytosanitary regulations.
 7. Prof. S.S. Chahal, who was chairing the session spoke on "MOOCs in plant pathology". Prof. Chahal highlighted the importance and the benefits accrued to students in the 'Massive Open Online Courses'. He traced the origin and the change over to 'SWAYAM'. The information on quantum mechanics and Thermodynamics to IIT; out of 72 programmes in MOOCs 41 are included in SWAYAM. He pointed out the implementation of 5th Deans' Committee recommendations and the benefits to the students' community. The acceptance by ICAR that infrastructures are inadequate and need for faculty development. At this point Prof. Mukhopadhyay pointed out that Plant pathology students must take pride being plant doctors. Prof. Subbarao pointed out that the MOOCs should not wear away further from practical sessions.
 8. Dr. A.H. Rajasab, former VC, Tumkur University talked on "Evaluation of Post Graduate theses and short comings". He made a distinction between dissertation and thesis and the importance of objective evaluation considering the scientific principles in order to maintain standards.
 9. After the panelists spoke chairman offered time for others to express their opinion. Prof. Subbarao from University of California USA mentioned that the need for development of soft skills among students. He mentioned that in the United States it is never the 'top down approach' and students evaluate the teachers based on the knowledge imparted.
 10. The Co-chairman, Dr M. Anandaraj, Former Director, ICAR-Indian Institute of Spices Research, Calicut while summing up the proceedings mentioned that the teachers must be empowered with infrastructure facilities so that they impart knowledge and skills to the students. Once the student possesses a sound knowledge in the subject and necessary practical skills they would be able to face all the challenges in the field and in turn impart knowledge to the farming community. He pointed out that the technologies developed by



crop-based institutes in plant pathology could be collected and stored in databases by the institutes like National Bureaus and ICAR-NCIPM.

Action Points

1. In order to address the problem of imparting knowledge and skills to student proper state of the art infrastructure facilities has to be established in the universities for performing basic Research along with applied one.
2. The faculty positions must be filled up with competent teachers who are up to date in the subject they teach.
3. Management skills need to be imparted to University teachers to manage and impart knowledge to students.
4. The students should be assigned research topic that solves the national problems.
5. There should be continuity and in depth probing of complex research problem to get lasting solutions.
6. The plant pathology curricula must be modified to include recent developments in mycology, taxonomy based on modern system of classification using molecular data besides the conventional tools and a system of biodiversity conservation.
7. The mechanisms of pathogenesis and innate defense of plants and molecular arms race need to be included in order to develop novel management strategies like interfering in the infection process rather than using toxic chemicals to prevent pathogens.

Special Session 2

A tribute to Dr. Y.L. Nene

On 16th of February 2018 during the 70th annual meeting at Jorhat, Assam, programme was scheduled on Homage to Dr. Y.L. Nene. With the permission of IPS president Dr. B.N. Chakraborty and Organizing secretary, the programme was initiated by Dr. Anil S. Kotasthane, HOD Plant Pathology IGKV Raipur.

The programme started with the garlanding of the photo of Dr. Y.L. Nene by Dr. U.S. Singh, Dr. B.N. Chakraborty (IPS President), Dr. T.S. Thind, Dr. C. Manoharachari Dr. T.S. Thind. Being very loosely

associated and a student of Dr. Nene, Dr. S.P.S. Beniwal expressed his views regarding Dr. Nene at length from the childhood days till date. Dr. C. Manoharachary also expressed his views and also brought to the knowledge of the gathering that one of the isolate of *Trichoderma* has been dedicated on Dr. Nene's name. At the end with the enchanting of (mahamrutunjay jap) shloka all the delegates were requested to express their floral tribute.



Homage to late Prof. Y.L. Nene

Special Session 3

Wilt diseases of crops

Special session on “Wilt diseases of crops” was held under chairmanship Prof. B.N. Chakraborty, Professor, NBU, Siliguri, WB.

The following speakers delivered the presentation in the session:

1. Dr. S.C. Dubey, NBPGR, New Delhi: Wilt Disease of Chickpea and its Management
2. Dr. A. G. Desai, Gujarat: Wilt Diseases of Castor and Their Management
3. Dr. R. Ramesh, Goa: Bacterial Wilt of Brinjal and its Management
4. Dr. Prashant Jambhulkar, Banswara, Rajasthan: Parawilt and Wilt of Cotton and Their Management
5. Dr. Dinesh Singh, IARI, New Delhi: Bacterial Wilt of Tomato caused by *Ralstonia solanacearum* and its Management
6. Dr. V. Devappa, UHS Bangalore: Wilt Diseases of Ornamental Crops and Their Management
7. Dr. L.C. Bora, Plant Pathology, AAU, Jorhat, Assam : Wilt Disease Complex Involving Plant Parasitic Nematodes and Pathogens
8. Prof. B.N .Chakraborty : Activation of Defense in Mandarin (*Citrus reticulata*) Plants against *Fusarium oxysporum* using Bioinoculants for Improvement of Their Health Status
9. Dr. R.K Mishra, IIPR, Kanpur: Races in *Fusarium udum* causing Wilt of Pigeonpea (*Cajanus cajan* L.) in India
10. Dr. S.K. Gupa, Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan, H.P.: *Fusarium* Wilt of Tomato and its Management
11. Dr. Ashok Bhattacharyya, Assam Agricultural University, Jorhat, Assam: Current Status of *Fusarium* Wilt Disease of Banana in India

The following recommendations suggested in the special session on Wilt Diseases of Crops

- ∅ Full genome sequence of wilt pathogens is required to understand the complexity and diversity within the wilt pathogens.
- ∅ Rapid, reliable and more sensitive advanced diagnostic tool either serological or nucleic acid based and microarray technique to detect wilt pathogens (bacteria and fungi) from



Dr. Dinesh Singh, Secretary, IPS presentation in special session

asymptomatic plants, seeds, soil and irrigation water and differentiate races is required to develop.

