(Deemed-to-be University)

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ASA BIMONTHLY E-NEWSLETTER

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"There are two types of education: education for a living and education for life. When we study in college, striving to become a doctor, a lawyer, or an engineer, that is education for a living. But education for life requires an understanding of the essential principles of spirituality; it is about gaining a deeper understanding of the world, our minds, our emotions, and ourselves."

Amma, Sri Mata Amritanandamayi Chancellor, Amrita Vishwa Vidyapeetham

I. STUDENTS ENDEAVORS

HAPPY HARVESTING BEGINS WITH CAREFUL SOWING

The 2019 batch students who have done vegetable cultivation at hometown as part of their course work (19HOR201- Production Technology for Vegetables and Spices) are now happy with their produce.



Mr. Ashok Balaji E, II year student harvesting Okra



Ms. Vaishnavi Warrier,
II year student harvesting Okra



Mr. Baskar S, II year student harvesting Tomato

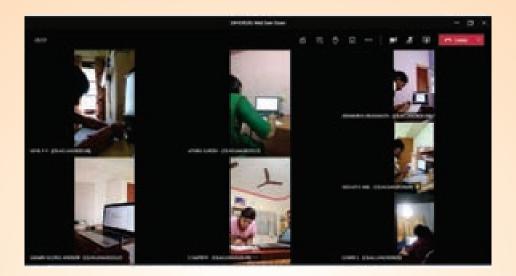


Ms. Nanda Vinod,
II year student harvesting Tomato

II. COLLEGE ACTIVITIES

1. MID SEMESTER EXAMINATION 2021

Mid Semester Examination was conducted for the first semester from 30.12.2020 to 11.01.2021 through Microsoft Teams App from 9.00 a.m. to 10.00 a.m. The question papers were scrutinized by the team of faculty under the headship of the Principal. The answer sheets are scanned and mailed to the faculty concerned for evaluation. The evaluated marks were approved by the online Class Committee Meeting held on 28.01.2021. Later, the marks were circulated among students for further clarification.



2. HEALTH AND SAFETY AWARENESS PROGRAM

Health is a blessing in one's life. Good health can make everyone to climb mountains and achieve dreams. Safety is the state of being "safe", the condition of being protected from harm or other non-desirable outcomes. A safe and healthy workplace not only protects workers from injury and illness, but also reduces absenteeism and increases productivity and quality, and raises employee morale. In this way to recognize these manifesto, Amrita School of Agricultural Sciences has organized a Health and Safety Awareness Program on 11.01.2021 at ASA Campus.

3. CONDUCT OF ONLINE END SEMESTER THEORY EXAMINATION

The online End Semester Theory Examination for the third semester was conducted from 20th January to 3rd February 2021. The answer sheets were evaluated by the course teachers and approved by the online Class Committee Meeting which was held on 26th February 2021.



ONLINE REGISTRATION OF IV SEMESTER

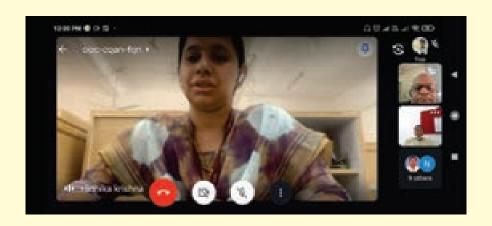
The online registration of the IV semester by the students of the 2019 batch was done on 17th February 2021 through AUMS. One hundred and nineteen students were registered for nine core courses and one elective course. The commencement of online classes was from the 18th of February 2021.

