



NATIONAL CONFERENCE
on
“Insect-Plant Biology in 21st Century”
Organized by
Department of Zoology
Deshbandhu College
University of Delhi, New Delhi-110019
(UGC Sponsored)

Venue: Deshbandhu College Auditorium
Dates: 4-5 November, 2019

About the Deshbandhu College:

DESHBANDHU COLLEGE was established in the year 1952 by the Ministry of Rehabilitation, in the memory of Late Lala Deshbandhu Gupta - a veteran freedom fighter. The college made a humble beginning with just 72 students and the courses like Prep(arts), Prep(science) and Pre-medical. The college was transferred to ministry of education and later taken over by the University of Delhi.

Guided by the mantra "Karmanyevadhikaraste" - our motto, the college continues to grow both in size and stature.

The college promotes organization of seminars, lectures, workshops, sports activities, N.S.S., N.C.C. and other co-curricular activities. Deshbandhu College has an active Internal Quality Assurance Cell (IQAC), as a mechanism to build and ensure a quality culture at the college level. The College is well-equipped with all infra-structural/academic support that a student requires. The College and the faculty offer a holistic environment to the student and gives preference to their

psychological/academic needs. This creates an informal, close knit, friendly and supportive environment to encourages hard work and academic achievement.

About the National Conference: “Insect-Plant Biology in 21st Century”

Introduction:

Insect-Plant Interactions are crucial for maintaining terrestrial biodiversity. Therefore, understanding of these ecological interactions is fundamental to biology as it provides insights of both, antagonistic and mutualistic interactions between plants and insects. How plants and insects interact in ecological settings? How do they specifically tailor the molecular response of each other? How does this dynamic system changes spatially and temporally? Do these ecological interactions vary with changes in geographic gradients such global warming and climate change? Answers to these questions are very crucial to understand and maintain ecological organization and to utilize this knowledge for serving human needs.

Insect-Plant Biology is a very vast and dynamic field. Most of the Conferences/Seminar/Symposia/Workshops organized in this field were either emphasizing on plant or insect. Very few conferences focused on both plant and insect together and emphasized on integrating them together as plant-insect interactions. For effective understanding of ecological systems they have to be integrated and their findings have to be discussed in ecological settings. The main motive of our conference is to gel both plant and insect system together from ecological perspective.

This kick-off meeting would provide a platform to exchange ideas in the field of plant-insect biology between various research groups and to promote collaborative research among them.

Aims/Objectives-

The key objective of this conference is to provide an opportunity to young researchers, proficient teaching faculties and scientists/academicians to interact and share their ideas. With this conference, we hope to encourage interdisciplinary discussions in the field of insect-plant sciences, enhance communication and stimulate future collaborations. Talks during the conference will emphasis on ecological, molecular, physiological, biochemical and evolutionary perspectives of plant-insect interactions. Insect-plant biology reveals the greatly elaborated antagonistic as well as mutualistic interactions evolved during long co-evolutionary history of millions of years. It includes a vast array of organisms sharing various types of interactions. It is a very fascinating and ever-expanding field. Antagonistic interactions involves herbivory, including vast group of phytophagous insects belonging to different feeding guilds i.e. sap suckers, leaf chewers, seed predators, gall inducers and leaf miners. Phytophagy comprises approximately 43% of all insects, majorly from the order Lepidoptera, Coleoptera, Hemiptera, Orthoptera and Hymenoptera. Approximately 20-40% of crop yield is lost to pests and diseases. As our demand for food is going to increase in future due to growing population, new sustainable crop improvement strategies must be explored. Improved agricultural production couldn't be achieved without automation and biotechnological innovations. Insect and plants are also involved in various mutualistic

interactions. They are the most investigated interactions from various perspectives. First, it helped in plant evolution by reproducing various vascular plants using mutualistic insects. Second, it sheds light on evolution of plant traits and their mating system. Third, it has been involved in configuring evolutionary diversification of certain groups of plants. Lastly, plant–insect mutualisms particularly gained importance in the conservation of both, critical mutualists facing threat of extinction and the plants that depend on them.

One of the key focuses of this conference is to draw attention of young investigators towards various plant-insect interactions operating in nature, growing food demand and decreasing crop yield due to insect pest, crop protection and impact of global warming and climate change on plant-insect interaction and both antagonistic and mutualistic interaction. Student will be able to translate a biological question into a feasible experimental approach. It will also aware them about range of methods and techniques commonly used in the subject area.

