



AMRITA
VISHWA VIDYAPEETHAM
(Deemed-to-be University)

**School of
Agricultural Sciences**

J P Nagar, Arasampalayam, Coimbatore, Tamil Nadu – 642 109.

“

Whenever you feel inspired and have the time, sit in solitude and try to visualize everything as pure light and bliss consciousness.

”

Amma, Sri Mata Amritanandamayi Devi

Chancellor, Amrita Vishwa Vidyapeetham

**ASA BIMONTHLY
E-NEWSLETTER**

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1. Rural Agricultural Work Experience (RAWE) Programme

RAWE Orientation

With Amma's blessings, Student READY Rural Agricultural Work Experience (RAWE) and Agro Industrial Attachment (AIA) orientation programme was inaugurated on 7 December 2022 for 2019 batch students of B.Sc. (Agriculture). This programme was started with the prayer song by Ms. Amrutha Ramesh and Ms. Ambili R Varier (2019 Batch) and followed by lighting of the lamp by the Principal, Dr. Sudheesh Manalil, course teachers, and student representatives. Dr. Sivaraj P, RAWE Coordinator, delivered the inaugural address and gave an overview of the Rural Agricultural Work Experience (RAWE) programme. Dr. Sudheesh Manalil, Principal and Head Research, delivered the introductory remarks to the students and enlightened the insights of RAWE and Agro Industrial Attachment (AIA), and briefly explained the crop-specific survey model. Later, Dr. E. Sathyapriya, Class Committee Chairperson (VII Semester), gave a briefing on RAWE and its various activities. Students of B.Sc. (Agriculture) 2019 batch successfully organized this programme.



RAWE Students Activities

As part of the RAWE programme, after the on-campus training, the students were officially attached to their respective Village Panchayats in Kinathukdavu, Pollachi (North), and Madukkarai regions viz., Arasampalayam, Myleripalayam, Panapatti, Vadasithur, Nallattipalayam, Kulathupalayam, Sirukalandai, Solavampalayam, Pottayandipurambu and Sokkanaur on 19 December 2022 by the course teachers, Dr. Sudheesh Manalil, Dr. Sivaraj P, and Dr. E. Sathyapriya. The student group was introduced to the village president and the progressive farmers of the respective village panchayats during the attachment. The students then visited the village regularly and met the village president, the village administrative officer, the school headmasters, and other input agencies as well as explored the resources. Students collected the progressive farmers list from the village administrative office and the State Department of Agriculture office and visited them regularly. Students maintained a good rapport with the progressive farmers and collected information about the farm and their farming experience.

The student groups celebrated National Farmers Day on 23 December 2022 with the farmers and school children at their panchayat level. As part of the programme, students conducted events for farmers such as an awareness campaign on organic farming, Participatory Rural Appraisal (PRA) exercise, Pest and disease scouting, e-extension (Uzhavan app), etc., and the programme was successfully completed with seed and seedling distribution to the participants. Also, students created awareness among the Government school children by engaging them in planting and maintaining the saplings at their schools.

Based on the PRA (Participatory Rural Appraisal) exercise, identified the farm and village-level issues and planned to conduct a training programme from the first week of January 2023. They involved actively in various agricultural and rural development activities with the farmer's participation.



STUDENT READY - RAWE PROGRAMME

ARASAMPALAYAM PANCHAYAT GROUP STUDENTS' ACTIVITIES



STUDENT READY - RAWE PROGRAMME

MYLERIPALAYAM PANCHAYAT GROUP STUDENTS' ACTIVITIES



STUDENT READY - RAWE PROGRAMME

PANAPATTI PANCHAYAT GROUP STUDENTS' ACTIVITIES



STUDENT READY - RAWE PROGRAMME

SOLAVAMPALAYAM PANCHAYAT GROUP STUDENTS' ACTIVITIES



STUDENT READY - RAWE PROGRAMME

POTTAIANDIPURAMBU PANCHAYAT GROUP STUDENTS' ACTIVITIES



STUDENT READY - RAWE PROGRAMME

SOKKANUR PANCHAYAT GROUP STUDENTS' ACTIVITIES



STUDENT READY - RAWE PROGRAMME

VADASITHUR PANCHAYAT GROUP STUDENTS' ACTIVITIES



STUDENT READY - RAWE PROGRAMME

NALLATIPALAYAM PANCHAYAT GROUP STUDENTS' ACTIVITIES



STUDENT READY - RAWE PROGRAMME

KULATHUPALAYAM PANCHAYAT GROUP STUDENTS' ACTIVITIES



STUDENT READY - RAWE PROGRAMME

SIRUKALANDAI PANCHAYAT GROUP STUDENTS' ACTIVITIES



2. Micropropagation Technologies

The students of 2020 batch cultured carnation, Turmeric and bamboo through tissue culture as part of the Elective course GPB214 Micropropagation Technologies handled by Dr. Reena. S. A variety of horticultural and field crops were raised at the college for the purpose of collecting explants. The shoot bud of carnation plant was used to initiate culture and after shoot development, they were sub cultured and multiplied. Upon rooting, the plants were transferred to pro-trays for hardening. Shoot bud of Bamboo and Rhizome bud of turmeric, rice seed and embryo were used to initiate the culture. Successful shooting was observed in many of these cultures.



3. Exposure Visit to Tissue Culture Unit

As part of the elective course GPB214 Micropropagation Technologies handled by Dr. Reena. S, students were taken to tissue culture units at SB Agro Biotech, Coimbatore and Central Potato Research Institute, Ooty on 16 and 17 November 2022. The exposure trip helped the students to understand the setup of commercial tissue culture unit, sterilization techniques, culturing procedure for different crops such as Potato, Banana and other ornamental plants, techniques to maintain the cultures contamination free and hardening of regenerated plants.