4. BOARD OF STUDIES MEETING



Quality is Pride of Workmanship

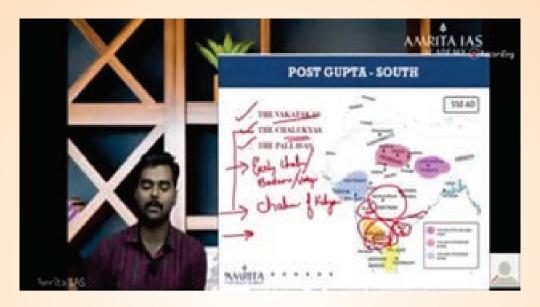
The Board of Studies (BoS) is the basic constituent of the academic system of an Institute. Its functions will include framing the content of various courses, reviewing and updating the content from time to time, introducing new courses of study etc., The Board shall ensure effective discharge of the teaching objectives of the Institution and is ultimately responsible for the content, structure, delivery, and quality assurance. To ensure these affirmations, Amrita School of Agricultural Sciences conducted the Board of Studies Meeting on 25.02.2021. Our distinguished Head Research and PGP Chair and Chairman BoS, Dr. Sudheesh Manalil, welcomed the gathering and gave a brief description of the proceedings. Report on performance appraisal was given by our esteemed Principal, Dr. P. Sureshkumar. Eminent Principal Scientist Dr. C.K. Narayana, IIHR, Bangalore, shared noteworthy guidelines on quality assurance and accreditation procedures, new developments, and milestones in the accreditation process. Dr. P. Saravanane, Associate Professor, Agricultural College & Research Institute, Karaikal, gave valuable information on the road map to accreditation. Academic Personnel were received valuable directions for their queries. Ultimately, the Board of Studies meeting ended with a vote of thanks by Dr. A.M. Radhika, Assistant Professor, ASA.



5. AMRITA UPSC- PCM PROGRAM

Amrita School of Agricultural Sciences, in association with Amrita IAS Academy, is immeasurably cheerful to ignite the aspirants for their interest in UPSC General Studies - Prelims cum Mains (PCM) Program. This program is well designed and offered absolutely for Amrita University students, those who would like to undertake Civil Service exam preparation along with their academics to augment their civil service impulse.

ASA Civil Service aspirants are provided with the most efficient and wide range of academic nourishment to get ready for the UPSC Civil Service Examination. Since UPSC has been persistently revising and evolving the pattern of the examination, the academic processes of Amrita are fully aligned with the shifting needs. It provides comprehensive tutoring for all the 3 phases of the UPSC Exam: Prelims, Mains and Personality Test. ASA Civil Service rising stars are geared up to face the challenges connected with all the three stages with the steersmanship of Amrita IAS Academy.



Quest for Supremacy

6. GEL DOCUMENTATION SYSTEM FACILITY AT CIL

Central Instrumentation lab is with the centralized facility, housing the high end equipment. This lab is already furnished with apparatuses such as Shaker cum incubator, Laminar air flow chamber, PCR (Mini AMP plus thermocycler; Make: Thermofisher), Hot air oven, Quick spin mini centrifuge, Magnetic stirrer with hot plate, leaf area meter, Gel electrophoresis unit (Make: Genei) and vortex mixer.



Gel documentation system installing by Dr. Reena S, Assistant Professor (Agricultural Biotechnology)

As a part of laboratory upgradation, the lab is embellished with the new equipment such as Gel documentation system (Model: Gel Doc XR+ Imager; Make: Biorad) and Digital electronic weighing balance (Model: 2200H; Make: Shimadzu). The Gel Documentation system model is an entirely automated gel imaging and documentation system. The instrument is used to image, document and analyse the nucleic acids, protein gels, blots and microarray. This equipment has a wide utility in molecular biology laboratory.

III. FARM ACTIVITIES

1. CASSAVA MINI-SETTS TECHNIQUE

Two node cuttings from mature, disease-free stems of cassava were used as the planting material for the rapid multiplication. Two node cuttings are planted end to end horizontally, about 5 cm deep, with the buds facing either side on a raised nursery bed, in rows at spacing of 10 cm. The nursery beds are regularly watered and observed for bud sprouts.





2. DRAGON FRUIT PLANTING – ARBOR SYSTEM OF TRAINING

The cuttings of dragon fruit plants were planted in Block C of our farm and concrete poles were erected as a support system for the crop to train on.



3. SPRINKLER IRRIGATION

A sprinkler irrigation system was fixed for horticultural crops and nursery area in Block C and D, respectively.



4. RED BANANA PLANTING UNDER DRIP IRRIGATION

Red banana suckers (90 numbers) were planted, and a drip irrigation system was laid out for suckers in Block D of our farm.





5. MUSHROOM PRODUCTION

Milky and Oyster mushroom production was initiated in the farm lab associated with the Department of Plant Pathology.







Commercial cultivation of Oyster Mushroom on Agro residues

6. EFFECTIVE MICROORGANISM (EM) SOLUTION PREPARATION AS PLANT GROWTH PROMOTER

EM solution was prepared by adding 10 ml of EM concentrate, 40 ml of Molasses, and 950 ml of water and kept closed for one week; after that, it is sprayed to the plants in the ratio of 1L in 15 L of water as a plant growth promoter.







7. TOMATO TWINING

The semi-determinate tomato crops raised in Block B of our farm were trained on strings for easy intercultural operations and quality production.