- ∅ High-through put, next-generation sequencing methods to examine environmental isolates (e.g., from soil or water sources) will promote understanding of the evolutionary dynamics of these strains in relation to survival and pathogenicity.
- ∅ The genetic resources now available will also provide the foundation upon which advanced transcriptomic studies can be pursued.
- ∅ Identify of resistance genes against wilt pathogens in the plants and incorporation of these genes in susceptible high yielding cultivars/ variety through marker assisted selection and other high throughput biotechnological tool.
- ∅ There is a case of continuous application of antibiotics and copper fungicides lose their utility because of pathogen become resistant, often through acquisition of broad host range transmissible plasmids from other bacteria. It is required to overcome this problem by searching alternative source to use for control of the disease.
- ∅ The eld now seems prepared to move forward with greater assurance toward fulling our dream that basic research on the pathogen can help to provide innovative tools and strategies to control wilt diseases.
- ∅ More emphasis should be done on resistant rootstock replacement through tube-grafting, which proved effective in controlling the disease.

Awards Presentation

The following award lectures were delivered during the national symposium held at AAU, Jorhat during February 15-17, 2018

1. Presidential Address by Prof. B.N. Chakraborty, NBU, Siliguri, on the topic entitled “Molecular recognition of fungal pathogens and activation of plant immune response”.



Presidential Address by Prof. B.N. Chakraborty

2. S.P. Raychaudhuri Memorial Award by Dr. N.K. Krishnakumar, Bioversity International New Delhi, on the topic entitled “Advances in Insect Vectors of Plant Pathogens”.



S.P. Raychaudhuri Memorial Award by Dr. N.K. Krishnakumar

3. Mundkur Memorial Lecture Award by Dr. P.K. Chakrabarty, ADG (PP and B), ICAR, New Delhi, on the topic entitled “Strategic Management of Plant Diseases to Ensure Crop Biosecurity”.



Mundkur Memorial Lecture Award by Dr. P.K. Chakrabarty

4. M.S. Pavgi Award Lecture by Dr. U.S. Singh, IIRI, New Delhi, on the topic entitled “Managing abiotic stresses in rice in South Asia using climate resilient rice varieties and potential to combine microbes with host gene(s) for more effective management at farmers’ fields”.



M.S. Pavgi Award Lecture by Dr. U.S. Singh

5. J.F. Dastur Memorial Award Lecture by Dr. Shamarao Jahagirdar, University of Agricultural Sciences, Dharwad, Karnataka, on the topic entitled “Present Status and Future Research dimensions of soybean diseases for sustainable productivity of soybean in India”.



J.F. Dastur Memorial Award Lecture by Dr. Shamarao Jahagirdar

6. A.K. Sarbhoy Memorial Award Lecture by Dr. T. Prameela Devi, Division of Plant Pathology, ICAR-IARI, New Delhi, on the topic entitled “Biodiversity, Taxonomy, Conservation and Documentation of fungi of India”



A.K. Sarbhoy Memorial Award Lecture by Dr. T. Prameela Devi

7. Sharda Lele Memorial Lecture Award by Dr. K.P. Singh, GBPUAT, Pantnagar, Uttarakhand, on the topic entitled “Aerobiology, Epidemiology and management strategies in apple scab - Science and its applications”.



Sharda Lele Memorial Lecture Award by Dr. K.P. Singh

8. M.K. Patel Memorial Young Scientist Award Lecture by Dr. V. Prakasam, ICAR-IIRR, Hyderabad, Telangana, on the topic entitled “Dynamics and sustainable approaches for the management sheath blight disease of rice in India”.



M.K. Patel Memorial Young Scientist Award Lecture by Dr. V. Prakasam

The following awardees were also felicitated during the symposium along with the felicitation of Fellows of IPS (FPSI)

Dr. D.P. Singh, ICAR, IIWBR, Karnal felicitated with KC Mehta Manoranjan Mitra award for writing review article on the topic “Wheat blast – A new challenge to wheat production in south Asia” and Dr. Bishnu Maya Bashyal, Division of Plant Pathology, IARI, New Delhi, felicitated with M.K. Patel Memorial Young Scientist Award delivered during Delhi Zone Symposium 2017 on the topic “Understanding the complex etiology of an emerging bakanae disease of rice in India”



Dr. D.P. Singh, felicitated with K.C. Mehta Manoranjan Mitra award



Dr. Bishnu Maya Basyal felicitated with M.K. Patel Memorial Young Scientist Award

