



AMRITA
VISHWA VIDYAPEETHAM
(Deemed-to-be University)

School of
Agricultural Sciences

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



“The greatest journey begins with the smallest step. Let each one of us welcome the New Year by making small changes in our life. If we are all able to do that, then we will be able to usher in a new age of love, compassion, and selflessness”.

Amma, Sri Mata Amritanandamayi Devi

Chancellor, Amrita Vishwa Vidyapeetham

**ASA BIMONTHLY
E-NEWSLETTER**

Volume 2 | Issue 6

November – December 2021

I. STUDENTS' ACTIVITIES

1. ASSESSMENT OF MILK PRODUCTION PERFORMANCE

As part of the 19AMP201-Livestock and Poultry Management course, handled by Dr. Deepak Chandran, Assistant Professor (Veterinary Sciences and Animal Husbandry), a project was assigned to the second-year students (2020 Batch) to study the “Milk Production Performance of Dairy Unit”. The students individually interacted with a selected dairy farmer near their location and analyzed their socio-economic profile, milk production performance of cattle, and management and the feeding practices followed in the dairy unit. The students gained an excellent understanding of the management practices followed by the farmers, as well as the financial aspects of cattle rearing.



Ms. Akshara S. Mohan,
second-year student (2020 Batch)



Mr. A. Gokul,
second-year student (2020 Batch)

2. LAWN MAKING AND LANDSCAPING

As part of the horticultural courses 19HOR212 and 19HOR214, handled by Dr. S. Kumaresan, Assistant Professor (Horticulture), the third-year students of ASA (2019 Batch) had participated in the establishment of lawn, garden landscape in ASA campus premises, making a terrarium, hanging basket and miniature garden. Also, they experienced trimming and pruning of ornamental shrubs into different shapes.



Third-year students (2019 Batch)

3. COLLECTION OF ROCKS AND MINERALS

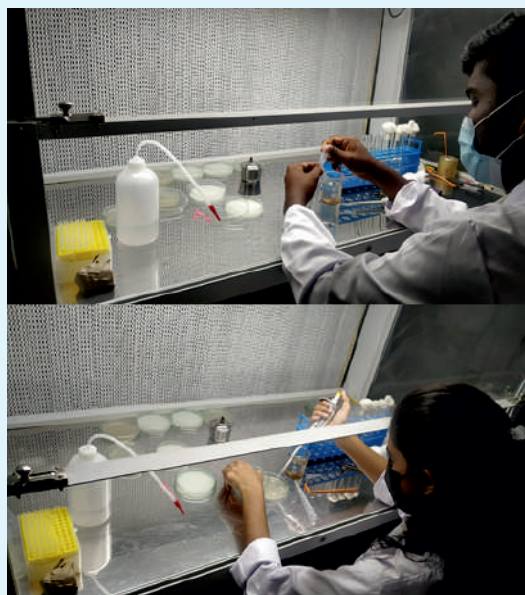
After gaining the theoretical knowledge on soil sampling and collection of rocks and minerals as part of the course 19SAC101-Fundamentals of Soil Science, handled by Dr. V. Sabareeshwari, Assistant Professor (SAC), the first-year students (2021 batch) have collected soil samples and rocks in their location by adopting the methodological procedures.



Mr. Ragul Vadhugunath,
first-year student (2021 Batch)

4. ISOLATION OF BENEFICIAL MICROFLORA

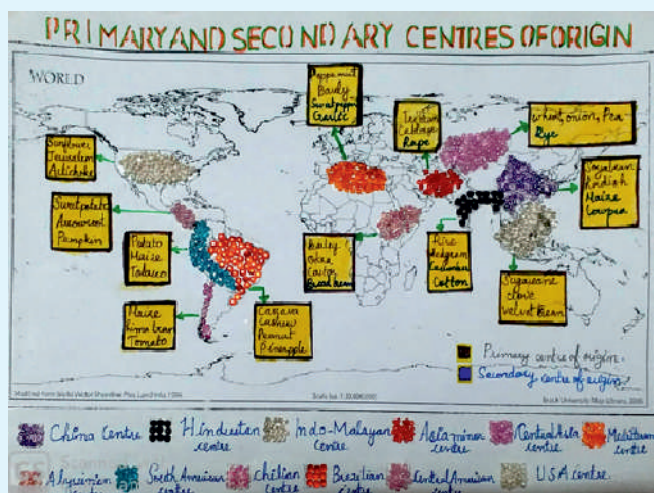
Third-year students, ASA (2019 Batch) isolated beneficial microflora such as *Azospirillum*, *Phosphobacteria*, *Azotobacter*, and *Rhizobium* from the plants and soil in ASA Campus at Arasampalayam and documented the diversity of beneficial microflora across the soil as part of the 19AGM111-Agricultural Microbiology course, handled by Dr. Parthasarathy S, Assistant Professor (Plant Pathology), ASA.



