

Programme:

Trip to A.P. State Sericulture Research and Development Institute(APSSRDI),Kirikera

Nature of the Programme:

- Exposure to Research labs
- Research discoveries
- Research Methodologies

No. of Participants:

- 35

In charge Lecturer: Dr.S.Smitha

Objectives:

- Helps in understanding the various geographical concepts, elements and process through direct personal experience
- Helps in understanding the correlation between human and environment
- Helps in enhancing learning abilities and acquire knowledge, analytical skills

OUT PUT:

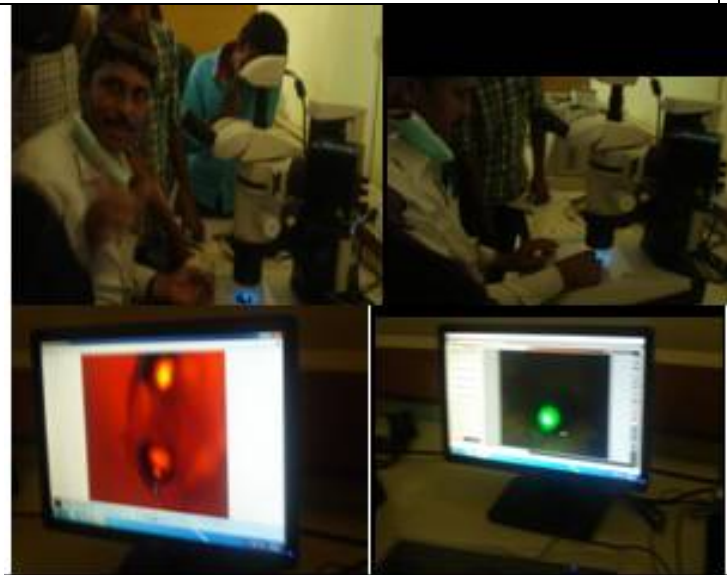
- Expose students to new experiences and can increase interest and engagement in Science
- Positive attitude toward a topic.

Department of Sericulture- Field trip

A.P.State Sericulture Research and Development Centre



Bio technology lab and Instrumentation



Pathology experiments and Transgenic evolution



Students interacting with farmers at Cocoon market and recording of observations

Report:

On 17.11.2021 35 students with 2 lecturers went for a field trip to APPSSRDI with a aim to visit the research Institute to observe and learn the method of research and new discoveries from APSSRDI, Kirikera, Hindupur.

Andhra Pradesh State Sericulture Research and Development Institute (APSSRDI) was established during 1996 under the World Bank assisted National Sericulture Project. The Institute is located 8 Km away from Hindupur of Anantapur district on Hindupur ,Bangalore highway.

APSSRDI occupies an area of 52 acres with 4710 Sq. m of operational buildings with 07 silkworm rearing houses surrounded and decorated by trees and flowers providing greenery to the Institute. This campus is beautiful and peaceful providing serene environment conducive to carry out the scientific research.

We arrived at 11 am there. We were guided by the Scientist there Dr.Seshagiri, Scientist(Alumni of our college) and explained in detail the activities, the research projects from central funds, exposed to all laboratories and to Instrumentation. Students could experience the Technology development in Science.

OBSERVATIONS: at APPSSRDI in Research Activities

Maintenance of silkworm genetic stocks :

A total of 252 silkworm genetic stocks, 108 bivoltine (including 19 BmDNV resistant and 09 BmNPV tolerant), 75 multivoltine (including 17 BmDNV resistant and 09 BmNPV tolerant), 42 improved and 27 bivoltine parental/productive stocks, were maintained conforming to their original characteristics.

Lines	Bivoltine	Multivoltine	Improved	Improved / Productive	Total
Bivoltine Breeding	66	--	15	27	108
Chinese	14	--	27	--	41
Multivoltine Breeding	--	49	--	--	49
Disease Resistance Breeding	28	26	--	--	54
Total	108	75	42	27	252

APSSRDI- DIVISIONS

The following divisions have been maintained in the campus:

Host Plant Genomics

The focus is on molecular characterization and identification of various mulberry species and other host plants, development of microsatellites for mulberry, characterization of drought resistant genes etc.