1. Tree Planting Programme at Vadasithur Village Panchayat and GHSS School



First-year students (2022 batch) and the AYUDH team were inspired by the 69th birthday speech of Chancellor Amma Mata Amirthanandamayi Devi and created awareness on tree planting and planted trees at Vadasithur village with the theme of “EACH ONE PLANT ONE” on 2 December 2022. The village panchayat president, ward members, locals, and ASA students (2022 batch) participated and planted numerous saplings. The Principal, Dr. Sudheesh Manalil, while presiding the meeting, along with students, took a pledge to safeguard nature. The Vadasithur Government Higher Secondary School organized the events for the students. The Principal, Dr. Sudheesh Manalil, in his key note address, stressed the importance of climate change and tree planting. The special address was delivered to school students by Dr. Sivaraj P,



Assistant Professor (Agricultural Extension), about the B.Sc. (Agriculture) programme at Amrita School of Agricultural Sciences and the opportunities. Later, students received saplings and seed balls as part of the celebration. AYUDH Coordinator Dr. K. Sivasabari and Physical Education Director Mr. V. Karthik Raja organized the events in a great manner.

2. A Seminar on Soil Less Cultivation and Soil Fertility Management Practices

On World Soil Day (5 December 2022), the webinar committee of ASA organized a seminar on Soil less cultivation and soil fertility management practices. Dr. Dhivyapriya D, Assistant Professor, Webinar Committee Coordinator, ASA, welcomed the gathering. The webinar session was officially inaugurated by Dr. Sudheesh Manalil, Principal, Head Research & PGP chair, ASA. Dr. Iniyakumar M, Assistant Professor, Webinar Committee Coordinator, invited the speaker Dr. D. Kalaivannan, Senior Scientist (Soil Science) IIHR, to deliver the seminar for the benefit of the students. Dr. Kalaivannan highlighted the importance of soil less cultivation of vegetables as it is one of the new methods of cultivation for the urban and peri-urban people. He also mentioned about fermented coco peat (ARKA microbial consortia) as a substrate for soil less cultivation. He also emphasized the advantages of coco peat as a pest-free, less soil-borne pathogen, and lack of weed seeds in the medium.

The pH, EC, and water retention capacity of the coco peat make it a suitable candidate for the production of vegetables on rooftops, terraces, and other urban areas of interest, and he highlighted the importance of cocoponics cultivation compared to hydroponics, aeroponics, and aquaponics in terms of production of a wide variety of crops, lesser cost and labor requirement, and less space requirement. Further, he explained the vegetables with higher and more efficient yield by adopting soil less cultivation are *Abelmoschus esculentus* (Brinjal), *Capsicum annum* (Chilli), *Brassica oleracea* (Red cabbage), *Cucurbita pepo* (Zucchini). The cost of production through soil less cultivation for some vegetables was lower than the soil-based cultivation, and for Zucchini, the B:C ratio was more than 1.



In the afternoon, there was a second session on controlling soil health, during which the scientist addressed several physical, chemical, and biological strategies for preserving soil health. He discussed the importance of organic matter and its method of improvement.

3. Seminar on IRRI-South Asia regional center a R4D Centre of Excellence for Rice-based Translational Research in South Asia

A seminar on Rice based Translational Research was delivered by Dr. Panneerselvam Peramaiyan, Senior Scientist- Agronomy, International Rice Research Institute South Asia Regional Centre, Varanasi, on 6 December 2022. The welcome speech was given by Dr. Iniyakumar M, Assistant Professor, Webinar Committee Coordinator, ASA. Dr. Sudheesh Manalil, Principal, Head Research & PGP chair, ASA, officially inaugurated the webinar session, Dr. Dhivyapriya D, Assistant Professor, Webinar Committee Coordinator, invited the speaker Dr. Panneerselvam Peramaiyan to deliver the seminar on Rice research at IRRI – South Asia hub. The guest speaker explained various aspects of Rice-based research happening in IRRI Southern Regional Centre. He highlighted the significance of IRRI Centre in India.



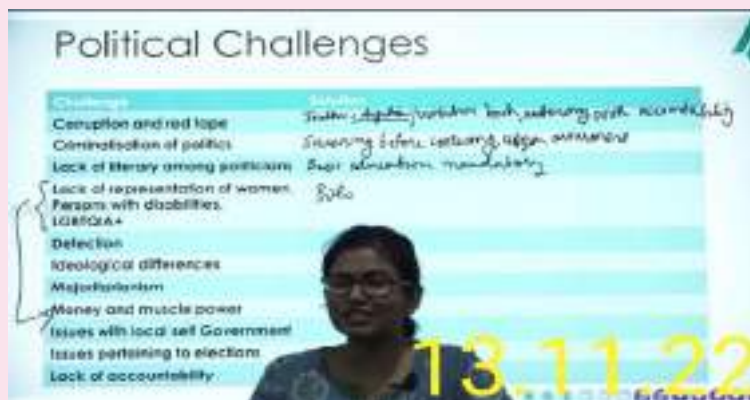
Dr. Panneerselvam explained the different Centres of Excellence run at the IRRI campus, including the Centre for Rice Speed Breeding, where the breeding time for rice was cut by up to 20 days by growing it under LED lighting. The Centre for value addition in Rice aims at various value-added product generation from Rice and other products. In addition to advanced equipment such as soil spectroscopy for non-invasive measurement of nutrient status and drones for spraying herbicides and chemicals, the center has an advanced phenomic facility for phenotypic rice and varietal selection. The youth and women empowerment programme at IRRI helped in empowering women on rice-based research. He also explained various short-term courses offered in IRRI for students

4. New Year 2023 Celebration

As part of New Year's eve, Amrita School of Agricultural Sciences conducted a New Year celebration on 31.12.2022 in auditorium. The celebration started with Pooja to invoke the blessings of Amma. The Principal, Dr. Sudheesh Manalil, welcomed the gathering and in his New Year's address he shared the achievements of ASA that happened during the year 2022 and wished faculties and students. After the enthralling performance of our students and the mesmerizing musical feast by the orchestra troop, crackers were burst, lanterns were set burnt, and cakes were distributed to the faculty members and students as part of the New Year celebration. Finally, the celebration ended with the national anthem.