Third-year students of ASA
(2019 Batch)

5. CENTRE'S OF ORIGIN: CROPS

As part of the course 19GPB201- Fundamentals of Plant Breeding, the course teacher Dr. Dhivyapriya D, Assistant Professor (Genetics and Plant Breeding) has assigned practical tasks to the students on "Primary centres and Secondary centres of origin illustration" for major field and horticulture crops.



Ms. Anjusree K C,
third-year student (2019 batch)
who completed the task
in a commendable manner.

6. CREATING ARTWORK -VISUAL REPRESENTATION

Students were assigned to create artwork for news stories as part of the course 19AEX211- Agricultural Journalism (2+1), handled by Dr. Sivaraj P. and Dr. Sathyapriya E., Assistant Professors (Agricultural Extension), ASA. The artworks were completed in a commendable manner.



Prepared by third-year students (2019 Batch)

7. INSECT COLLECTION AND PRESERVATION

As part of the 19AEN111- Fundamentals of Entomology (3+1) course, handled by Dr. Aravind J., Assistant Professor (Agricultural Entomology), a practical task was assigned to the second-year students (2020 batch) to “Collect and Preserve Various Insect Specimens”. As part of the work, Ms. Kaavya A.V. collected more than 100 insect specimens, preserved them in an insect box and exhibited them in an appreciable manner. This helped the students to gain more practical experience and learn about insect biology, habit, habitats, and natural enemies present in the ecosystem, as well as taxonomic characters of various orders.



Ms. Kaavya A V, second-year student (2020 batch)

8. TREES PLANTING AT ASA CAMPUS

As part of the practical class for 19HOR213 - Production Technology of Fruits and Plantation Crops course, handled by Dr. Priya R, Assistant Professor (Horticulture), students have actively involved in the coconut planting activities in ASA farm.



Prepared by third-year students (2019 Batch)

II. COLLEGE EVENTS

1. NATIONAL FARMER'S DAY 2021

Amrita School of Agricultural Sciences celebrated National Farmer's Day on 23rd December 2021. As part of the celebration, the **Skill Development Committee** of this School organized a guest lecture cum workshop on "Soil, Weed, Water, and Pest Management through Organic Farming" for the farmers and students. Dr. R. Sureshkumar, Assistant Professor (Agronomy), welcomed the gathering and briefed about the need for Organic Agriculture.



The presidential address was delivered by Dr. Sudheesh Manalil, Principal and Head Research ASA. During his address, he emphasized the need for rejuvenating the traditional knowledge on Organic Agriculture methods in preserving the soil and water resources from being polluted through the chemical fertilizer and weedicides. Mr. S. Ramakrishnan, a well-renowned pioneer in Organic Farming from Sathyamangalam, Erode District, Tamil Nadu demonstrated organic formulations such as archaea bacterial solutions, Amritham solution, Panchagavya, and Butter-milk solution for natural pest control and promoting vegetative growth to the farmers and students of ASA. Also, he educated the critical role of agro-ecology and circular economy in sustainable agriculture.



Finally, a training session on “Polybag Azolla production techniques” was given by Dr. M. Iniyakumar, Assistant Professor (Agricultural Microbiology). Later, students had an interaction session with the farmers to learn about sustainable crop cultivation and rural livelihood. On behalf of ASA, Dr. Sivaraj P., Assistant Professor (Agricultural Extension), expressed his profound gratitude to the farmers and the management. The Principal, ASA distributed the coconut seedlings and Azolla seed materials to the participated farmers. Dr. Sureshkumar R and Dr. Sivaraj P, Assistant Professors, and Mr. V. Karthik Raja (Physical Education) were coordinated the entire event successfully.