Felicitations of Fellows of the Society

The following 13 fellows of the Society were felicitated in the symposium

1. Dr. V.K. Razdan, Professor, Sher-e-Kashmir University of Agriculture Science & Technology-Jammu, Jammu & Kashmir
2. Dr. Ramji Singh, Professor & Head, Department of Plant Pathology, S.V.B.P.U.A. & T., Meerut, Uttar Pradesh
3. Dr. M.B. Patil, Professor and Extension Leader, Agricultural Extension Education Center [UAS-R], Taluka Panchayat Campus, Koppal, Karnataka
4. Dr. M.S. Yadav, Principal Scientist (Plant Pathology), National Centre for Integrated Pest Management, New Delhi
5. Dr. Vasanth Kumar Thimakapura, Founder, Krishi Jnana Vijnana Vedike, Mysore, Karnataka
6. Dr. J.N. Srivastava, Associate Professor/Senior Scientist, Department of Plant Pathology, Bihar Agricultural University, Bhagalpur, Bihar
7. Dr. Gayatri Biswal, Associate Professor, Orissa University of Agriculture and Technology, Bhubaneswar, Odisha
8. Dr. Vinod Kumar, Senior Scientist (Plant Pathology), ICAR-National Research Centre on Litchi, Muzaffarpur, Bihar
9. Dr. S.S. Vaish, Senior Assistant Professor, Banaras Hindu University, Varanasi, Uttar Pradesh
10. Dr. Sampat Nehra, Scientist, Birla Institute of Scientific Research, Jaipur, Rajasthan
11. Dr. S.D. Somwanshi, Assistant Professor, College of Agriculture, Udgir, Maharashtra
12. Dr. Sunita J. Magar, Assistant Professor, College of Agriculture, Latur, Maharashtra
13. Dr. Prashant P. Jambhulkar, Assistant Professor (Plant Pathology), Agricultural Research Station, Banswara, Rajasthan



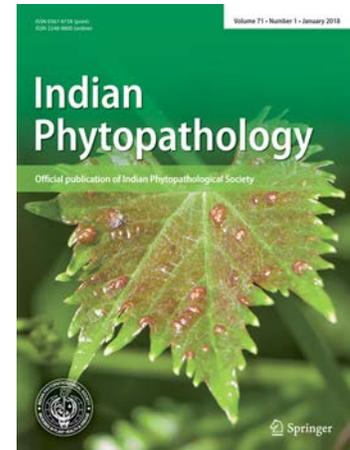
Publications

Journal: *Indian Phytopathology*

[ISSN 0367-973X (print version) 2248-9800 (electronic version); NAAS Rating : 5.9]

The Society publishes its official organ “Indian Phytopathology” a leading plant pathology research journal, which deals with the disciplines of Mycology, Fungal Pathology, Bacteriology, Virology, Phytopathology and Nematology. The journal is a focus and strength of the society. First number appeared during 1948 with 96 printed pages and such issues were kept up uninterrupted every six months till 1961. On account of increase in membership and greater impetus to research all over the country and the number of papers received it was decided to increase the frequency of publication to 4 issues (quarterly) from vol. 15 during 1962. Each year about 400 pages are printed to form a volume. About 285 libraries and institutions are subscribing the journal. Out of this number about 150 are in foreign countries. The journal is published quarterly i.e. in March, June, September and December. Till 2017, the society has published 70 volumes. This is one of the scientific journals of India, which is up to date and published in time. Besides, quality research papers, presidential address, award lectures short communications, first reports, book reviews, phytopathological news etc. are also published in the journal. The journal also publishes the abstracts of the papers presented in zonal and annual meetings. The Society has developed a strict system for the review of manuscripts and referees are from all over India, specialized in different areas of plant pathology.

The journal became online on ICAR online journal portal in 2011 and free online access to this journal is available for IPS members. In 2017, agreement was signed with Springer (India) Private Ltd., New Delhi for co-publication of the



Journal *Indian Phytopathology* from January 2018 (Vol. 71, Issue 01, 2018) onwards initially for five years (2018-2022).

The journal is being accessed across the world by 147 countries and being abstracted & indexed by 22 agencies viz., CAB Abstracts, Indian Science Abstracts, RUNNERS, Indian Citation Index (ICI), Google Search Engine, Google Scholar, AGRIS (International Information System for the Agricultural Sciences and Technology), Chemical Abstracts Service (CAS), AGRICOLA, Directory of Open Access Journal (DOAJ), WorldCat, PASCAL database, CAS Source Index (CASSI), RefDoc, UGC, etc.

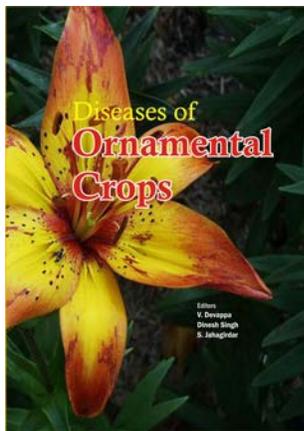
Archives of back volumes of Indian Phytopathology are available in set of DVDs from Vol 1 (1948) to Vol 70 (2017).

Publications: Books

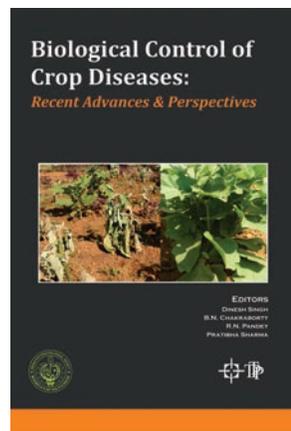
IPS BOOKS PUBLICATION – 2017-18

Apart from the publication of journal, the Society also publishes books in discipline of Plant Pathology. During the year 2017-18, total 04 books has been published.

- 1. Diseases of Ornamental crops** (Eds. Dr. V. Devappa, Shamaro Jahagirdar and Dinesh Singh) released in the Southern Zone symposium at UHS, Bangalore, Karnataka, on September 12, 2017.
- 2. Biological Control of Crop Diseases: *Recent Advances & Perspectives*** (Eds. Dinesh Singh, B.N. Chakraborty, R.N. Pandey and Pratibha Sharma) released during special symposium at AAU, Anand, Gujarat
- 3. Microbial Antagonists: Role in Biological control of Plant Diseases** (Eds. R.N. Pandey, B.N. Chakraborty, Dinesh Singh and Pratibha Sharma) released during special symposium at AAU, Anand, Gujarat
- 4. Recent Approaches for Management of Plant Diseases** (Eds. Srikant Das, Subrata Dutta, B.N. Chakraborty and Dinesh Singh) released in IPS National Symposium at Assam Agricultural University, Jorhat, Assam during February 15-17, 2018.