5. ASA Civil Service Foundation Course



ASA Civil Service aspirants were taught the significance of learning political theory to understand the concepts of our political system, including democracy, equality, individuality, and justice to fully comprehend our administrative structure to become an effective leader for the nation.

Integrity is doing the right thing

III. EXTENSION OUTREACH AND DEVELOPMENT



1. Spray Cabinet Facility Established at ASA

A spray chamber was constructed at ASA to spray agro chemicals on small potted plants. Syphon-type pneumatic atomizing nozzles were used to eliminate the need to pressurize the spray solution. The chamber used to permit convenient and accurate regulation of volume and rate of chemical application for laboratory and greenhouse investigations.

2. Capacity Building Programme and Inputs Distribution Under Tribal Sub-Plan 2022

With Amma's blessings, Amrita School of Agricultural Sciences and ICAR- Indian Institute of Horticultural Research (IIHR), Bengaluru, jointly organized Capacity building programme and inputs distribution under the Tribal Sub-plan (2022) on 20 December 2022 at the Community hall, Sadivayal tribal village. The programme began with a prayer song followed by the lighting of the lamp by the dignitaries. Dr. Sivaraj P, Assistant Professor (Agricultural Extension), welcomed the gathering. Dr. Sudheesh Manalil, Principal and Head Research, ASA, delivered the inaugural and presidential address. In his address, he explained our Chancellor Amma Sri Mata



Amritanandamayi Devi's message on agriculture and farmers, as well as ASA activities and mottos towards the farming community. A brief introduction on eminent scientists from ICAR-IIHAR, Bengaluru, was given by Dr. Iniyakumar M, Assistant Professor

(Agricultural Microbiology). The participants of the capacity building programme were tribal farmers of Singampathi panchayat and Perur Jaihind Vegetable Farmers Producer Company. Dr. D. Kalaivanan, Senior Scientist and Nodal Officer, TSP and

NEH Programme, introduced and briefed about the tribal sub-plan to the villagers. Dr. R. Venkattakumar, Principal Scientist and Head, Division of Social Sciences and Training, explained several interventions in horticultural crops to farmers of Sadivayal and Singampathi villages. Various techniques for the improvement of production and productivity of fruit crops and IIHR released cultivars of fruits such as mango (Arka Udaya), papaya, guava (Arka Poorna), annona (Arka Sahan), jackfruit (Arka Siddu), and vegetables like chilli (Arka Suphal, Arka Meghana, Arka Swetha & Arka Haritha), brinjal (Arka Harshitha), okra, bottle gourd, and amaranthus were elaborated by Dr. Anil Kumar Nair, Principal Scientist, Division of Vegetable Crops. Further, microbiological technologies like biofertilizer application and soil-less cultivation of vegetables were explained by Dr. G. Selvakumar, Principal Scientist, Division of Natural Resources. At the end of the session, the tribal farmers received inputs such as seed kits, Arka Microbial Consortium, micronutrients, and saplings. Finally, the programme ended with a vote of thanks given by Mr. Manojkumar E, Development Officer, ASA.

3. National Farmers Day-Agro-Advisories 2022

ASA Team visited nearby villages on National Farmers Day, 2022. The faculties of ASA periodically visited farmers' fields in Kinathukadavu and Pollachi north blocks to interact consistently with farmers and addressing the crop health issues such as diagnosis of pests, diseases, deficiencies, and disorders and suitable recommendation perspectives. On 23 December 2022, Dr. Parthasarathy S, Assistant Professor (Plant Pathology), Dr. Aravind J, Assistant Professor (Agrl. Entomology), Dr. Sathyapriya E, Assistant Professor (Agrl. Extension), Dr. Mageshan V.R. Assistant Professor (Soil Science), visited Arasampalayam, Sollavampalayam and Sirukalanthai villages and involved in agro-advisory services to the farmer producer groups, and coconut, tomato growers.



1. **Dr. Sivaraj P**, Assistant Professor (Agricultural Extension), has published a research article entitled "Training Needs Analysis for Certified Organic Growers in Tamil Nadu on Organic Agricultural Practices" *International Journal of Agricultural and Statistical Sciences*, 18(2), Pp 575-582. <https://connectjournals.com/03899.2022.18.575>



2. **Dr. Sivaraj P**, Assistant Professor (Agricultural Extension), has published a research article entitled "Socio-Economic Characteristics and Empowerment of Women's Self-Help and Non-Self-Help Groups in Tamil Nadu" *Indian Journal of Economics and Development*, 18(4), Pp 892-899. <https://doi.org/10.35716/IJED/21285>



3. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a research article entitled "In silico targeting of influenza virus haemagglutinin receptor protein using Diosmetin, Tangeritin, and Anthocyanidins as potential drugs". Journal of Experimental Biology and Agricultural Sciences. [http://dx.doi.org/10.18006/2022.10\(5\).995.1002](http://dx.doi.org/10.18006/2022.10(5).995.1002)



4. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a research article entitled "Seroprevalence and risk factors of infectious bovine rhinotracheitis in dairy cattle of Chitwan, Nawalpur and Rupandehi districts of Nepal". Journal of Experimental Biology and Agricultural Sciences. [http://dx.doi.org/10.18006/2022.10\(5\).1100.1108](http://dx.doi.org/10.18006/2022.10(5).1100.1108)