2. AYUDH EVENT ON AMR CAMPAIGN

The World Health Organization (WHO) has declared 18-24 November 2021 as the World Anti-Microbial Resistance Awareness Week (WAAW). AYUDHians of Amrita School of Agricultural Sciences conducted the awareness programme about the growing global threat of Anti-Microbial Resistance with the theme “Spread Awareness, Stop Resistance”. Students, namely Ms. Meenakshy, Ms. Mehaa, Ms. Deepa, and Ms. Vashuki of the 2021 batch, took part in the campaign to spread awareness and shared information about the drastic consequences of Anti-Microbial Resistance in the nearby schools, houses, shops, friends, etc.



Ms. Mehaa S., first-year student (2021 batch)



Ms. Meenakshy, first-year student (2021 batch)



Ms. Deepa, first-year student (2021 batch)

3. ASA CIVIL SERVICE FOUNDATION COURSE

ASA Civil Service Foundation course is predetermined to assist the aspirants in understanding all UPSC-related subjects. The Indian history and culture account a significant part of both the Civil Services Preliminary Exam, and the Main Examination. Ancient India, Medieval India, and Modern India carried a substantial amount of weightage in both the UPSC Civil Services Preliminary Exam and, the Main Examination.

HOW TO PREPARE FOR HISTORY?

SYLLABUS: PRELIMS

ANCIENT INDIAN HISTORY
3000 BC – 1100 AD

MEDIEVAL INDIAN HISTORY
1100 AD – 1750 AD

Prehistoric cultures in India; Indus Civilization; Vedic Period; State formation and urbanization- Mahajanapadas; Jainism and Buddhism; Mauryan Empire; Post-Mauryan India; Sangam texts and society; Gupta dynasty; Post Gupta period; Early Medieval India

8th cen - 10th cen

Lodhi, Khalji
Delhi Sultanate; Sufi and Bhakti movements; Major Provincial dynasties: Lodhi, Sharqi's etc; Vijayanagar and Bahmani kingdoms; Mughal Empire; Maratha empire

4. ASA CAREER DEVELOPMENT ACTIVITIES

The Career Development Committee of ASA organized a session on “Competitive exam-based resources collection review” on 30th December 2021. Third-year students (2019 batch) of ASA have presented their valuable resources in front of committee members and students. Dr. Sudheesh Manalil, Principal and Chairperson (Career Development Committee) has technically reviewed all the student presentations and extended his suggestions for future improvement. Dr. Aravind J and Dr. Parthasarathy S, Coordinators, Career Development Committee, have facilitated the event successfully.



Ms.Keerthana Vijayan & team members, (2019 batch),
presented study resource material to the students

III. RESEARCH AND DEVELOPMENT

1. TRIBAL VILLAGE ADOPTION FOR EXTENSION AND RESEARCH ACTIVITIES

Amrita School of Agricultural Sciences has adopted a tribal village at Sadivayal, facilitated by Amrita Management. This valuable work will further ensure many research and developmental activities in the village with students and faculty participation. The team from ASA and Live in Lab have visited the Sadivayal tribal village on 5th December 2021 and assessed the Ph.D. research work in crop intensification. Mr. Masoud, a student of the Amrita E4LIFE International Ph.D. programme in sustainable development will work on the topic “Crop intensification” under the supervision of Dr. V.S. Manivasagam and Dr. Sudheesh Manalil, ASA. Also, Mr. Estone Jiji Habanyati, a student of the Amrita E4LIFE International Ph.D. program in sustainable development will conduct research and demonstration on organic inputs preparation at Sadivayal village under the supervision of Dr. Sivaraj P, Dr. Sudheesh Manalil, Dr. Parthasarathy S and Dr. Aravind J, ASA.



2. RESEARCH COLLABORATIONS WITH MIZORAM CENTRAL UNIVERSITY

Dr. Sudheesh Manalil, Principal and Head Research (ASA) visited Mizoram Central University and discussed with Prof. K.R.S. Sambasiva Rao, Vice Chancellor, Prof. Lalnundanga, Registrar, Dr. Lalnilawma, Professor and Dr. Laldinliana, Associate Professor about various ongoing and future collaboration agreements, the visit was facilitated by Amrita Management.