8. RAIN WATER HARVESTING STRUCTURE

A rain water harvesting structure is evacuated to store the rain water from Agriculture block and hostel buildings in Block B of our farm with the dimensions of 14m length, 14m width, and 1.6m depth.



IV. RESEARCH PROGRESS

1. HIVING AN INDIAN BEE COLONY

A commercial bee-keeping unit was visited by Dr. Sudheesh Manalil, Head Research and PGP Chair, Dr. J. Aravind, Assistant Professor (Agricultural Entomology), and Mr. Nandagopal from Ettimadai campus for the Purchase of Indian honeybee hive boxes from Pudhuparriyaram, Palakkad, Kerala. The purchased bee hives were placed in ASA campus (4 nos.) and Ettimadai campus (11 nos.) and monitored regularly. Super frame cleaning was done at seven days intervals, and also sugar syrup feed is supplied at four days intervals. Malathion dust is sprayed at the bottom of the stand to protect bees from ants, termites and wasps. Lessar Wax moth (*Achroia grisella*) infestation was identified on our farm and cleaned regularly. The entire Honey bee rearing practices were recorded from Pudhuparriyaram, Palakkad, Kerala and the videos kept for academic purpose.



Visiting Royal Honey bee keeping Training centre at Pudhuparriyaram, Palakkad, Kerala on 20.01.2021 by Dr. Sudheesh Manalil, Dr. Aravind and Mr. Nandagopalalong with Ettimadai team

2. TRADITIONAL VARIETY SOWING (RICE)

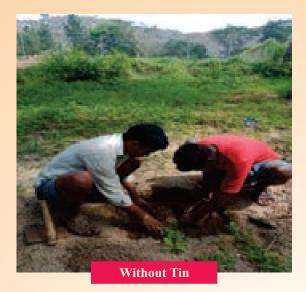
In Block A (inside the polyhouse), 19 traditional varieties of the rice crop were sown in the pot, namely Veliyan, Chenellu, Koduveliyan, VeliyanBala, Chomala, Chenthadi, Pournami, Mullankayam, Adukkan, Kalladiarayan, Njavara, Thondi, APO, Jeerakasala, Gandhakasala, CO51, IR20, N22, CBMAS14110 for testing their germination percentage and growth.





3. PEPPER ROOT DYNAMICS STUDY

Pepper planting is done in coconut field (Block C) to evaluate the root dynamics of pepper with and without a covering structure (Tin is used as a covering structure).





4. GARLIC VERNALIZATION STUDY

Two varieties of Garlic were planted to evaluate the growth under vernalized and non-vernalized conditions.



5. PARTHENIUM IMAGE PROCESSING STUDY

High-resolution images of the Parthenium plants were collected on a weekly basis at a constant view angle to observe the growth habits of Parthenium using an image processing tool.





6. GRAFTING (BRINJAL AND TOMATO)

Grafting has been done by means of brinjal as rootstock and tomato as scion material to test the regeneration and quality of fruit.





7. COIR PITH STUDY

Coir pith study is initiated to standardize the coir pith usage quantity by means of moisture-holding capacity of coir pith in different layers.





8. MULCHING STUDY

The mulching study is started with the usage of different environment friendly mulching materials. Treatments are fixed as stabilized and non-stabilized with lime and water repellent solution to evaluate the growth and quality of the okra crop.



V. FACULTY - STUDENT SPOTLIGHT

- 1. **Ms.** Anagha A and **Ms.** Anagha Krishna K, II year students, ASA, have actively participated in the Online National Training on "Prospects of Oyster and Milky mushroom cultivation for young entrepreneurs" which is organized by the College of Horticulture and Forestry, Central Agricultural University (Imphal), Pasighat, Arunachal Pradesh, under Institutional Development Plan of National Agricultural Higher Education Project during 8th January 2021.
- 2. **Dr. Parathasarathy S**, Assistant Professor (Plant Pathology), ASA, has participated and presented a poster entitled "Evaluating Isotonic Aqueous Formulation of Chaetomiumglobosum Kunze for the Management of Potato Black Scurf Caused By Rhizoctoniasolani In India" in the Annual International Conference, which is organized by The Association of Microbiologist in India and Indian Network for Soil contamination Research during 3rd to 5th February 2021.
- 3. Dr. Parathasarathy S, Assistant Professor (Plant Pathology), ASA, has participated in BIOCREST 2021.



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