This conference is meticulously planned to focus on insect-plant biology as a whole instead of favoring either plant or insect. Their discussion is incomplete without each other. Therefore, we have integrated both and emphasized on their relationship in an ecological setting.

It will nurture a scientific temperament and environment among young researchers, teaching faculties and eminent scientists working in the field of insect-plant biology through direct face to face interactions with the eminent experts of both national and international repute from various disciplines of

insect-plant biology. Such intellectual interaction will also promote research temperament among young investigators. It will create awareness among the participants regarding latest developments in various fields of insect-plant biology. It will also promote scientific reading habits and library culture among the participants by disseminating scientific and technical information relevant to their work. Lastly, it will also provide a platform for exchange scientific ideas among fellow scientists.

Important Dates:

Theme of the Conference	
Session 1	Insect Taxonomy & Systematics/Reproduction / Development/Behaviour
Session 2	Insect Plant Physiology/Insect Pest management
Session 3	Molecular analysis of Plant-Insect interaction / Insect-Plant Resistance
Session 4	Medical Entomology and Public Health

- Last Date of Submission of Abstract: **22nd October, 2019.**

Selected paper (s) will be published in UGC listed peer-reviewed journal published by Elsevier.

Guidelines for the Abstract preparation:

All abstracts must be submitted online via email to ipb2019@db.du.ac.in

The corresponding author is responsible for the abstract content. This author is the contact person for submission and communication purposes and is also responsible for disseminating information related to the abstract to the co-authors. If accepted, the abstract will be included in the abstract book of the conference proceedings.

- **Language of Abstract:** English
- **Number of Submissions:** Each author can submit maximum two abstracts from different sections.

Prepare your abstract in a word processing software such as MS Word. For preparation of an abstract, please follow these format guidelines:

The abstract text should not exceed 200-250 words. Authors are responsible for the originality and proofreading of the abstract.

Abstract should contain the following sections:

1. Title: Please ensure that the first word of your title starts with a Capital Letter and complete title should be in BOLD font.

2. Authors: Please indicate the presenter with an asterisk. If there is more than one author, list the authors with last name and initial. Separate the authors with a comma.

Important: If the presenting author is not indicated with an asterisk, the first author will be considered as the presenter and it cannot be changed in any situation.

3. Affiliation: Please write the affiliation of the authors in the following order e.g. "": Department (or hospital), School (or Faculty), University (or Research Institute), City, Country. Example: Department of Zoology, Deshbandhu College/School of Medicine, University of Delhi, Delhi, India."

4. Aims and Objectives

5. Methods

6. Results

7. Conclusions

8. Keywords

Abstract submitted in other formats will NOT be accepted (use Times New Roman 12-point font and 1 inch's side margins and Line spacing 1.5). Participants should also mention their choice for presentation as ORAL/POSTER. A panel of experts will review all submitted abstracts, and the scientific program committee will allocate accepted abstracts to an oral or poster session. For any queries, please feel free to contact ipb2019@db.du.ac.in (Note: Kindly mention the section (Theme) under which you are submitting your abstract)

Guidelines for the Abstract submission:

For submission of the abstract, email your abstract at ipb2019@db.du.ac.in

After submission of the abstract, Kindly use same Email Id for the correspondence

Last date of abstract submission is 22nd October, 2019.

Guidelines for Poster Presentation:

- Printed poster indicating Title followed by Authors and their affiliation.
- The poster should clearly define Objectives, Outcome and Conclusion.

- Size of the poster should be 36 inches (Width) and 48 inches (Height) in Portrait format.

- Leave margins of 3 inches from each side.

Guidelines for oral Presentation:

- Oral presentation should be prepared in MS PowerPoint in compatibility mode only.
- Time slots given for each presentation will be 10 minutes for presentation and 2 minutes for discussion.
- A copy of the presentation should be submitted 4 days before the presentation i.e. **30th October, 2019** by email to ipb2019@db.du.ac.in

Expected List of Invited Speakers:

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REGISTRATION FEE

Academia/Scientists	1000/- INR
Researchers/Students	500/- INR

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The fees include access to the conference, sessions, material and lunch; and it does not include accommodation and travel costs

For details, please visit

<https://deshbandhucollege.ac.in>

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