Prof. K.R.S. Sambasiva Rao, Vice Chancellor, Prof. Lalnundanga, Registrar, Dr. Lalnilawma, Professor, Dr. Laldinliana, Associate Professor of the Mizoram University with Dr. Sudheesh Manalil of ASA

3. STUDENTS RESEARCH

Third-year students (2019 Batch) namely Ms. Gowry Parvathy, Mr. Pranav, and Ms. Soundharya Sivakumar under the supervision of Dr. Iniyakumar M took up pot culture studies on growth and physiological traits of Arka Microbial Consortium treated cowpea VBN2 under deficit irrigated conditions.

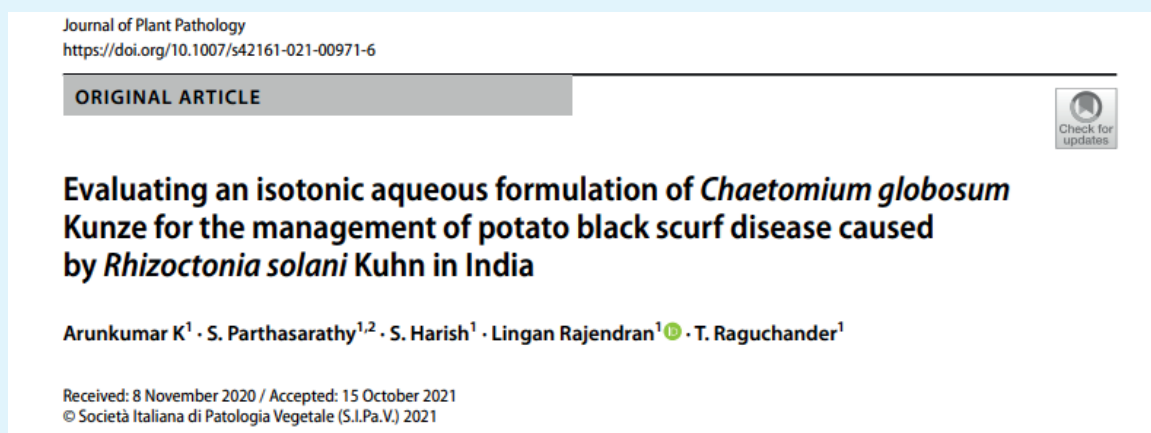


IV. PUBLICATIONS

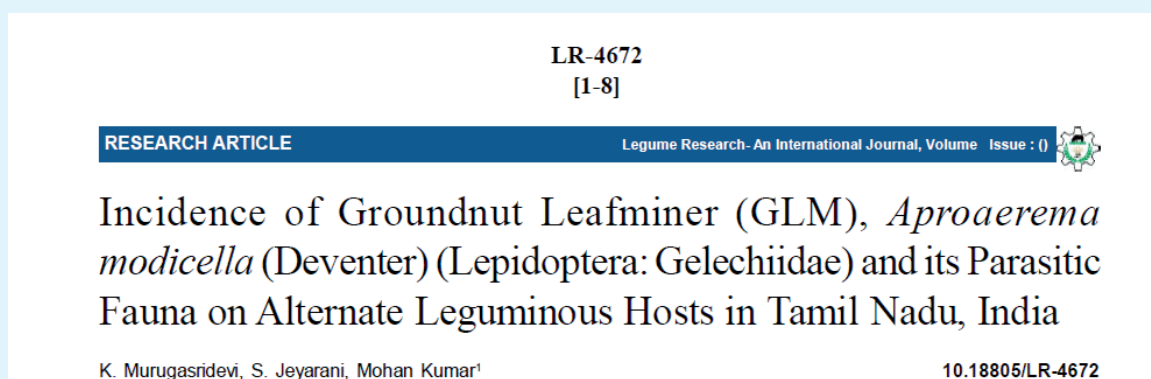
1. **Dr. Sudheesh Manalil**, Principal has published a research article on “Seedbank persistence of four summer grass weed species in the northeast cropping region of Australia” in PLoS ONE 17(1): e0262288. <https://doi.org/10.1371/journal.pone.0262288>