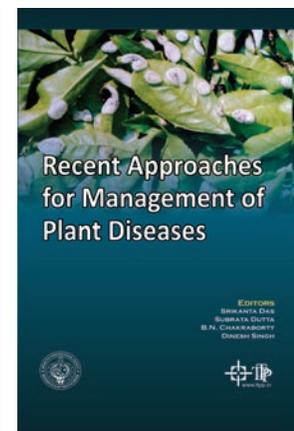
Diseases of Ornamental crops



Biological Control of Crop Diseases: *Recent Advances & Perspectives*



Microbial Antagonists: Role in Biological control of Plant Diseases

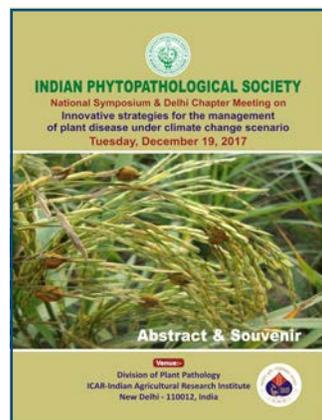
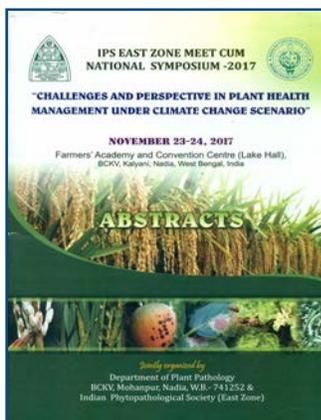
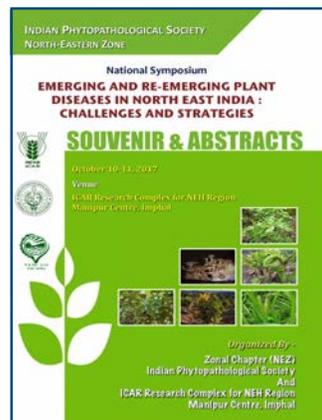
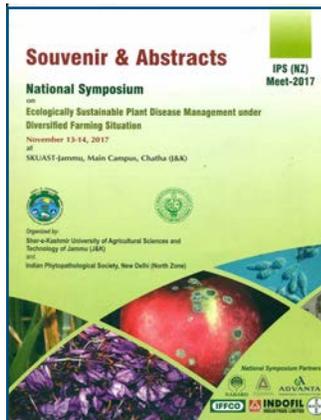
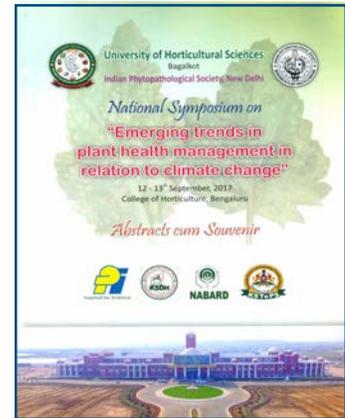
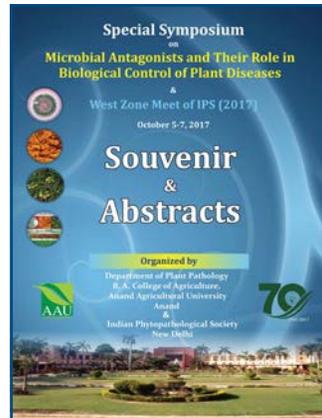
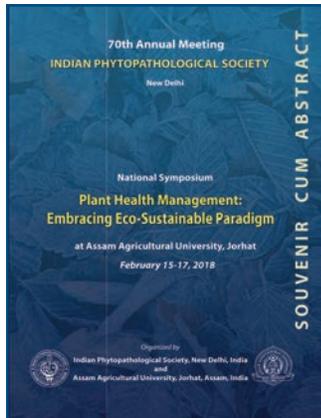


Recent Approaches for Management of Plant Diseases



Publication: Abstract Books

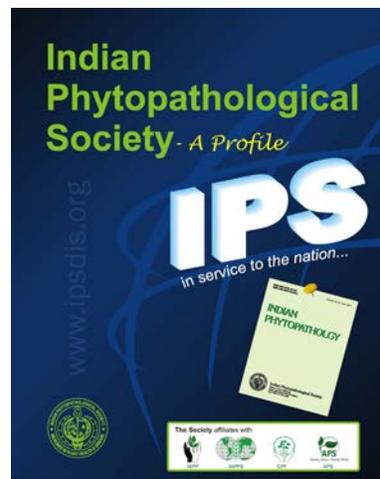
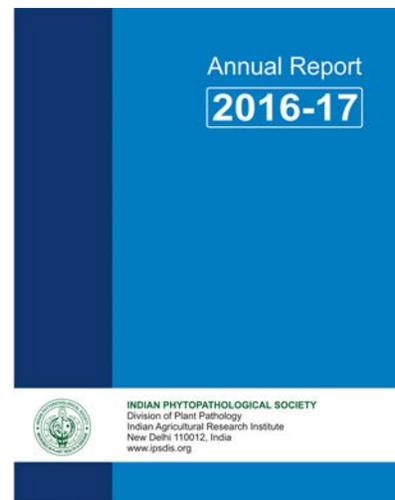
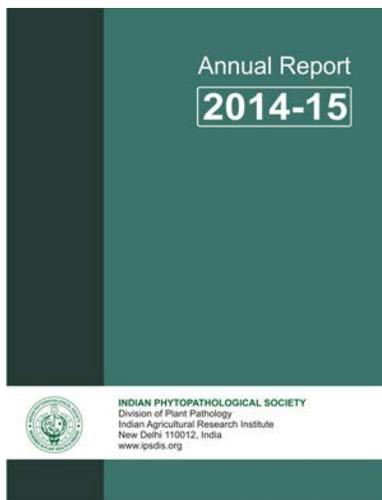
Abstract Books of all the symposium (national/zonal) published during 2017-18