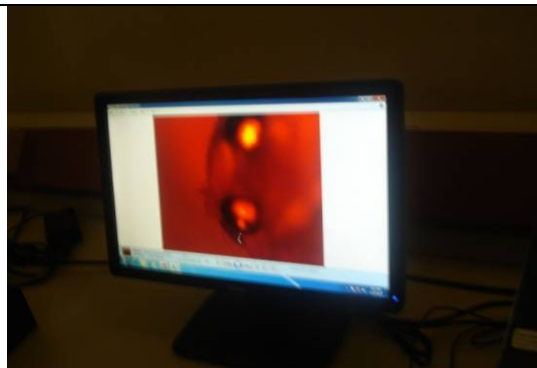
Silkworm Genomics

The focus is on identification of silkworm genes and their functions associated with resistance to viral and fungal pathogens, development of NPV tolerant silkworm lines based on marker assisted selection and RNAi technique, regulation of yolk proteins, characterization of RNA dependent RNA polymerase gene, characterization of oviposition stimulating factors in silkworms etc.



Molecular Pathology

Focus is on identification and molecular characterization of various pathogens like virus, bacteria, microsporidia etc. infecting silkworms and development of diagnostic tools for their easy and early detection.



Developing of disease resistant breeds in Pathology Lab

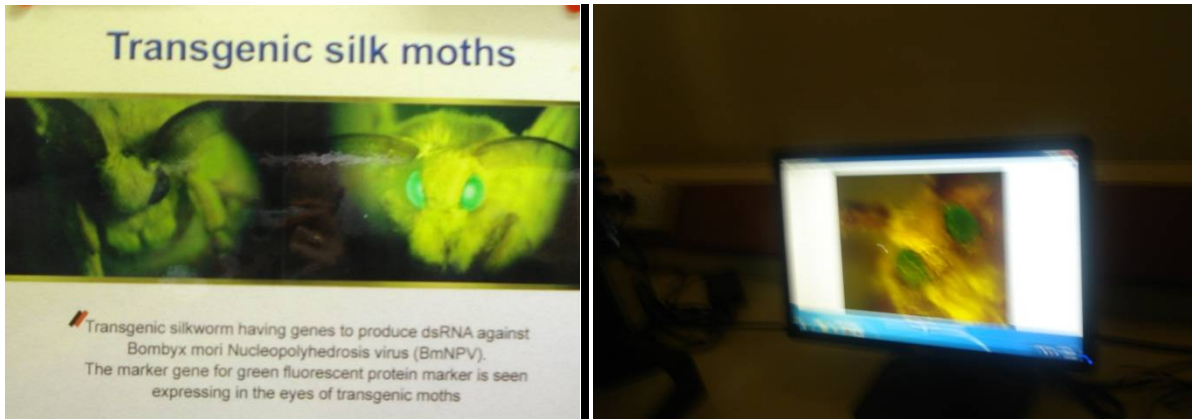
Proteomics

The focus is on identification of immune response proteins and their interactions, and silkworm transcriptome analysis under stress from pests like uzi fly etc.

Silk Biomaterials

Programmes on Silk Biomaterial research are being initiated through formulation of collaborative projects.

Transgenic Silk Worms and rearing:



APPSSRDI in collaboration with CDFD:

The Andhra Pradesh State Sericulture Research and Development Institute (APSSRDI) with the technical collaboration of the Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, has developed transgenic silkworms, which is first of its kind in India. Horsley Hills in Madanapalle division of Chittoor district is being identified as the rearing station for the silkworms during summer season.

Highlight of the APSSRDI activities here included upgradation of the existing museum, creating of new buildings and infrastructure for the Sericulture Department. "The museum will host an integrated approach to sericulture, displaying various aspects from soil to silk. The museum will also be a big attraction to the tourists coming here," Dr Raju said. Joint Director (Sericulture), Dr B.J. Sharma, and field level officers were also present during the Visit.

Research Projects

Recently a Project entitled "Silkworm breeding for productivity and quality improvement of bivoltine silk" is taken up with the objective of Bivoltine silkmooths get acclimatized to Tropical climate.

Mulberry Cultivation in Campus-Tree Plantation:



Mulberry can be grown under different climatic and Wide range of soil conditions. Higher yields of quality leaf which is a pre-requisite for the successful cocoon harvest is possible by adopting the following package of practices.

Soil and climate	Land preparation
Spacing	Variety and preparation of cuttings
Planting	Maintenance of garden
Intercultural operations	Manure and fertilizer schedule
Leaf Harvest	

Conclusion:

- Thus the Research institute is playing a great role in the development of transgenic silkworms resistant against NPV.
- Best efforts are being taken to improve and stabilize the productive Bivoltine strains

Dr.S.Smitha

STSN GOVT DEGREE COLLEGE KADIRI
DEPARTMENT OF MATHEMATICS

Nature of the programme: Group Discussion
Class: II BSc,MPCS
No of participants: 25
Incharge of the activity: P.SIVAPRASAD
Output : Helps in improving Analytical skills

Topic : Speed maths VS Vedic maths

Brief Report:

The Department of Mathematics of STSN GDC, Kadiri organized a group discussion on Speed maths VS Vedic maths in the college premises with the objective of providing knowledge to the young minds on solving the airthimetic problems in competitive examinations that they are going to face un future.