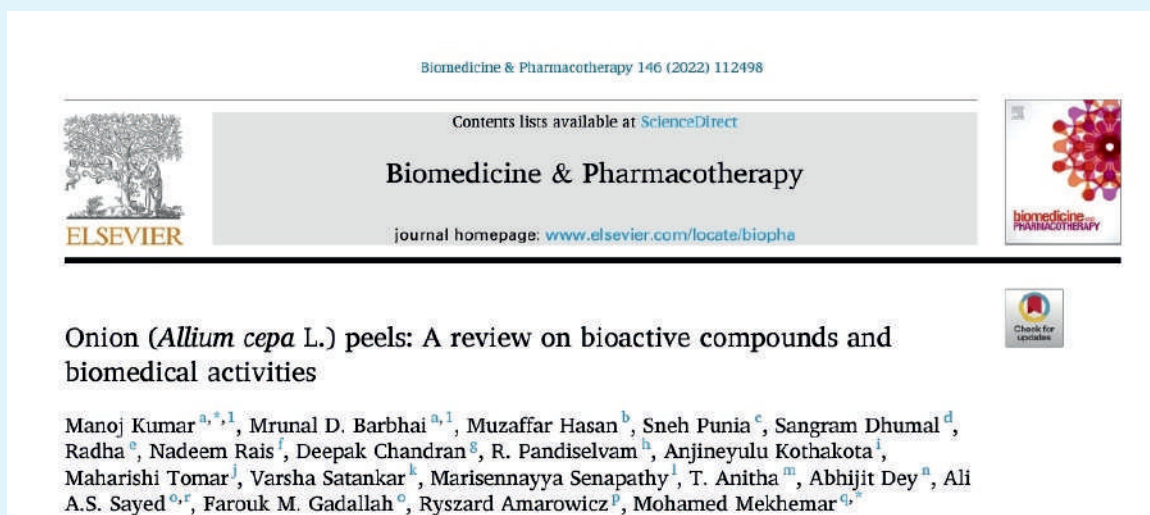
2. **Dr. Parthasarathy S**, Assistant Professor (Plant Pathology), has published a research article on “Evaluating an isotonic aqueous formulation of *Chaetomium globosum* Kunze for the management of potato black scurf disease caused by *Rhizoctonia solani* Kuhn in India” in Journal of Plant Pathology (2021). <https://doi.org/10.1007/s42161-021-00971-6>



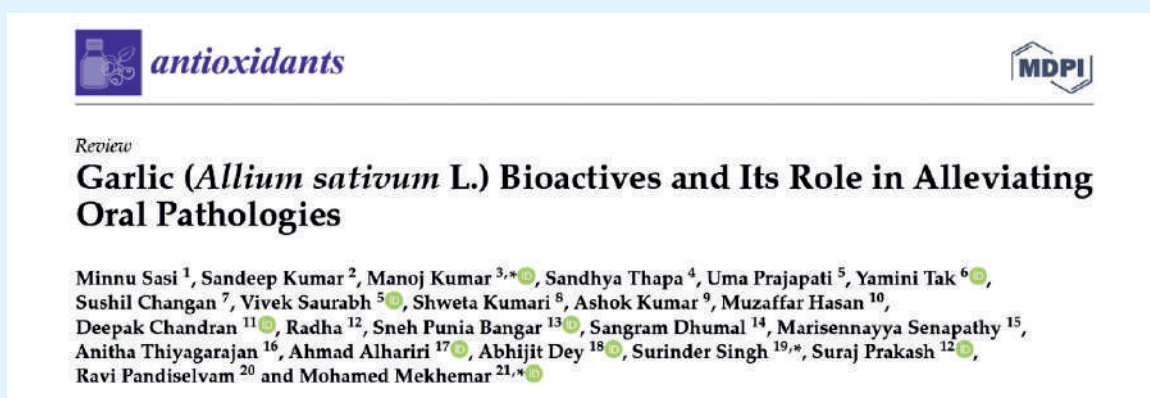
3. **Dr. K. Murugasridevi**, Assistant Professor (Agricultural Entomology), has published a research article on “Incidence of Groundnut Leafminer (GLM), *Protaetia modicella* (Deventer) (Lepidoptera: Gelechiidae) and its Parasitic Fauna on Alternate Leguminous Hosts in Tamil Nadu, India” in Legume Research- An International Journal (2021). <https://doi.org/10.18805/LR-4672>