Other Publications

1. **IPS Annual Report** for last three years (2014-15, 2015-16, 2016-17) has been compiled and published during the year and has been circulated among the members of the Society through mail and also available on IPS website.
2. The Society has also published its brief profile "**IPS Profile**" and is available on IPS website.





Editorial Board

New Editorial Board for the period 2017-19 has been constituted and is functioning well and their details are also available on IPS website.

Chief Editor

Dr. M. Anandaraj, Former Director (ICAR-IISR, Calicut), Bangalore, Karnataka, India

Senior Editors

1. Dr. S.C. Dubey, ICAR-National Bureau of Plant Genetic Resources, New Delhi, India
2. Dr. V.K. Baranwal, ICAR-Indian Agricultural Research Institute, New Delhi, India

Ex-officio

Dr. Dinesh Singh, Secretary, IPS, New Delhi

Editors

Fungal Pathology

1. Dr. David B. Olufolaji, The Federal University of Technology, NIGERIA
2. Dr. H.B. Singh, Banaras Hindu University, Varanasi, Uttar Pradesh, India
3. Dr. Jing Lan, Inner Mongolia Agricultural University, China
4. Dr. Laetitia Willocquet, Castanet-Tolosan, Université Toulouse, France
5. Dr. Mousa Najafiniya, South Kerman Agricultural and Natural Resources Research and Education Center, Jiroft, Iran
6. Dr. M.S. Saharan, ICAR-Indian Agricultural Research Institute, New Delhi, India
7. Dr. Naresh Mehta, Haryana Agricultural University, Hisar, Haryana, India
8. Dr. Radha Raman Pandey, Manipur University, Imphal, Manipur, India
9. Dr. Serge Savary, Castanet-Tolosan, Université Toulouse, France
10. Dr. Shrishail S. Navi, Iowa State University, Iowa, U.S.A.
11. Dr. Tusar Kanti Bag, ICAR-Indian Agricultural Research Institute, New Delhi, India
12. Dr. Urmil Bansal, The University of Sydney, Australia
13. Dr. Usha Chakraborty, University of North Bengal, Siliguri, West Bengal, India
14. Dr. V.B. Nargund, College of Agriculture, Bheemrayanagudi, Karnataka, India

Bacteriology

1. Dr. Dhruva Kumar Jha, Gauhati University, Guwahati, Assam, India
2. Dr. Gomathinayagam Subramanian, University of Guyana, Guyana, South America
3. Dr. Kalyan K. Mondal, ICAR-Indian Agricultural Research Institute, New Delhi, India
4. Dr. Mehdi Azadvar, South Kerman Agricultural and Natural Resources Research and Education Center, Jiroft, Iran
5. Dr. Ramesh Chand, Banaras Hindu University, Varanasi, Uttar Pradesh, India
6. Dr. Sanjay Swarup, National University of Singapore, Singapore
7. Dr. Yulmira Yanti, Andalas University, Padang, Indonesia

**Mycology**

1. Dr. B.F. Rodrigues, Goa University, Goa, India
2. Dr. Hesham Ali Metwally Ali El-Enshasy, Universiti Teknologi Malaysia, Malaysia
3. Dr. M. Srinivas Prasad, ICAR-Indian Institute of Rice Research, Hyderabad, Telangana
4. Dr. N.K.B. Adikaram, University of Peradeniya, Sri Lanka
5. Dr. Sanjay Kumar Singh, Agharkar Research Institute, Pune, Maharashtra, India
6. Dr. Vijai Kumar Gupta, National University of Ireland Galway, Ireland

Virology

1. Dr. P.N. Sharma, C.S.K.H.P. Agricultural University, Palampur, Himachal Pradesh, India
2. Dr. R. Selvarajan, ICAR-National Research Centre for Banana, Tirchirapalli, Tamil Nadu, India
3. Dr. Savarni Tripathi, ICAR-IARI, Regional Station, Pune, Maharashtra, India
4. Dr. V. Celia Chalam, ICAR-National Bureau of Plant Genetic Resources, New Delhi, India

Nematology

1. Dr. Ali Anwar, SKUAST-Kashmir, Srinagar, Jammu & Kashmir, India
2. Dr. D.J. Patel, Anand Agricultural University, Anand, Gujarat, India
3. Dr. M.R. Khan, Aligarh Muslim University, Aligarh, Uttar Pradesh, India
4. Dr. N.G. Ravichandra, University of Agricultural Sciences, Bangalore, Karnataka, India

LINKAGES

Agreement with Springer (India) Pvt. Ltd.

A key event was organized to exchange MoU between IPS and publication house Springer which is considered to be a milestone in the history of IPS. The formal **Exchange of Agreement** between IPS and Springer was held and the new **cover page of Journal *Indian Phytopathology*** has been released in the Inaugural Session. Dr. M. Kapila, Senior Editor, Springer India (Pvt.) Ltd. New Delhi was felicitated during the inaugural session.