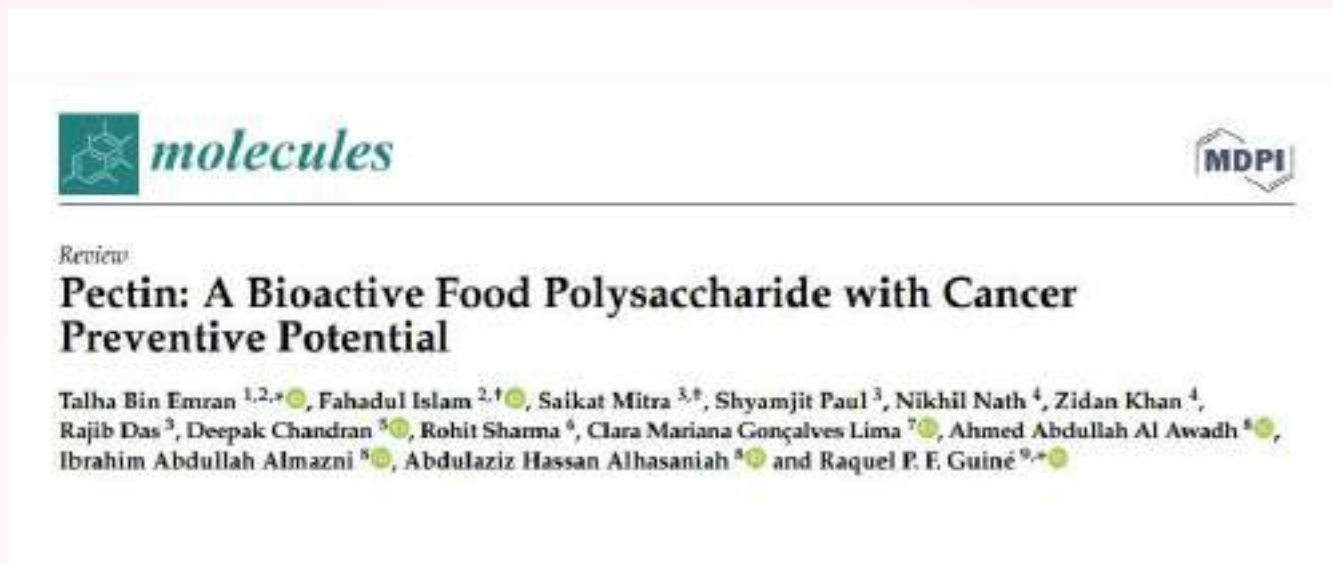
5. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Application of ultrasonication as pre-treatment for freeze drying: An innovative approach for the retention of nutraceutical quality in foods". Food Chemistry. <https://doi.org/10.1016/j.foodchem.2022.134571>



6. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Jamun (*Syzygium cumini* (L.) Skeels) seed bioactives and its biological activities: A review". Food Science. <https://doi.org/10.1016/j.fbio.2022.102109>



7. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Pectin: A bioactive food polysaccharide with cancer preventive potential". *Molecules*. <https://doi.org/10.3390/molecules27217405>



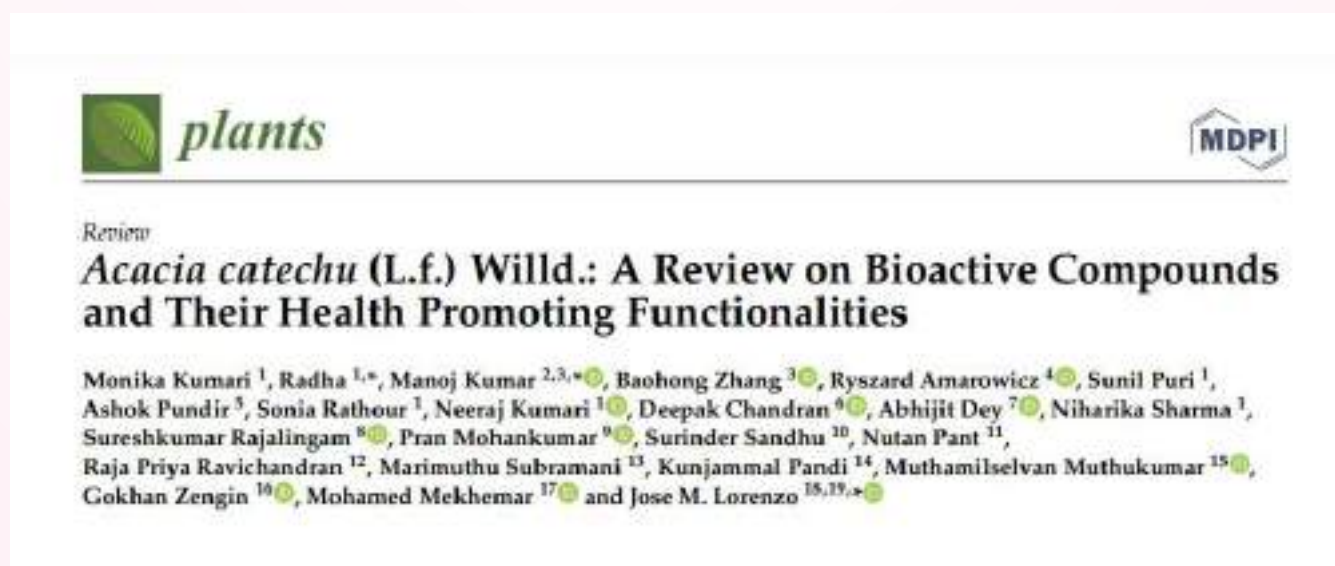
8. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a correspondence article entitled "FDA's authorized "JYNNEOS" vaccine for counteracting monkeypox global public health emergency; an update – Correspondence". *International Journal of Surgery*. <https://doi.org/10.1016/j.ijso.2022.106971>



9. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "FIFA world cup 2022 and the risk of emergence of zoonotic diseases". Journal of Pure and Applied Microbiology. <https://doi.org/10.22207/JPAM.16.4.47>



10. **Dr. Deepak Chandran** and **Dr. Sureshkumar R**, Assistant Professors have published a review article entitled "Acacia catechu (L.f.) Willd.: A review on bioactive compounds and their health promoting functionalities". Plants. <http://dx.doi.org/10.3390/plants11223091>



11. **Dr. Deepak Chandran, Dr. Marthandan V and Dr. Sabareeshwari V**, Assistant Professors, have published a review article entitled "Apple (*Malus domestica* Borkh.) seed: A review on health promoting bioactivities and its application as functional food ingredient". Food Bioscience. <https://doi.org/10.1016/j.fbio.2022.102155>



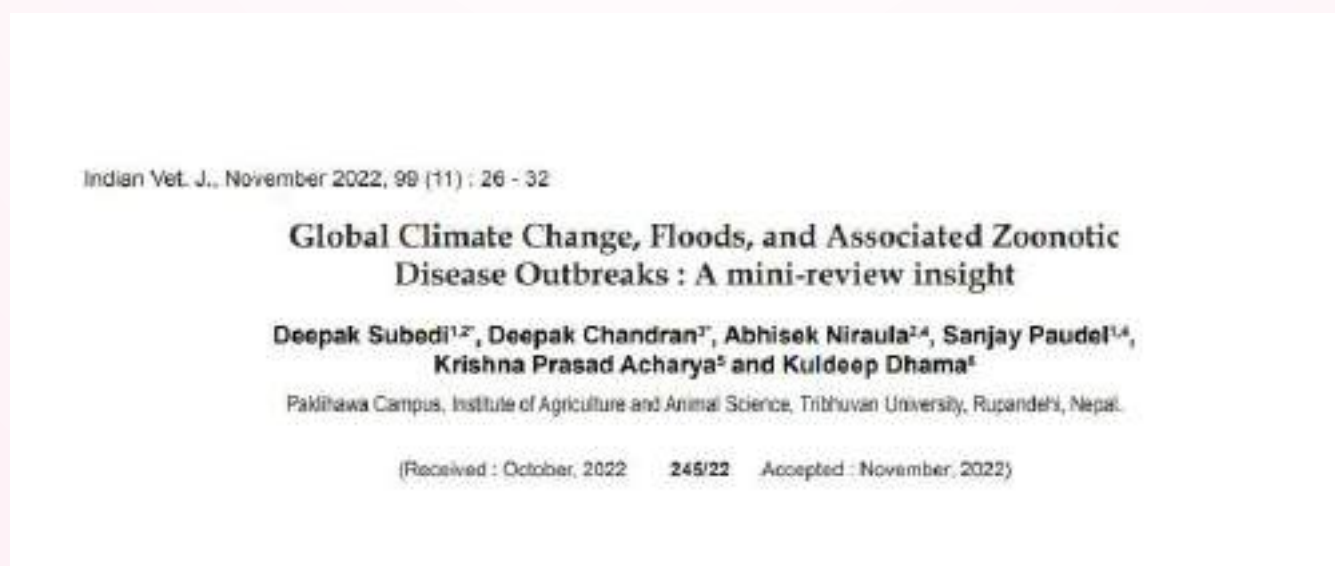
12. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Neuroprotective effect of curcumin and curcumin-integrated nanocarriers in stroke: from mechanisms to therapeutic opportunities". Minerva Biotechnology and Biomolecular Research. <http://dx.doi.org/10.23736/S2724-542X.22.02946-7>



13. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Ecological and socio-economic factors in the occurrence of rabies: A forgotten scenario". *Infectious Diseases Reports*. <https://doi.org/10.3390/idr14060097>



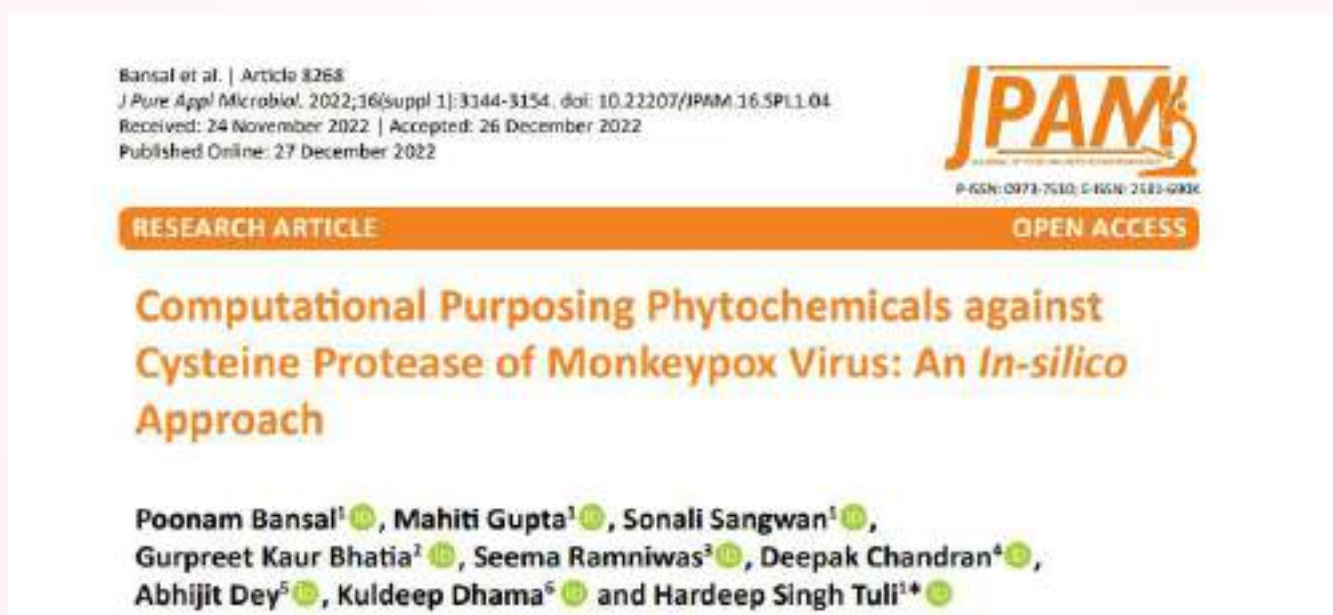
14. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Global climate change, floods, and associated zoonotic disease outbreaks: A mini-review insight". *The Indian Veterinary Journal*.



15. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a correspondence article entitled "Recent outbreaks of Hantavirus-a very lethal and zoonotic virus – An update and counteracting strategies". International Journal of Surgery Open. <https://doi.org/10.1016/j.ijso.2022.100582>



16. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Computational purposing phytochemicals against cysteine protease of monkeypox virus: An in-silico approach". Journal of Pure and Applied Microbiology. <https://doi.org/10.22207/JPAM.16.SPL1.04>



17. **Ms. Neha A R, Ms. Mekha Soman, Ms. Sreelakshmi K S, Ms. Nanda Vinod, Mr. Hari Sankar C R, Ms. Parvathy S Nair**, UG students, **Dr. Deepak Chandran** and **Dr. Marthandan V**, Assistant Professors have published a review article entitled "Moringa oleifera as a feed additive: A narrative assessment of current understanding regarding its potential beneficial health effects and increasing production performances of poultry". The Indian Veterinary Journal.

Indian Vet. J., December 2022, 99 (12) : 07 – 17

***Moringa oleifera* as a Feed Additive: A Narrative Assessment of Current Understanding Regarding its Potential Beneficial Health Effects and Increasing Production Performances of Poultry**

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18. **Ms. Nandanagopal V G, Ms. Malu Gopan, Ms. Megha K, Hari Sankar C R**, students, **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) have published a review article entitled "Major advances in monkeypox vaccine research and development – An update". Journal of Pure and Applied Microbiology. <https://doi.org/10.22207/JPAM.16.SPL1.08>

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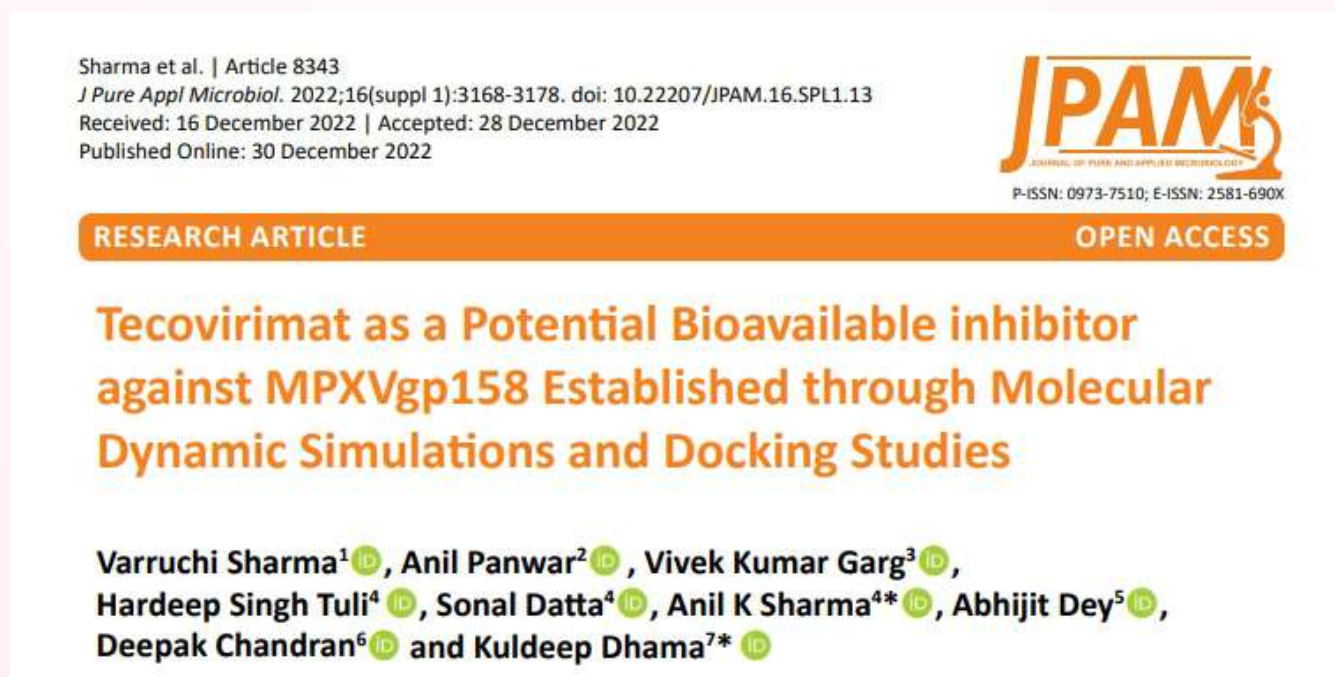
Major Advances in Monkeypox Vaccine Research and Development – An Update

