Proceedings of the Seminar on

"Wonderful World of Insects"

3rd December 2008

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1	4	7
2	5	8
3	6	9

- 1. Angled castor
- 2. Tawny rajah caterpillar
- 3. Green hopper
- 4. Ant and aphid
- 5. Tent caterpillar
- 6. Praying mantis
- 7. Moon moth
- 8. Praying mantis
- 9. Mosquito

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Chairman's note, 🖄

I have great pleasure in handing over this book of proceeding of the seminar "Wonderful World of Insects" to you. The college has been organizing from last 6 years National seminars on various modern subjects, which help students and teachers not only enrich their knowledge but also keep them updated in modern technology era.

The subject "Wonderful World of Insects" chosen for this year's seminar" will appeal to students and adults not only to nature lovers but to others also. We know some of the common insects, however many of us do not know many insects. There are well over 1 million different known species of insects in the world. Some experts estimate that there might be as many as 10 million. For the first time in 87 years, researchers have discovered an insect that constitutes a new order. Even in the frozen extremes of Arctica and Antartica you will find some insects alive and active during the warmer months.

While many types of insects, birds and animals seen in the home are unwanted intruders; others play a vital role in pollinating plants and moving seeds from one place to another. In fact, without these animal and insect helpers, most plants would be unable to reproduce. Insects perform a vast number of important functions in our ecosystem. They aerate the soil, pollinate blossoms, and control insect and plant pests, they also decompose dead materials, thereby reintroducing nutrients into the soil. Burrowing insects such as ants and beetles dig tunnels that provide channels for water, benefiting the plants. Bees play a major role in pollinating fruit trees and flower blossoms. Gardeners love the big-eyed bug and praying mantis because they control the size of certain insect pest populations, such as aphids and caterpillars, which feed on new plant growth. Finally, all insects fertilize the soil with the nutrients from their droppings.

Butterflies by their innumerable designs and colors have attracted poets, writers and painters. I wish this section could have been also devoted to this study. Butterflies have become part of human literary and artistic creativity. The fossil studies also throw light on evolutionary process.

This seminar will throw light on varieties of insects, diverse group of insects, their lifestyle, behaviours, habits and their usefulness to mankind with reference to medicinal use. This seminar will also promote and encourage observational studies on insects. I am sure all stake holders will take the benefit of this opportunity and make this seminar a grand success.

Dr. Vijay V. Bedekar Chairman Vidya Prasarak Mandal, Thane

संपादकीय

हल्लीच्या माहिती व तंत्रज्ञानाच्या युगात इंटरनेटवर कीटकांबद्दलच्या ज्ञानाचा महासागर पसरलेला आहे. असे असले तरी त्यात बुडी मारून ज्ञानशिपले गोळा करणे जरूर आहे. शाळा-महाविद्यालयाचे विद्यार्थी आणि जनसामान्यांमध्येही कीटकांविषयी उत्सुकता निर्माण व्हावी व कीटकांविषयीच्या माहितीचा प्रसार व्हावा एवढे माफक उद्देश ठेवून कीटकांविषयीचे चर्चासत्र आयोजित करण्याचे ठरले. पूर्वतयारीच्या दोन कार्यशाळा (१६ जाने. व २६ ऑगस्ट २००८) आयोजित करून कीटकांविषयी काय व कशी माहिती गोळा करावी याबद्दल विद्यार्थ्यांना तज्ज्ञांकडून मार्गदर्शन करण्यात आले. नंतरच्या सप्टेंबर ते नोव्हेंबर २००८ या काळात त्यांनी स्वत: कीटकांच्या जगांत डोळसपणे मुशाफिरी करून त्यांची छायाचित्रे काढावीत, त्यांच्या विषयी माहिती मिळवून भित्तीपत्रके (Posters) करावीत किंवा कीटकांच्या विषयी स्वत: केलेली निरीक्षणे शोधनिबंधाच्या स्वरूपात मांडावीत व ह्या सर्व गोष्टी ३ डिसेंबर च्या चर्चासत्रात सादर कराव्यात अशी सर्व योजना होती व तिला प्रतिसादही चांगला मिळाला असे म्हणावे लागेल. चर्चासत्राच्या निमित्ताने कीटकांविषयी गोळा केलेल्या सर्व माहितीचे संकलन ह्या नोंद पुस्तिकेच्या (Proceeding) स्वरूपात सादर करतांना मला व माझ्या संपादक मंडळाला तसेच प्राणीशास्त्र विभाग, वि.प्र.मं. चे. बा. ना. बांदोडकर विज्ञान महाविद्यालय व विश्व प्रकृति निधी (WWF- India, MSO) या दोन्ही संस्थांना अत्यंत आनंद व समाधान वाटते. ह्या पुस्तिकेत तज्ज्ञांचे लेख, शोधनिबंध, छायाचित्रे, भित्तीपत्रिका (Posters) व भित्तीपत्रिकांवर आधारित लेख यांचा समावेश आहे. सदर पुस्तिकेत काही त्रुटी राहिलेल्या असल्यास वाचकांनी नीरक्षीरविवेक ठेवून चांगले व बरोबर ते घ्यावे, अशी विनंती करतो. दोन्ही कार्यशाळा, चर्चासत्र, नोंद पुस्तिका यांच्या जडणघडणीत मला साथ दिलेल्या सल्लागार समिती व आयोजन समितीच्या मान्यवर सदस्यांचा, संपादक मंडळाचा, माझ्या महाविद्यालयातील शिक्षक, शिक्षकेतर कर्मचारी वर्ग व विद्यार्थी यांचा, विश्व प्रकृति निधीच्या (WWF-India, MSO) पदाधिकारी व स्वयंसेवकांचा आणि चर्चासत्रात उत्साहाने भाग घेणाऱ्या सर्व कीटक प्रेमी अभ्यासकांचा मी अत्यंत ऋणी आहे.