Exchange MoU between IPS and publication house Springer in Inaugural session

APS-IPS Collaboration

APS Travel Sponsorship Grant 2017

Report on attending the 2017 American Phytopathological Society (APS) Annual Meeting, August 5-9, 2017 in San Antonio, Texas, U.S.A.

Ms Himadri Kaushik, recipient of 2017 APS-Indian Phytopathological Student Travel Award (presented by APS foundation) participated in the APS Annual Meeting held in San Antonio, Texas, U.S.A. during August 5-9, 2017 and delivered a talk on **“Chemical approach of synthesizing zinc oxide nanopowder and its studies on its antifungal activity and plant growth promotion”** authored by Himadri Kaushik and Pranab Dutta, Department of Plant Pathology, Assam Agricultural University, Jorhat-785013, Assam on 9th Aug, 2017 under the session of Chemical control.

The talk covered the detail work on synthesis and characterization of Zinc oxide nanoparticles. It also included the result of antimicrobial activities of the nanoparticles tested at seven different doses against plant pathogenic fungi, bacteria and nematode. Further the effect of zinc oxide nanoparticle on plant growth parameters and its role on activation of host defence related compounds were also discussed. The

presentation was concluded by mentioning that zinc oxide nanoparticles can be considered as a single bullet for the management of plant pathogen like fungus, bacteria and nematode of plant ecosystem.

The work was appreciated by the gathering present during the day.

Her participation in the meeting helped her to get a platform to interact with the international delegates having expertise in diversified field of plant pathology. During the interaction, information on on-going research work were exchanged and the knowledge gathered will help her in designing methodology, formulating plan and projects through collaborative research in the forthcoming days.



Ms Himadri Kaushik (Right) with her advisor Dr. Pranab Dutta (Left)



80G certificate for the Society

The Society has performed various activities since its inception as per its objectives viz., publication of journals and books/bulletins, organizing conferences (national as well as international), brain storming sessions, trainings, workshop and special guest/invited lecture by eminent plant pathologists for the benefits of scientists, students, researchers and farmers. For further activities, more funds are required and it is expected only by getting 80G certificate. Hence, the Society, pursued Income Tax (Exemption) office to get the exemption certificate and it is with great pleasure to inform that Society has been granted Income Tax (Exemption) u/s 80G (5) (iv) of the Income Tax Act 1961.


Office of the
Commissioner of Income Tax (E),
26th Floor, Tower-E2, Pratyaksha Kar Bhawan
Dr. S.P.Mukherjee Civic Centre, J.L.Nehru Marg, Delhi

NQ.CIT (E) I 2017-18/ DEL - IE28201 - 21122017/7429 Dated 21/12/2017

NAME & ADDRESS: INDIAN PHYTOPATHOLOGICAL SOCIETY
DIVISION OF PLANT PATHOLOGY INDIAN AGRICULTURE
RESEARCH INSTITUTE NEW DELHI 110012

Legal Status : Society
PAN NO : AAAAI2745R
GIR NO : I-693

Sub:-ORDER UNDER SECTION 80G (5)(vi) OF THE INCOME TAX ACT, 1961

On verification of the facts stated before me/hearing before me, I have come to the conclusion that this organization satisfies the conditions u/s 80G of the Income Tax act, 1961. The institution/Fund is granted approval subject to the following conditions:-

(i) The Donee institution shall forfeit this benefit provided under the law, if any of the conditions stated herein are not complied with/abused/whittled down or in any way violated.

(ii) This exemption is valid for the period from **A.Y.2018-19** onwards till it is rescinded and subject to the following conditions

Conditions:

(i) You shall maintain your accounts regularly and also get them audited to comply with sec. 80G (5)(iv) read with section 12A(1)(b) and 12A(1)(c) and submit the same before the assessing officer by the due date as per section 139(1) of the Income tax Act 1961.

(ii) Every receipt issued to donor shall bear the number and date of this order and shall state the date up to which this certificate is valid. **A.Y.2018-19** onwards till it is rescinded.

(iii) No change in the deed of the trust/association shall be affected without the due procedure of Law and its intimation shall be given immediately to this office.

(iv) The approval to the institution/fund shall apply to the donations received only if the fund/institution, established in India for charitable purpose, fulfills the conditions as laid down in section 80G5(i), (ii), (iii), (iv), (v) & (5B) of the Income Tax Act 1961.

(v) This office and the assessing officer shall also be informed about the managing trustees or Manager of your Trust/Society/Non Profit Company and the places where the activities of the Trust/Institution are undertaken/likely to be undertaken to satisfy the claimed objects.

(vi) You shall file the return of income of your fund/institution as per section 139(1)/(4A)/(4C) of the Income Tax Act, 1961.

(vii) **No cess or fee or any other consideration shall be received in violation of section 2(15) of the Income Tax Act, 1961.**

Copy to:
1 The applicant as above
2. The Assessing Officer



(SANDEEP JAIN)
Commissioner of Income Tax (Exemptions)
DELHI

(D BABU RAO)
ACIT(Exemp)(HQ)

For Commissioner of Income Tax (Exemptions) DELHI
(Exemptions) (Hqrs.), Room No. 2620
26th Floor, E-2 Block
Pratyaksh Kar Bhawan, Civic Centre
J.L. Nehru Marg, New Delhi-110002



Financial Report

The main source of generating funds for the Society is membership fee, subscription of journal and financial assistance received from ICAR and SERB, DST. During the year 2017-18, the Accounts of the Society are audited by Chartered Accountant (Annexures: I-III).

The Society has also received the audited **Receipts and Payments Account** from the organizers of the national/zonal symposium held during 2017-18, which given below.