Deepak Chandran^{1*}, V.G. Nandanagopal¹, Malu Gopan¹, K. Megha¹, C.R. Hari Sankar¹, M.K. Muhammad Aslam², V. Vishnu Savanth², M. Pran³, Firzan Nainu⁴, Mohd. Iqbal Yatoo⁵, Mohammad Ebad Ur Rehman⁶, Hitesh Chopra⁷, Talha Bin Emran^{8,9}, Abhijit Dey¹⁰, Anil K. Sharma¹¹, AbdulRahman A. Saied^{12,13} and Kuldeep Dhama^{14*}

19. **Ms. Hridya P, Ms. Diya Prasanth, Ms. Abernaa D, Ms. Kaaviya A V, Ms. Sivani Menon P S**, III year students, **Dr. Deepak Chandran** and **Dr. Vinodini D**, Assistant Professors have published a review article entitled "Changing patterns in the spread of human monkeypox: A dangerous new development in disease epidemiology". Journal of Pure and Applied Microbiology. <https://doi.org/10.22207/JPAM.16.SPL1.11>



20. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a research article entitled "Tecovirimat as a potential bioavailable inhibitor against MPXVgp158 established through molecular dynamic simulations and docking studies". Journal of Pure and Applied Microbiology. <https://doi.org/10.22207/JPAM.16.SPL1.13>



21. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "An overview on monkeypox, current paradigms and advances in its vaccination, treatment and clinical management: Trends, scope, promise and challenges". Journal of Pure and Applied Microbiology. <https://doi.org/10.22207/JPAM.16.SPL1.21>



22. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Tinospora cordifolia (Willd.) Hook.f. & Thomson polysaccharides: A review on extraction, characterization, and bioactivities". International Journal of Biological Macromolecules. <https://doi.org/10.1016/j.ijbiomac.2022.12.181>



23. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Advances and prospects of platelet-rich plasma therapy in veterinary ophthalmology". Veterinary Research Communications. (DOI: <https://doi.org/10.1007/s11259-022-10064-z>).



24. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "SARS-CoV-2 emerging Omicron subvariants with a special focus on BF.7 and XBB.1.5 recently posing fears of rising cases amid ongoing COVID-19 pandemic". Journal of Experimental Biology and Agricultural Sciences. [http://dx.doi.org/10.18006/2022.10\(6\).1215.1221](http://dx.doi.org/10.18006/2022.10(6).1215.1221)



25. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a review article entitled "Medicalization of sexuality and sexual health: A perspective review". Journal of Experimental Biology and Agricultural Sciences. [http://dx.doi.org/10.18006/2022.10\(6\).1241.1252](http://dx.doi.org/10.18006/2022.10(6).1241.1252)



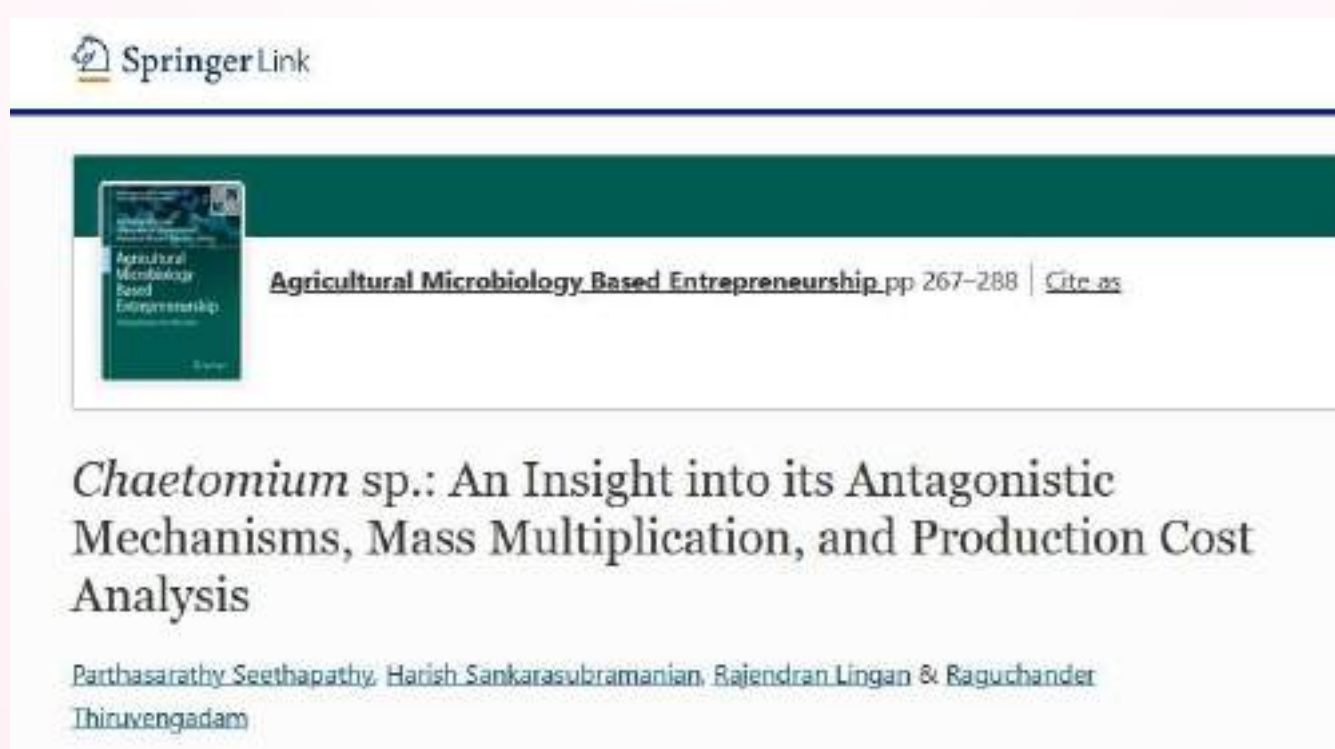
26. **Mr. Hari Sankar C R**, **Mr. Nithin S Rajan**, **Ms. Raida**, **Ms. Sreya V K**, **Ms. Shreya Suresh**, **Mr. Harisankaran P S**, III year students, **Dr. Deepak Chandran** and **Dr. Priya R**, Assistant Professors have published a review article entitled "Potential effects of essential oils in safeguarding the health and enhancing production performance of livestock animals: The current scientific understanding". Journal of Experimental Biology and Agricultural Sciences. [http://dx.doi.org/10.18006/2022.10\(6\).1222.1240](http://dx.doi.org/10.18006/2022.10(6).1222.1240)