डॉ. रघुनंदन प्रभाकर आठल्ये.

Contents

Section A - Keynote Addresses	
Wonderful World of Insects - Dr. R. P. Athalye	3
कीटकांचे जग : निरीक्षण कीटकांचे ! का आणि कसे?	6
- डॉ. पु. वि.जोशी	
Observing the World of Insects - Dr. P. V. Joshi	10
How to Observe and study Butterfly Caterpillars - Isaac Kehimkar	12
Nature Photography - Dr. Amol Patwardhan	16
Poster Making - Tejal Vishweshwar	19
Parental Care in Insects - Dr. P. V. Joshi	23
Simple Projects on Insects - Dr. B. G. Kulkarni	27
Life History of Butterfly Papilio polytes polytes L (Lepidoptera: Papilionidae) - Dr. Sunil M. Gaikwad	28
A short note on Moths - Mrs. Alka vaidya	30
Silk producing insects - Prof. Dr. P.V. Joshi	35
Stingless Bees - Prof. Dr. R. V. Ranade	40
Entomological Research in Department of Zoology at Modern College, Pune - H.V. Ghate and students	43
Entomological Research in Department of Zoology, Shivaji University, Kolhapur - G. P. Bhawane	45
Genera of Click Beetles (Coleoptera: Elateridae) From Maharashtra - Amol P. Patwardhan and R. P. Athalye	47
Section B - Research Papers	
Preliminary Study of Butterfly Diversity from Thane City and Forest around Thane, Maharashtra - Amol Patwardhan and Poonam Kurve	53
Beautiful Butterflies of Sanjay Gandhi National Park - Shaunak Bhawalkar and Pratik Tambe	58

- M.V. Prabhu, V.R. Fernandes, Rahul Khot and Dr. M.N. Mukherji	60
Butterfly Diversity of Maharashtra Nature Park - Prahant Gokarnkar, Sachin V. Chorge and Anil Rajbhar	63
Development of the Butterfly Common Baron Euthalia garuda - Suvarna Rawal and Dayanand Patil	65
Seasonality of Swallowtail Butterfly Community (Lepidoptera: Papilionidae) of Siruvani Forest, Western Ghats, Southern India - Arun P.R	66
Some Aspects of Biology of Grass Demon Skipper - Kamlakar V. Indulkar and Dr. Purshottam G. Kale	72
Scarabaeid Beetles in and Around Kolhapur City, Maharashtra A. B. Mamlayya, S. R. Aland, Y. J. Koli, S. M. Gaikwad, D. L. Bharmal and G. P. Bhawane	76
Small Brained Wonder - the Insects - Suvarna Rawal	79
Diversity of Ant Fauna (Family: Formicidae) In IIT- Bombay Campus - Kaustubh Bhagat, Gauri Gurav and Goldin Quadros	82
Study of Odonata During Monsoon in IIT-Bombay Campus, Mumbai - Aniruddha H. Dhamorikar, Gauri Gurav and Goldin Quadros	85
Study of Diversity of Macro-fauna from the Household Biocompost - Gayatri A. Sagade and M. K. Pejaver	89
Insects Found in V.P.M.'s Thane College Campus - Swapnil Ghanekar, Nachiketan Gaonkar, Onkar Patkar, Pratik Goregaonkar and Shripad Kundale	91
Studies on Insects encountered during compost preparation, with special reference to Fly Breeding Menace - Moses J Kolet	96
Study of Life Cycle of Slug Moth (Parasa sp) - Priti Vilas Choghale	100
Study of insects and their life cycles found in C.K. Thakur A.C.S. College, New Panvel - Virgilio Menezes, Supria Choramekar and Kirti Parulekar	102
Life Cycle of Flesh Eating Fly and It's Application in Deciding Post Mortem Interval - Joel Joy and RoshniDonny	104
Behavioural Characteristics of <i>Poecilocerus Pictus</i> (Fabricius) - Madhavi V Sawant, Shiney Peter and K. R. Kharat and B. P. Hardikar	106
Observation on Parasitism in Moth Caterpillars, near Sewree Creek - Nilesh Kudupkar, Ravindra Jadhav and Vaishali Somani	110
Study of Psyllid species forming Galls on leaves of Ficus glomerulata (Audumber) - Mansi P. Phanse and Ketki A. Deodhar	111
Study of Insect diversity on the Asteraceae plants of IIT-Bombay Campus - Alok Chorghe, Gauri Gurav and Goldin Quadros	113
Study of Biodiversity of Insects on Leea Indica in IIT-Bombay campus. - Kashmira Khot, Gauri Gurav and Goldin Quadros	115