Receipts	Amount (Rs)	Payments	Amount (Rs)
(i) IPS National Symposium - Jorhat			
Registration and Sponsorship)	14,71,000.00	Symposium Expenditures	23,87,807.00
Excess of expenditure over income	9,16,807.00		
(ii) Special Symposium- Anand			
Registration and Sponsorship	6,08,300.00	Special Symposium Expenditures	14,97,358.62
Excess of expenditure over income	8,93,827.62	Balance in Symposium Account	4,769.00
iii) North Eastern Zone Symposium 2017-18			
Registration and Sponsorship	6,41,000.00	NEZ Symposium Expenditures	6,13,900.00
		Contribution to IPS - 10% of registration	27,100.00
(iv) Northern Zone Symposium 2017-18			
Registration and Sponsorship	3,26,188.00	NEZ Symposium Expenditures	3,25,497.00
		Balance in Symposium Account	691.00
(v) Eastern Zone (EZ) Symposium			
Registration and Sponsorship	4,79,500.00	EZ Symposium Expenditures	4,79,500.00
(TOTAL i -v)	53,36,622.62		53,36,622.62



Annexure -I

Receipt and Payment A/c

Indian Phytopathological Society, New Delhi
Receipt and Payment (April 01, 2017 to March 31, 2018)

Receipts	Amount (Rs.)	Payments	Amount (Rs.)
Opening Balance as on April 01, 2017			
Cash in hand	1,208.00	Symposium/Meetings	
IPS Saving Bank A/c	7,39,895.49	7 Decades Celebration	24,750.00
Fixed Deposit	78,83,432.02	Award Meeting	18,660.00
IPS International Confernece A/c	37,000.67	Guest lecture	45,214.00
	86,61,536.18	Local Meeting	13,907.00
Annual Membership	2,11,900.00	National Symposium - Jorhat	4,93,550.00
LIFE MEMBERSHIP	6,72,300.00	Special Symposium - Anand	2,19,758.00
Subscription of journal 2017	8,82,420.00	Zonal Symposium	23,859.00
Special Issue	12,200.00	Delhi Zone Symposium	1,04,480.00
Royalty/Sale of Books	1,38,360.00	Local TA	6,838.00
Processing Fee	1,43,900.00		9,51,016.00
Guest Lecture	19,000.00	Printing/Publication	
FPSI Fee	55,000.00	Journal Publication	2,92,688.00
Postal charges for print copy	200.00	Members Directory	57,926.00
APS Membership	51,600.00	Proceedings Intl Conf	3,06,200.00
Savings from National /Zonal Symp	99,759.00	Annual Report (2014-2017)	90,720.00
	22,86,639.00	IPS Profile	26,609.00
			7,74,143.00
Bank Interest on saving bank and Fixed Deposits		Salary	7,04,500.00
	9,45,571.66	Consultancy Fee for CSR	4,64,250.00
Financial Assistance		Election	83,145.00
For Publication of journal		APS Membership	35,630.81
ICAR 2016-17	1,50,000.00	Stationery	5,068.00
ICAR 2017-18	1,37,500.00	Purchase of Printer	23,000.00
SERB, DST 2017-18	1,25,000.00	AC Servicing	2,300.00
Special Symposium - Anand		Display Board	13,600.00
SERB, DST	1,00,000.00	Postal Charges	60,881.00
Bioinnovation	50,000.00	Computer Repairing	23,585.00
For National Symposium - AAU, Jorhat		Telephone/Internet	25,846.00
Syngenta India Ltd.	25,000.00	Audit Fee	35,750.00
Sumitomo Chemical India Pvt Ltd	25,000.00	Miscellaneous Expenditures	49,864.63
Delhi Zone Symposium 2017-18	1,10,000.00	Bank Charges	3,381.61
For Intl. Conference 2015-16	2,00,000.00		15,30,802.05
	9,22,500.00	Closing Balance as on March 31, 2018	
		Cash in hand	412.00
		IPS Saving Bank A/c	1,68,540.93
		Fixed Deposit	87,54,332.19
		New Fixed Deposit	6,00,000.00
		IPS International Confernece A/c	37,000.67
TOTAL (A)	1,28,16,246.84		95,60,285.79
			1,28,16,246.84

For Tasky Associates
Chartered Accountants

Anil Kumar Mathpal
Partner
Membership No. 503011

Place : New Delhi
Date : May 28, 2018



Vaibhav Kumar Singh
(Treasurer)

Dr. Vaibhav Kumar Singh
Treasurer
Indian Phytopathological Society
Division of Plant Pathology
IARI, New Delhi 110012, India



Dinesh Singh
(Secretary)

Dr. Dinesh Singh
Secretary
Indian Phytopathological Society
Division of Plant Pathology
IARI, New Delhi 110012, India





Balance Sheet

INDIAN PHYTOPATHOLOGICAL SOCIETY, NEW DELHI

BALANCE SHEET AS ON 31st MARCH 2018

Liabilities		Amount	Assets		Amount
Capital A/c			Assets		
Opening Balance	83,96,709.96		Computer (1 - 3) & P - IV with UPS	130.88	
Add:- Surplus From P&L A/c	9,38,343.18	93,35,053.15	Computer (1-3) New	331.21	
Expenses Payable for			Laptop (HP Pavilion Laptop)	458.75	
National Symposium - Jorhat		2,11,265.00	Printer (HP Lasterjet 6L Pro)	165.33	
Journal Publication		79,232.00	Printer (HP Lasterjet P1007)	176.99	
			UPS (650 VA)	62.01	
			EPSON LX 300+	85.78	
			Air Conditioner	11,012.92	
			Furniture	28,308.80	
			Microwave Oven & Refrigerator	7,409.88	
			SLR Camera	15,138.18	
			Bicycle	1,983.62	
			Cash in Hand	412.00	
			Syndicate Bank		
			IPS Saving Bank A/c	1,68,540.93	
			Fixed Deposit	87,54,332.19	
			New Fixed Deposit	6,00,000.00	
			IPS International Confernece	37,000.67	95,59,873.79
		96,25,550.15			96,25,550.15

