

**DESHBHAKTA SAMBHAJIRAO GARAD MAHAVIDHYALAYA
MOHOL**

DEPARTMENT OF ZOOLOGY

(Departmental profile Year 2018-19)

Faculty: 02

1) Dr. Kishor Subhash Shinde

(M.Sc.(Zoo),M.Sc. (Seri.), Ph.D)

2) Mr. Vaishali Ramchandra Rupnar

(M.Sc.)

Number of Student:

1) B.Sc. I-113

2) B.Sc.II- 74

3) B.Sc. III- 13

**One day National Seminar on Biodiversity and Its Conservation on Dated
October 16, 2018**

Department of Zoology organised One day National Seminar on 16th October 2018, on Biodiversity and its Conservation. The Chief Patron of this Seminar was Dr. Mrunalini Fadnavis (VC Solapur University), Mr. Pratapsinh Garad (Secretary, Deshbhakta Sambhajirao Garad Mahavidhyalaya, Mohol), Mr. Pravinsinh Garad (Treasurer, Deshbhakta Sambhajirao Garad Mahavidhyalaya, Mohol), Dr. Chandrashekhar Hiware (Ex. Director, Directorate of Sericulture Maharashtra and Head Dept. of Zoology Dr. B. A. M. University, Aurangabad), Dr. Aabasaheb Deshmukh (Prin. Shankarrao Mohite Mahavidhyalaya Akluj), Dr. Ubale V.P (Dean Science Faculty Solapur University), Dr. K. R. Rao (Chairman BOS Solapur University), Mr. Mali S.N (Divisional Forest Officer, Solapur) and Dr. Tikte D.S (Principal D. S. Garad College, Mohol).

For this Seminar the Key note is addressed by **Dr. C.J.Hiware** (Ex. Director, Directorate of Sericulture Maharashtra and Head Dept. of Zoology Dr. B. A. M. University, Aurangabad) and the Speakers are **Dr. Varad Giri** (Herpatologist, Conservationist and Former Curator and Deputy Director BNHS Mumbai), **Dr. Vinayak Dhulap**(Director of School of Earth Sciences Solapur University Solapur), **Dr. Hippargi Rajshekhar**(Walchand College Solapur). For this function 52 research papers were presented as poster, Wild Life Photography Competition was conducted 32 participants were Participated. Nearly 360 Participants were Participated in this seminar.

1. Organized One day National Seminar on Biodiversity and Its Conservation on Dated October 16, 2018



Inauguration by Dr. Mrunalini Fadnavis Madam



Theme and Purpose of seminar is concluded by Convener Dr. Shinde Kishor



Lecture delivered by Dr. Varad Giri sir (Senior Scientist BNHS Mumbai)



Hands behind Grand Success of National Seminar

Haemoglobin (Hb) Percentage in Blood, Awareness Camp

Department of Zoology Organises Haemoglobin Camp on 7th July 2018. For this Function, Team of Dr. Hedgewar Blood bank were aware about the level of Hb in blood, function of Hb etc.



Haemoglobin (Hb) Percentage in Blood, Awareness Program

Blood Donation Camp organized every Year

We organise Blood donation Camp on the occasion of Birthday, Mr. Pratapsinh Garad, (Secretary, Deshbhakta Sambhajirao Garad Mahavidhyalaya, Mohol). This year 80 people were participated for donate blood.



Inauguration of blood donation camp through Treasurer shri. Pravinsinh Garad, Principal Dr. Tikte sir, Chavan sir, Deshmukh Madam

College Level Avishkar Festival Organized

Department of zoology organises College level Avishkar on dated 12 September 2018. 20 students were participated in this festival from B.Sc. I, II and III year students. Students presented posters and models; this festival is inaugurated by Mr. Pratapsinh Garad, Principal Dr. Tikte sir, Avishkar co-Cordinator Prof. Dr. Mulani Sir, examiner Dr. Deshmukh sir (BPC Angar). In this festival 6 students were selected for University level Avishkar festival. In University level Avishkar festival B.Sc. III year Zoology student Bhosale Vrushali was selected for State level festival was held at Gadchiroli University.



College Level Avishkar Festival Organized



Evaluation of Avishkar Festival through Expert Dr. Deshmukh sir



Student Vrushali Bhosale selected for State level Avishkar Festival



Selected and Participated students with Senior Scientist Padmshree Dr.



Selected Model (Bio-Toilet) for State Level Avishkar program

Birth Anniversary of Father of Genetics Johan Gregor Mendel Celebration

On 20th July 2018, Department of Zoology Celebrated Birth Anniversary of **Gregor Johann Mendel** who born on 20th July 1822 – dead on 6th January 1884) was a scientist, Augustinian friar and abbot of St. Thomas' Abbey in Brno, Margraviate of Moravia. Mendel was born in a German-speaking family in the Silesian part of the Austrian Empire (today's Czech Republic) and gained posthumous recognition as the founder of the modern science of genetics. Though farmers had known for millennia that crossbreeding of animals and plants could favor certain desirable traits, Mendel's pea plant experiments conducted between 1856 and 1863 established many of the rules of heredity, now referred to as the laws of Mendelian inheritance.