- Sharda Vaidya

Auther Index

Section C - Articles based on Posters	
Collection and Preservation of Insects - Sonal Salvi	121
Life Cycles of Insects - Department of Zoology, B.N. Bandodkar College of Science, Thane.	124
Types of Larvae and Pupae - Gayatri Oak and Suyog Sawant	126
Life Cycle of Butterflies - Pushya Francis, Rufina Rodrigues, Kirti Shivsharan, Harshada Adkar and Prachi Sawant	128
लाल कुंभार माशीच्या पाळणा घरी - <i>डॉ. पु. वि.जोशी</i>	131
Bombardier Beetle (Tribe: Brachini) - Sanket Sawant , Omkar Vichare, Sonesh Kamble and Pranita Ghonge	134
Screwworm Fly - Sushma S. Thakan, Swapna Pawar, Sneha S. Vedak, Vrushali Pushalkar, Sanjay Jadhav, Rahul Ubale, Pratipada Lohar and Amey Pawar	136
Petroleum Fly - Gayatri Oak	138
Potter Wasp - Swapna Pawar, Sushma S. Thakan, Sneha S. Vedak, Vrushali Pushalkar, Sanjay Jadhav, Rahul Ubale, Amey Pawar and Pratipada Lohar	139
Study of some Insects found in Panvel area Ms. Poonam Shinde, Ms. Karishma Mhatre and Mrs. Vijay Savli	140
Aquatic Insects - Ashwini Shirsat	142
Mimicry In Insects - Rufina Rodrigues, Pushya Francis, Kirti Shivsharan, Harshada Adkar and Prachi Sawant.	147
Insects Attracted Towards Light	152
- Sushma S. Thakan and Sonesh A. Kamble Insect Communication - Amol and Dheeraj	154
Range Extension of Humming Bird Moth Macroglossum prometheus prometheus Boisduval, 1875 The first record of the moth in Mumbai region. - Sachin Vijay Chorge	155
Section D - Posters	159

168

Conferences/Workshops/Seminars conducted till October 2007

National Seminars

1. **Creeks, Estuaries and Mangroves Pollution and Conservation** 28th - 30th Nov. 2002, conducted by Zoology Department

2. **Human, Health & Nutrition - A Biotechnological Approach** 12th - 13th December, 2004, conducted by Botany Department

3. **Einstein's Theories & Present Scenario** 17th - 19th November 2005, conducted by Physics Department

4. **Linux Thane 2006**24th - 25th November 2006, conducted by I.T. Department

State level Seminars / Workshops

Laboratory Safety
 30th January 2004, conducted by Chemistry Department

Vedic Mathematics
 5th December 2005, conducted by Physics Department

Statistics for Nonstatisticians
 27th - 29th September 2005, conducted by Statistics Department

4. **Financial Mathematics** 26th August 2006, conducted by Mathematics and Statistics Departments

5. **Refreshing Chemistry for Biologist** 25th Sept. 2006, conducted by Chemistry Department

6. **Contaminants in Food and Beverage** 6th October 2007, conducted by Chemistry Department

Upcoming Conference:

1. **Orchid - Genetic Diversity, Conservation and Commercialization**Date of conference: 4th and 5th December 2009