



Indian Council of Social Science Research

(Ministry of Education)

Post Box-10528, Aruna Asaf Ali Marg, JNU Institutional Area, New Delhi, Delhi 110067

EPABX: 011-26741849-51 Fax: 91-11-26741836

www.icssr.org

F. No. NIS/NS/215/IC/2023-24/SC

Dated: 06.12.2023

✓ The Principal
Nallamuthu Gounder Mahalingam College (Autonomous),
Pollachi-642001, Tamil Nadu

Sanction Order

Subject: Sanction for organizing a National seminar on "Celebrating Millets Legacy & Contribution to Agriculture".

Dear Sir,

Sanction of the Council is hereby accorded for the grant-in-aid of **Rs.1, 30, 000/-** (Rupees One Lakh thirty thousand only) to organize the above mentioned National seminar under the Convenership of **Dr. A. Sarvalingam**, Assistant Professor, Department of Botany to be held during 11-12 December, 2023.

The sanctioned amount will be released in two instalment as follows:

First instalment	Rs. 97,500/-
Second instalment	Rs. 32,500/-
Grand Total	Rs. 1, 30, 000/-

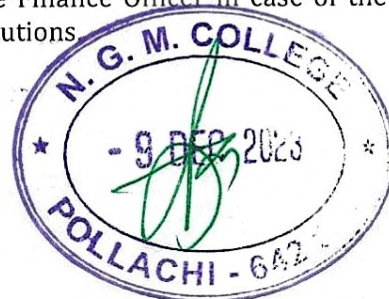
The first instalment of Rs. 97, 500/- will be released on receipt of the **grant-in-aid bill & PFMS Form** (copy enclosed) duly signed and stamped by the Competent Authority of the Institution/University/College.

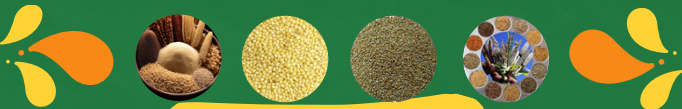
The second instalment of Rs. 32, 500/- will be released on receipt of the following documents that may please be submitted within two months after holding the seminar:

I. Two complete sets of Reports (Soft & hard bound copies) of the seminar/Conference that should necessarily constitute of the following:

- ✓ The List of the Actual Participants of the seminar.
- ✓ The exact titles & presenters of each of the session.
- 2-3 paragraphs write-up on seminar topic.
- Full Proceedings as presented in the Seminar alongwith the abstracts (both in Soft & Hard Copies).
- A note on the contribution of the seminar to the existing body of research.
- The Convener shall acknowledge support of ICSSR in all publications resulting from the seminar outcome (Books, Articles, Reports etc.) and should submit a copy of the same to the ICSSR after the completion

II. The audited head-wise statement of accounts and utilization certificate in GFR (form 12A) (copy enclosed) for the entire expenditure incurred from the sanctioned amount. Both these needs to be duly certified by the Convener, Registrar/Principal, and the Finance Officer in case of the Central University or the Chartered Accountant in case of other institutions





RESOURCE PERSONS

Day-1

Dr. T. Parimelazhagan

Professor & Head
Department of Botany
Bharathiar University
Coimbatore.

Dr. P. Alagesan

Senior Scientist and Head
ICAR-KVK MYRADA
Erode.

Mr. V. S. Arunachalam

Organic Farmer & Trainer
Elunkathir Organic Farms
Gobichettipalayam.

Dr. V. Dhaarani

Assistant Professor
C.V. Raman Global University
Bhubaneswar, Odisha.

Day-2

Dr. K. Vasanth

Associate Professor
Department of Botany
Bharathiar University
Coimbatore.

Mr. R. Sivalingam

MD- Minor Millet Farmer
Producer Company Limited
Dharmapuri.

Mr. Maran G

Chief Executive Officer
Thai Vazhi Iyarkai Unavagam
Sivakasi.

Dr. V. S. Ramachandran

Professor of Botany (Rtd.)
Bharathiar University
Coimbatore.

EXPO

Dr. P. Mahendramani

Professor of Botany (Rtd.)
Govt. Arts College
Coimbatore.

Mr. E. Senthil

Organic Farmer & Trainer
Senchola Integrated Farms
Sulur, Coimbatore.

"Cure with Miracle Millets"

Address for Correspondence
For any queries regarding participation you are
welcome to contact:

Dr. A. Sarvalingam

Organizing Secretary- CMLCA-2023

Department of Botany

NGM College (Autonomous)

Pollachi - 642 001, Coimbatore, Tamil Nadu

Ph: 04259-234154, Email: botanyactivities@gmail.com

Mobile: +91-90474 10293; +91- 95663 31605



CHIEF PATRON

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Dr. A. Logamadevi

Associate Professor & Head

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Dr. A. Sarvalingam

Assistant Professor

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Associate Professor

Dr. E. Neelamathi

Assistant Professor

Dr. A. Vignesh

Assistant Professor

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Assistant Professor

Dr. A.M. Ananda kumar

Assistant Professor

Ms. D. Sowmiya

Assistant Professor

PG Department of Botany



Event ID: IQAC/2023-24/DEC/158

NATIONAL SEMINAR ON

"CELEBRATING MILLETS LEGACY & CONTRIBUTION TO AGRICULTURE- CMLCA-2023"

(From Farm to Fork)

11th & 12th December 2023



ORGANIZED BY

DEPARTMENT OF BOTANY
NGM COLLEGE (AUTONOMOUS)

