



## Bioecology and Physiology of invasive fall armyworm

18<sup>th</sup> - 20<sup>th</sup> January, 2023



**Sponsored by**

Science and Engineering Research Board  
Department of Science and Technology  
Government of India

**Organised by**

Division of Entomology  
ICAR-Indian Agricultural Research Institute, New Delhi-12

Division of Entomology, ICAR-Indian Agricultural Research Institute, New Delhi, invites applications from teaching and research faculty of ICAR-Deemed to be Universities/SAUs/CAUs/CUs/other UGC recognized Universities and research institutes for three days workshop on “**Bioecology and Physiology of invasive fall armyworm**” sponsored by **Science and Engineering Research Board**, Department of Science and Technology, Government of India

#### **WHO CAN PARTICIPATE**

Faculty members of ICAR-Deemed to be Universities/SAUs/CAUs/CUs/other UGC recognized Universities/colleges and research institutes are eligible to apply. The number of participants will be limited to **twenty five only**.

#### **REGISTRATION FEES**

No registration fee is to be paid; the programme is sponsored by DST-SERB

#### **HOW TO APPLY**

Filled in application form in the prescribed format forwarded by authority should reach the Course Director (**by Email- labnumber54@gmail.com**), Division of Entomology, ICAR-IARI, New Delhi on or before **20<sup>th</sup> December, 2022**.

#### **TRAVEL**

**Travelling allowance will not be provided by the organizers.** Participants have to make their own arrangements

#### **FOOD and ACCOMMODATION**

Working lunch will be provided for the participants, refreshments will be arranged during the programme. Participants have to make their own arrangements for the accommodation.

## Background

The invasive fall armyworm, *Spodoptera frugiperda* (J. E. Smith, 1797) (Lepidoptera: Noctuidae) is a global pest native to tropical and subtropical areas of America. It has a wide host range of more than 353 plant species which include major crops like maize, sugarcane, wheat, cotton, and some fruits and vegetables. High migration capabilities coupled with adaptability to diverse climatic conditions has made this pest to extend its distribution outside America in West Africa in the recent years. Since 2016, this pest has invaded sub-Saharan Africa, parts of West, East, and South Asia, and Australia. Ever since its first report on maize in India during 2018, it has spread rapidly to all regions of the country causing a major impact on maize production in the country. *S. frugiperda* has a high reproductive capacity with average fecundity of 600-1000 eggs per female. The larva feed on leaves, stems, and reproductive parts with a duration of 15-20 days. It completes its pupal period in 8-9 days with the adult longevity of 10-12 days.

The pest is known for its high adaptability in an alien ecosystem and has remarkable reproductive capacity. Understanding the bioecology and physiology of this pest helps in better management at the field level. To create awareness about this pest among scientific community this workshop is organized as a part of Scientific Social Responsibility (SSR) policy of DST- SERB funded project entitled, "Studies on thermal stress *vis-à-vis* reproductive physiology in invasive fall armyworm, *Spodoptera frugiperda* (J. E. Smith)" (CRG/2021/003396).

### This workshop will focus on

- i. Reproductive physiology of Lepidopteran insects
- ii. Invasive insect pests in India: Current status and invasion pathways
- iii. Bioecology and Management strategies for Fall Armyworm (FAW)
- iv. Techniques for mass rearing of FAW
- v. Molecular diagnostics for identification of FAW
- vi. Laboratory techniques on reproductive physiology of FAW



## **Organizers**

### **Course Director**

**Dr. Sagar D**  
Scientist (SS)  
Division of Entomology,  
ICAR-IARI,  
New Delhi -110012  
E-mail: [garuda344@gmail.com](mailto:garuda344@gmail.com)

### **Course Coordinators**

**Dr. S. Subramanian**  
Principal Scientist,  
Division of Entomology,  
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**Dr Suresh M Nebapure**  
Scientist (SS)  
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### **Contact details**

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## **Application Form**

DST-SERB sponsored Three days workshop on  
**“Bioecology and Physiology of invasive fall armyworm”**  
(January 18-20, 2023)  
under the SERB Scientific Social Responsibility Policy

1. Full Name (in block letters):
2. Designation:
3. Discipline/Specialization:
4. Present Employer and Address:
5. Permanent Address:
6. Date of Birth:
7. Sex (Male/ Female):
8. Category (Gen/OBC/SC/ST):
9. Phone/mobile No:
10. Email:
11. Educational Qualifications:
12. Current Areas of Research:
13. Teaching/ Research / Professional Experience (mention post held during last 5 years and number of publications):
14. Marital Status (Married/Unmarried):
15. Computer Proficiency:

**Signature of Applicant with date**

### **Recommendations of the forwarding institute**

It is certified that the information provided above is verified and found correct.  
The applicant is recommended & nominated for attending the workshop in IARI.

**Signature of the forwarding Authority with Seal  
and Date**