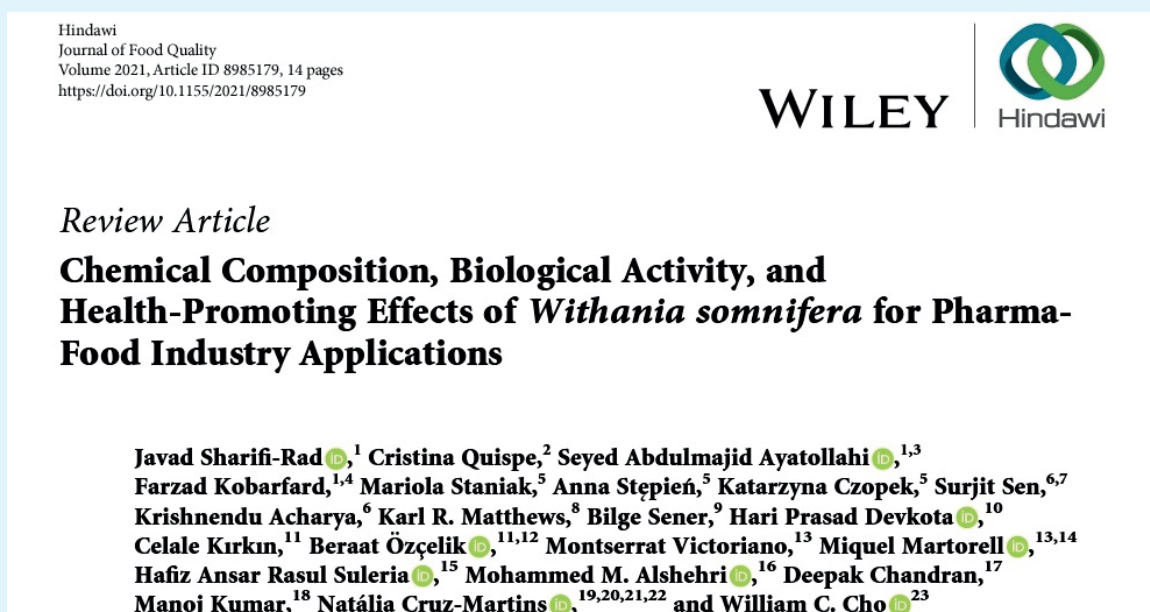
4. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry), has published a review article entitled “Onion (*Allium cepa* L.) peels: A review on bioactive compounds and biomedical activities” in Elsevier – Biomedicine & Pharmacotherapy (2021). <https://doi.org/10.1016/j.biopha.2021.112498>



5. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry), has published a review article entitled “Garlic (*Allium sativum* L.) Bioactives and its Role in Alleviating Oral Pathologies” in MDPI – Antioxidants (2021). <https://doi.org/10.3390/antiox10111847>



6. **Dr. Deepak Chandran**, Assistant Professor (Veterinary Sciences and Animal Husbandry), has published a review article entitled “Chemical composition, biological activity and health-promoting effects of *Withania somnifera* for pharma-food industry applications” in the Journal of Food Quality (2021). <https://doi.org/10.1155/2021/8985179>



7. **Dr. K. Murugasridevi**, Assistant Professor (Agricultural Entomology), has published a research article on “Evaluation of shelf life and pathogenicity of oil based formulation of *Beauveria bassiana* against chilli thrips and mites” in the Journal of Entomological Research (2021). <https://doi.org/10.5958/0974-4576.2021.00107.9>



8. **Dr. Parthasarathy S**, Assistant Professor (Plant Pathology), has published a book chapter on “Entomopathogenic Viruses”. In: Omkar (eds) Microbial Approaches for Insect Pest Management. Springer, Singapore. https://doi.org/10.1007/978-981-16-3595-3_1



V. ACHIEVEMENTS

1. FATHIMA NEHA's EXHIBIT

Ms. Fathima Neha of the 2019 batch got an opportunity to sing a song “Chote Chote Pankh” at an event in Mumbai – 20th November 2021 on the occasion of Universal Children’s Day organized and conducted by KidzCINEMA 2021.



Mellifluous performance of Ms. Fathima Neha, third-year student (2019 batch)

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