Birth Anniversary of Father of Genetics Johan Gregor Mendel Celebration

Chief Guest of this function was Mr. Karande Vaibhav, Head BCS department DS Garad College Mohol Dr. Kolhal Sir, Mr. Mane Sir, Prakshale sir, Waghmode sir B.Sc. III year students.



Workshop-cum-Seminar attended at Walchand College Solapur



Teaching through demonstration Method



Department involved in National Science Day Celebration



Practical Examiner at KVK Amajogai, Beed



Celebrated Traditional Day



Participated in National Seminar at Kurdwadi



Guest Lecture delivered by Dr. Waradhe Sir
Study Toure



studyToure



Shri Vithalrao Shinde Sugar Factory Madha Solapur District



Visited to Prawn Harvesting unit



Visited Fish Market near Ujjani Dam



Social Activity Food and Water for Birds in College Campus

“Effect of various animal Wastes (Dung) on Growth and Reproduction of Eisenia foetida during Vermicomposting”

Aishwarya Pakekari¹ and Dr. Kishor Shinde²

¹Student B.Sc. III Zoology.,² Asst. Prof. & Head Dept. of Zoology D.S Garad College Mohol

Earthworms digest organic matter; they excrete a nutrient-rich waste product called castings. As food passes through their digestive tract, worms secrete chemicals that break down organic matter into sustainable nutrition. These chemicals, excreted with their castings, comprise vermicompost, which improves soil texture, structure and aeration. From the Latin “vermi” which means worm, vermicompost offers nutrients that are immediately available to plants. It can be applied as mulch, incorporated as a component in potting mixes or brewed in water as a compost tea liquid fertilizer.

Simply speaking, vermicompost is earthworm excrement, called castings, which can improve biological, chemical, and physical properties of the soil. The chemical secretions in the earthworm’s digestive tract help break down soil and organic

matter, so the castings contain more nutrients that are immediately available to plants.

Bio-Toilet Future Need

¹Vrushali Bhosale,¹HandeGeetanjali and Dr. Kishor Shinde²

¹Student B. Sc. III Zoology.² Asst. Prof.& Head Dept. ofZoology D.S Garad College Mohol

A Bio-Toilet is a next generation eco-friendly waste management solution, which reduces solid human waste to biogas and pure water, with the help of a bacterial inoculum. The disposal of human waste is a very big problem in high altitude areas. The corrosion caused by the faecal matter can be minimized by using **bio-toilet**. By using **bio-toilet** we can purify the solid waste into the pure water by means of chlorination tank. Toilet waste creates serious problems worldwide like stink and spreading of diseases.

Preparation of herbal Tea from mulberry leaves

¹Ketaki Shinde, ¹Metkari Tejaswi and²Kishor Shinde

¹Student B.Sc. III Zoology D.S.Garad College Mohol

Introduction

Sericulture is agro based industry with its industrial super structure and low gestation period. It has rural base with equal opportunity to all age, gender, education and economic status human society. This industry is environmental eco-friendly and does not interfere with any agricultural activity; rather it provides supports to agriculture, dairy, fisheries, livestock culture, organic farming in rural area. This is an attempt to provide information on sericulture industry, silk production, history of silk filament and all related components like silkworm rearing, host plant culture, extraction of silk and management of

diseases to ensure quality production of silk. The global mulberry raw silk production largely depends on superior silkworm hybrids, improved rearing technology, nutritious mulberry leaf (feed to silkworm) and disease free environment for rearing and improved cocoon reeling system for higher quality raw silk production. Cocoon quality contributes to a great extent in cocoon productivity and raw silk production. Silkworm *Bombyx mori* is **Monophagus insect** which feeds only on mulberry leaves.

Effect of Plant growth hormones on mulberry plant

¹Nagane Pratiksha, ¹Kshirsagar Soniya, *Dr. Kishor Shinde

Department of Zoology D.S. Garad College Mohol

Plant growth regulators are organic compounds synthesized in specified plant parts in small quantity and are transported to the place of requirement leading to a change in physiological responses. **Plant growth regulators can be classified into growth promoters and growth retardants.**

Plant growth regulators are Auxins, gibberellin, cytokinin and growth retardants are Abscisic acid, IAA, IBA and ethylene. The plant growth regulators play a vital role in mulberry leaf yield which leads to increase the cocoon yield. The commercially available plant growth regulators are auxins, gibberellins, cytokinins, abscisic acid and ethylene. The newly included plant growth hormone as promoter is Brassinosteroid. Vermicompost and bio-fertilizers like Plant

growth-promoting rhizobacteria (PGPR) are also having plant growth-promoting activity to increase the leaf yield and quality and also inducing the systemic resistance against the pathogen. Mulberry is the perennial crop and it is the sole food crop for silkworm, *Bombyx mori* L. Thus, the usage of plant growth regulators is also somewhat different. Under favorable conditions, plant growth promoters are increasing the sprouting of plants and enhance the leaf yield. Under unfavorable conditions, plant growth retardants are used to reduce the yield losses by reducing the evaporation and transpiration.