ONLINE QUIZ PROGRAMME

Department of Botany

Date of Quiz 20.11.2021

Programme : Online Quiz Programme – (Cell Biology)

Class : III. B Sc (BZC)


No of Students participants : 14

Incharge Lecturer : A.Narayana swamy

Output : Student can learn cell biology concepts

Student able to recognize the cell organells

Student can compare difference between cell organells.



Botany Quiz 20.11.2021 (Cell Biology)

విద్యార్థులారా !
మీ మైయిల్ ఐడి ద్వారా లాగిన్ అయ్యి సరియైన జవాబులు ఎన్నుకొండి.
అన్ని ప్రశ్నలకు సమాధానాలు ఎన్నుకొన్న తర్వాత submit చేయండి. మీ మార్కులు తెలుసుకోండి.

A.Narayana swamy,
Lecturer In Botany,
STSN GDC, KADIRI,
Anantapuramu Dist.

Quiz URL: <https://forms.gle/HuczU4Kt7TUFoEcz7>

List of Students Participated:

20/11/2021 13:50:39	sailukky1122@gmail.com	10 / 25	M Naveen sai Kumar	S T S N GDC kadiri	Bzc
20/11/2021 15:28:59	shanthipalle2@gmail.com	7 / 25	Amrutha	Stsn degree College	3rd. Bzc
20/11/2021 15:42:06	reddyseenu2001@gmail.com	11 / 25	Reddyseenu	STSN GOVT Degree College	3rd Bzc
20/11/2021 15:48:18	bravitejanaik35@gmail.com	9 / 25	B.ravi teja naik	S T.S.N.govt.college kadiri	3year
20/11/2021 15:51:54	shaikrubiya1010@gmail.com	10 / 25	Shaik rubiya	STSN	Final year
20/11/2021 16:06:19	ganesh080402@gmail.com	14 / 25	Beedanapalli	Beedanapalli	Final year
20/11/2021 16:06:42	bharithabai@gmail.com	17 / 25	Haritha bai	Stsn gdc	3rd bzc
20/11/2021 16:28:29	cnanjindunanjindu@gmail.com	6 / 25	Lavanya	Stsn deggree college	3rd Bzc
20/11/2021 16:37:03	pavanikuppireddy66@gmail.com	8 / 25	K pavani	Psgdc penukonda	3rd bzc
20/11/2021 17:21:02	bboyaprathap28@gmail.com	4 / 25	B prathap	Psgdc	3rd bzc
20/11/2021 17:31:28	thulasisigilipalli@gmail.com	10 / 25	S. Thulasi	Psgdc	3rdbzc
21/11/2021 09:31:50	naikupendra333@gmail.com	13 / 25	E.Upendra naik	Psgdc penukonda	3rd year Bzc
21/11/2021 14:46:59	anjia4701@gmail.com	12 / 25	D B Anjineyulu	PSGDCollge	3rd Bsc
21/11/2021 20:26:34	gangaram143zzz@gmail.com	8 / 25	S.GANGADH AR	P.s.g.d	3rd b.a

STSN Govt Degree College, KADIRI.
Sri Sathya Sai (Dist)
Department of Chemistry.

Date: 21.01.2022

Programme	: Student seminars
Nature of the Programme	: Student Exposure, Internet Knowledge
Class	: III. B Sc (BZC)
No of Students participants	: 35
Incharge Lecturer	: P.Guruprathap Reddy
Output	: Helps in improving <ul style="list-style-type: none">• Communication• Analytical and• Teaching skills.

Brief Report

Almost all 35 students delivered a seminar in good manner .It is observed 5 students are having very low voice, less eye contact,3 students are having stage fear ,given advice for those students need to improve in giving seminar in effective manner.

Dept. of Chemistry Student Seminars
Students Explore their Knowledge by Seminars



STSN GOVT DEGREE COLLEGE, KADIRI
SRI SATHYA SAI (Dist)
Department of Physics

Date:18.02.2022

Programme : Circuit boards preparation and applicability
Class : II & III B.Sc (MPCs)
No.of Students participated : 15
In charge Lecturer : D.Subramanyam
Output : Students prepared Circuit boards

Brief report

Circuit Board Manufacturing Process

1. Designing the CB.
2. Design Review and Engineering Questions.
3. Printing the CB Design.
4. Printing the Copper for the Interior Layer.
5. Layer Alignment.