27. **Mr. Anuranj P R, Mr. Harisankaran P S, Mr. Adithya Krishna S, Ms. Parvathy S, Mr. Gautham Prakash**, III year students **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) have published a review article entitled "Essential oils as valuable feed additive: A narrative review of the state of knowledge about their beneficial health applications and enhancement of production performances in poultry". Journal of Experimental Biology and Agricultural Sciences. [http://dx.doi.org/10.18006/2022.10\(6\).1290.1317](http://dx.doi.org/10.18006/2022.10(6).1290.1317)



28. **Dr. Parthasarathy S**, Assistant Professor (Plant Pathology), has published a book chapter entitled Parthasarathy, S., Harish, S., Rajendran, L., and Raguchander, T. (2023). *Chaetomium* sp.: An Insight into its Antagonistic Mechanisms, Mass Multiplication, and Production Cost Analysis. In: Amaresan, N., Dharumadurai, D., Babalola, O.O. (eds) *Agricultural Microbiology Based Entrepreneurship. Microorganisms for Sustainability*, vol 39. Springer, Singapore. https://doi.org/10.1007/978-981-19-5747-5_17



29. **Dr. Parthasarathy S**, Assistant Professor (Plant Pathology), has published a book chapter entitled Parthasarathy Seethapathy, Subbiah Sankaralingam and Harinathan Balasundaram (2022); Bioconversion and Biotransformation Efficiencies of Wild Macrofungi. In: Praveen Gehlot & Joginder Singh (eds) Biomolecules of Fungi: Nutraceutical, Pharmaceutical, Industrial and Environmental Protection. p. 239-255.

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14. Bioconversion and Biotransformation Efficiencies of Wild Macrofungi

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30. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a book chapter entitled "Ameliorative effects of phenolics in oxidative stress management in plants". In: Lone, R., Khan, S., Mohammed Al-Sadi, A. (eds) Plant Phenolics in Abiotic Stress Management, 369-390. Springer, Singapore. https://doi.org/10.1007/978-981-19-6426-8_17



Plant Phenolics in Abiotic Stress Management pp 369-390 | [Cite as](#)

Ameliorative Effects of Phenolics in Oxidative Stress Management in Plants

[Kanika Sharma](#), [Manoj Kumar](#) & [Deepak Chandran](#)

31. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry) has published a book chapter entitled "Colored cereals: Extraction and purification of bioactive compounds (pigments)". In: Functionality and application of colored cereals: Nutritional, bioactive and health aspects, edited by Sneh Punia Bangar and Manoj Kumar, 135-160. Elsevier, Academic Press. <http://dx.doi.org/10.1016/B978-0-323-99733-1.00011-X>



32. **Dr. Sivasabari K, Dr. Aravind J, and Dr. Kumaresan S**, Assistant Professors, have published a research article entitled "Effect of Liquid Rhizobium with Organic Bio-stimulants on Growth, Yield Attributes and Yield of Leguminous Blackgram [*Vigna mungo* (L.) Hepper]", Legume Research- An International Journal, 45 (12), Pp 1587-1592. <https://doi.org/10.18805/LR-4999>



V. AWARDS AND ACHIEVEMENTS

1. **Mr. J. Adinan**, a second-year student (2021 batch), had been selected to represent the Football team of Amrita Vishwa Vidyapeetham (AVVP) and went to participate in the South Zone Inter University Tournament held at the University of Calicut from 23.12.2022 to 31.12.2022.



2. **Mr. Harishankar J** (2020 batch), **Mr. Murali Vasanth K**, and **Mr. Nawin G K** (2021 batch) were selected from ASA to represent the AVVP-Coimbatore team in the Inter Campus Volleyball (Men) Tournament. The Volleyball selection trials were conducted at Ettimadai on 9.12.2022.



3. **Dr. Deepak Chandran**, Assistant Professor (AH & VS) has received 'Certificate of Excellence' and USD750 dollars award for posting the most popular tweet in the International Cotton Advisory Committee (ICAC) Twitter Contest held on 22.12.2022 as part of the 7th World Cotton Research Conference and World Cotton Day.



4. **Dr. Reena S**, Assistant professor (Agricultural Biotechnology) has participated Training Program on Mass Spectrometry-based Proteomic and Metabolomics, organized by ICRISAT, Telangana, during 21-25 November 2022.



5. Participation: Seminar on NEP 2020

Faculties from ASA participated in the Implementation of National Education Policy (NEP) 2020, organized by the Amrita Office of Academic Progression in collaboration with the Centre for Educational and Social Studies (CESS) on 26 November 2022 at AVVP Ettimadai campus. This seminar introduced the participants to the execution of the policy at the institutional level and the participation of faculties in the implementation of the policy in relation to the core concepts of NEP.



6. **Dr. Jidhu Vaishnavi S**, Assistant Professor (Crop Physiology) has participated Workshop on Gene Editing in Agriculture: Opportunities and Enabling Policies held on November 29, 2022 at TNAU, Coimbatore.





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