For Tasky Associates
Chartered Accountants


Anil Kumar Mathpal
Partner
Membership No. 503011

Place : New Delhi
Date : May 28, 2018


Vaibhav Kumar Singh
(Treasurer)
Treasurer
Indian Phytopathological Society
Division of Plant Pathology
IARI, New Delhi 110012, India


Dinesh Singh
(Secretary)
Dr. Dinesh Singh
Secretary
Indian Phytopathological Soci
Division of Plant Pathology
IARI, New Delhi 110012, India



Acknowledgements

The Society is grateful to Prof. B.N. Chakraborty, President for his guidance, advice, encouragement and support in day to day functioning of the Society and also thankful to all the Executive Council members for their cooperation, active support and suggestions in various activities of the Society. Special thanks to Dr. Ashok Bhattacharyya, Organizing Secretary of the National Symposium; Chairman, Co-chairman and rapporteurs of various technical sessions and members of organizing sub committees for their wholehearted support in making the 70th Annual Meeting and National Symposium a grand success. The Society is also thankful to all the staff members and students for rendering their valuable help in various ways for making the symposium success. Last but not least, thanked to the staff of the Headquarter of IPS for their valuable support. The Society is also thankful to Dr. R.N. Pandey, President-Elect and Organizing Secretary of special symposium on “Microbial antagonists and their role in biological control of plant diseases” held at AAU, Anand, Gujarat during October 05-07, 2018. Special thanks to Zonal Presidents/ Councillors for successfully organizing the zonal symposium of their respective zones.

Sponsorship for Guest Lecture

The Society thankfully acknowledges the sponsorship by Sungro Seeds Ltd., New Delhi and Life Technology India Pvt. Ltd., New Delhi for organizing guest lecture by Dr. R.K. Khetarpal.

Financial Assistance for IPS National Symposium at AAU, Jorhat, Assam

The financial support extended by the Indian Council of Agricultural Research (ICAR), New Delhi and NABARD, Mumbai (MS) for organizing IPS National

Symposium at AAU, Jorhat, Assam, Feb. 15-17, 2018 is thankfully acknowledged.

The Society also acknowledges all the sponsors viz., North Eastern Council, ICAR-ATARI, Zone VI, Guwahati; ICAR Research Complex for NEH Region, Umiam, Meghalaya; Syngenta; Bayer Crop Science; Bioversity International, New Delhi; Oil India Limited; Orgaman; Swagat; Sumitomo Chemical and Numaligarh Refinery Limited (NRL) for their contribution in organizing IPS national symposium.

Financial Assistance for Special Symposium on Biological Control at AAU, Anand, Gujarat

The Society gratefully acknowledges grants received from SERB, DST, New Delhi and NABARD, Mumbai (MS) as partial financial support to organize Special symposium “**Microbial antagonists and their role in biological control of plant diseases**” at AAU, Anand, Gujarat during October 05-07, 2018.

The other sponsors viz., Anubhav Trichoderma, Anubhav Seeds. NABL, GSTBM, NAU, GSP, Bio-Tox, Shakti Scientific Co., Eppendorf, Empire Enterprises, Nico-Orgo, Divya Scientific & Chemicals, Krishna Surgical Co, Agriland and AsiaGreen are also thankful for sponsoring the special symposium.

Financial Assistance for publication of journal Indian Phytopathology during 2017-18

The Society also acknowledges Indian Council of Agricultural Research (ICAR), New Delhi and SERB, DST, New Delhi for their partial financial support for publication of *Indian Phytopathology* during 2017-18.

Special thanks all the sponsors for their financial support in organizing zonal symposia of the Society during 2017-18.



Condolence

Condolence meeting was held for the following plant pathologists who passed away to their heavenly abode during 2017-18, namely:

- Dr. Mahendra Pal (FPSI, 1987), Principal Scientist (Retd.), C-9, 118, Sector 7, Rohini, New Delhi
- Dr. Jamaluddin (FPSI, 1978), Emeritus Scientist (CSIR), 298, Pragati Nagar, Mandla Road, P.O. Bilhari, Jabalpur, Madhya Pradesh
- Dr. V. Gunasekhar, Scientist - D, Central Sericulture Research and Training Institute, Srirampura, Mysore, Karnataka
- Dr. A.K. Roy (FPSI, 1977), Director of Research (Retd.), Joynagar, Jail Road, Borbheta, Jorhat, Assam

- Dr. Sangam Lal (FPSI, 1977), RZ-E-53A, Sagarpur West, Behind Sanatan Dharam Mandir, Gandhi Market, New Delhi
- Dr. Y.L. Nene (FPSI, 1965), Chairman, Asian Agri-History Foundation, 47, ICRISAT Colony-1, Brig. Sayeed Road, Secunderabad, Telangana
- Dr. A.K. Verma, Principal Scientist (Retd.), 15/53-1, Indira Nagar, Lucknow, Uttar Pradesh

The members of the Society express their sincere condolences and profound grief to the bereaved families and pray to almighty that their souls may rest in peace.



Indian Phytopathological Society

Division of Plant Pathology

Indian Agricultural Research Institute

New Delhi 110012, India

Tel: +91-11-25840023; Email: ipsdis@yahoo.com

www.ipsdis.org