

REPORT OF THE THREE-DAY WORKSHOP ON MANAGEMENT OF COMMON INSECT PESTS IN URBAN GARDENS

A three-day workshop was organised by the Department of Zoology and Genetics of Jyoti Nivas College Autonomous on 'The Management of Common Insect Pests in Urban Gardens' which was funded by the Karnataka Science and Technology Academy (KSTA). The workshop commenced on 25th May, 2022 and concluded on 27th May, 2022.

The workshop began with Dr. Reema Orison Lobo welcoming the participants to the workshop which was followed by the lighting of the lamp by our honourable speaker Dr. Abraham Verghese along with our Principal Dr. Sr. Lalitha Thomas, Administrator Sr. Rosily and Vice Principals. The lighting of the lamp was followed by a prayer. Subsequently our respected Dr. Sitavi Yathiender, HOD of the Department of Zoology and Genetics gave an overview of the entire workshop. The three day workshop was attended by students of other colleges, faculty and a few gardeners.



Following the overview Dr. Abraham Verghese Director of GPS Institute of Agricultural Management, Bengaluru shared his expertise with us. Dr. Verghese began by telling us how with some common tools and a minimum investment we can have our own kitchen garden. He also threw light upon the common insect pests in urban gardens and the measures of controlling

them. Dr. Verghese powerpoint presentation along with his practical knowledge helped the participants visualise and grasp the subject .This was followed by a question and answer session .



The second session of the first day was taken by Dr. M. Jayashankar. Dr. Jayashankar is the Head of the Zoology Department of St Joseph’s College Autonomous. His PhD degree is based on the topic “Distribution and Ecology of the Giant African Snail in and around Bangalore”. Dr. Jayashankar’s session was based on the effects of non-insect pests like snails on urban gardens. We were given information about how the snail was introduced to India and the effects it had on our environment. The participants were taught about the different types of snails and how to identify the presence of snail infestations in our home gardens. The observation of eaten leaves with large holes, browning leaves and the tell-tale trail of mucus secretions all point towards the presence of snail pests in our gardens. Dr Jayashankar provided the audience with practical solutions to the pesky problems caused by snails in our kitchen gardens. He explained to us that the use of Integrated Pest Management is the best way to curb snail infestations. Manual hand picking and removal of snails is the most convenient method to reduce their population in our gardens. Luring the snails to a particular site and trapping them can help to get rid of a large number of snails easily. Dr Jayashankar emphasized to the participants that

the use of chemicals should always be the last resort. However, should one need to use drastic measure to eradicate a large infestation, molluscicides like Met aldehyde can be used as it is toxic to snails. The session was immensely informative and eye-opener as we usually view insects as the only pests in our home gardens. The provision of practical applications to tend to our gardens against snails will prove to be useful in the long run.



The 2nd day of the workshop was held on 26th of May 2022. The workshop began with a brief introduction of the resource person Dr.A.Krishnamoorthy. He is a scientist specialising in Agricultural Entomology and is currently working as the Managing Director of Genuine Fert and Pest Pvt Ltd, Bangalore. He gave the students an insight on the topic- Integrated approach towards Pest management. He began by giving the students the scientific meaning of pests and explaining the life cycle of insect pests in general. He spoke about the different methods of integrated pest management which are cultural, mechanical, biological and chemical methods. Then he went on to elucidate about some of the common pests that infest urban gardens along with their symptoms of damage and control methods. He displayed some beautiful pictures of them as well which helped the participants visualise and get familiarised with the insect pests. He talked about sucking pests like aphids, thrips, whiteflies, spiralling whiteflies and jassids. He concluded the session by clarifying doubts of the participants. His immense knowledge in the field of entomology and his detail-oriented presentation helped the participants gain a better understanding on integrated pest management. The participants were then taken to have a look at some of the terrace and roof garden products manufactured by his company Genuine Fert

and Pest Pvt Ltd which were displayed in the college campus. Interested participants were also given an opportunity to buy these products.



The second session of day 2 began with a brief introduction about the speaker Dr. Soumya.K and then the participants were taken for a practical session to the college garden where the participants were subjected to hands-on training in identifying insect pests found on the plants. During the activity some sucking pests which include Scale insects, Female aphids species, Mealybugs (*Ferrisia*), Whiteflies were identified. This helped the participants to differentiate between mealy bugs and scale insects. Participants also spotted caterpillars which were detected with the help of their excreta. Then the participants visited the vermicomposting unit to spot pests on trees and fallen fruits. Larvae feeding beetle insects were spotted. The participants learnt the difference between pests, natural enemies and pollinators. To know what is beneficial and harmful. In an overview all the insects we see are not pests and some of them are indeed useful.



The final day of the workshop was held on 27th May, 2022. Dr. Soumya K was briefly introduced once again to the participants. Dr. Soumya continued with the topic related to the previous session to further deepen the knowledge on identifying pests by giving a presentation on 'How to become a backyard pest detective'. She displayed the various life cycles of the pests, pollinators and natural enemies. She talked about the predominant group of insects such as butterflies, flies, beetles, wasps, honeybees, ants, Aphids, whiteflies, mealy bugs, etc. She taught the participants about the harmful and useful effects of these insects. She taught about the insect stages such as egg, larva, pupa, nymph and adult that the people should be cautious about and told how to manage them in a more natural and effective manner without disrupting their natural biodiversity. Dr. Soumya later made the students apply their theoretical knowledge into use by asking them to identify the various pests in a practical class later in that session. She showed different methods to store the specimens of pests. Some of these methods included using pheromones to attract pests and catch them in a box, using alcohol, using vial and brushes, etc. Finally, she clarified the doubts of many participants with her professional knowledge. The final session was wrapped up by thanking Dr. Soumya for her clear and highly informative presentation.



Valedictory was held after thanking Dr.Soumya.K. We welcomed Vice Principal and Head of the Department of Zoology and Genetics Dr.Sitavi Yathiender, Dr. Soumya, the coordinator of the workshop, the entire faculty of the Department of Zoology and Genetics and the attendees. A few registered participants were requested to come forward to give their feedback and thoughts regarding the workshop.



Dr.Soumya.K was requested to give the concluding remarks regarding the workshop, after which the Head of the Department of Zoology and Genetics, Dr.Sitavi Yathiender gave the vote of thanks where she expressed her heartfelt gratitude to the Karnataka Science and Technology Academy without whose aid and generosity we would not have been able to conduct the workshop. She went on to thank our dear Principal Dr.Sr.Lalitha Thomas for being a pillar of support throughout the event. Ma'am expressed her sincere thanks to the speakers Dr.AbrahamVerghese, Dr. Jayashankar, Dr A Krishnamoorthy and Dr. Soumya K for taking time off their busy schedule to share their expertise with us. Dr.Sitavi Yathiender also thanked the participants of the workshop, the entire faculty of the department of Zoology and Genetics and the student volunteers for making the event a grand success. Dr.Sitavi Yathiender and Dr.Soumya.K were called forward to distribute the certificates to the attendees with which the workshop was concluded.

Feedback forms were given to the participants to express their views about the three day workshop.