95th Rank in NIRF,

Re-accredited with NAACISO 9001:2015 Certified,
Affiliated to Bharathiar University, 91, Palghat Road,
Pollachi - 642 001, Coimbatore, Tamil Nadu

Phone No: (04259) 234868, 234870

Fax: 04259-234869

Email: ngm@ngmc.org, principal@ngmc.org

Website: www.ngmc.org

VENUE: PROF. M. ALKONDAN HALL

TIME: 9:00 AM - 5:00 PM

ABOUT THE COLLEGE

Nallamuthu Gounder Mahalingam (NGM) College, Pollachi was established in the year 1957 and it is an autonomous institution affiliated to Bharathiar University, Coimbatore. The college has been spreading its wings far and wide to provide a variety of educational programmes under one roof for around 65 years. Over the years, the College has been developed into a premier teaching and research Institution, offering 41 different programmes including UG, PG and research. The College has 250 staff members and 6000+ students. The benevolence of the beloved Patron Arutchelvar Dr. N. Mahalingam, the President Dr. B.K. Krishnaraj Vanavarayar and the Secretary Shri M. Balasubramaniam has transformed the College into a Centre of Excellence in higher learning and active research. The academic excellence, expert faculty, state-of-the art research facilities, commendable ISR activities and promising placements are the strength of the college. The NAAC has awarded 'A' grade twice and it is also an ISO 9001:2008 certified institution since 2002.

ABOUT THE DEPARTMENT

The Department of Botany was established during the year 1972 with an undergraduate course in botany and the post graduate course was introduced during the year 2015. The course is highly integrative in nature in order to ensure vertical and horizontal mobility of students. Curricular contents range from the Classical Botany to Applied Botany including Plant Biotechnology, Molecular Biology, and Bioinformatics and Bio nanotechnology. The infrastructure and the expertise available in the department have elevated it into a recognized research centre of Bharathiar University to carry out research in both fundamental and applied fields of Botany to award M.Phil (full time/part time) and Ph.D. degrees.

ABOUT THE CONFERENCE

Milletts dominate India's agriculture, constituting 80% of Asia's Sorghum and millet production. With an annual output of 15.53 million tons on 12.45 million hectares, they contribute 10% to India's food grain basket. Milletts are climate-resilient "famine reserves" with a short growing season and extended shelf-life. These superfoods are rich in minerals and dietary fiber.

Combating iron deficiency and surpassing rice and wheat in calcium, iron, and beta-carotene content. Gluten-free and low glycemic, millets are ideal for celiac patients and diabetics. Thus, promotion of millets farming can help in fighting malnutrition. With the aim to create awareness and to increase production & consumption of millets, the United Nations, at the behest of the Government of India, declared 2023 as the **International Year of Millets**. Hence, we believe that the National seminar on "CELEBRATING MILLETS LEGACY & CONTRIBUTION TO AGRICULTURE" would bring new insights into the millet revolution for a healthier, sustainable future. Furthermore, the aim is to establish a shared platform that brings together academics, research scholars, and students to explore and discuss cutting-edge advancements in future food sources. The lectures will also enlighten the young minds and budding research scholars to focus on the latest trends and updates in the nutritional benefits of millets for better health.

- ### OBJECTIVES
1. Encourage local farmers to grow millets to diversify agriculture and income sources.
 2. Support small-scale millet producers and empower rural communities.
 3. Educate consumers on the nutritional benefits of millets for better health.
 4. Raise awareness about the wide variety of dishes that can be prepared from millets.
 5. Promote millet-based snacks as a healthier alternative to processed foods.
 6. Work with schools and colleges to include millets in their meal plans.
 7. Collaborate with chefs to create innovative millet recipes.

- ### SEMINAR THEMES
- Breeding climate resilient millets for global food security.
 - Insect pest and diseases in the millet agro-ecosystem.
 - Pharmacological and nutraceutical properties in Millet grain.
 - Millet in nutrition, health & value added products.
 - Development of early maturing & high yielding varieties in millets.
 - Advances in millet genetic improvement, molecular biology & genomics.
 - Molecular marker assisted selection for biotic & abiotic stress tolerance.
 - Genome-wide association studies & genomic selection of agronomic traits in millets.
 - Nanotechnology applications in millets propagation.

ABSTRACT SUBMISSION GUIDELINES

- Abstract should be within 250 words and the title of the abstract should be relevant to the theme of the conference.
- Abstract should be typed in the MS-Word with Times New Roman font. font size 12 & Line Spacing of 1.5.
- Abstracts are invited via e-mail botanyactivities@gmail.com on or before 03.12.2023.

FULL PAPER SUBMISSION GUIDELINES

Authors are requested to prepare their abstract and paper submissions and send a soft copy through email at botanyactivities@gmail.com. The abstracts and research papers will undergo a peer-review process by experts in the field. The review process may consider criteria such as originality, relevance, methodology, results, and overall quality of the submission. Authors will receive feedback and notifications regarding the acceptance or rejection of their research paper. Accepted full length research articles will be published in the **PHYTOSPECTRUM** (A Bi-Annual Magazine) with ISBN number. For Authors whose papers has been accepted will be published in PHYTOSPECTRUM journal. Separate guidelines will be communicated for paper formatting.

POSTER PRESENTATION DETAILS

The poster should be 4x3 feet, neatly prepared and can be read from distance of 3 feet. The poster content should include introduction, objectives, materials & methods, results & discussion and conclusion.

REGISTRATION DETAILS

Delegates are requested to register their participation by filling the registration link <https://forms.gle/wp21Fb4aQ55sjYpZ8>

CERTIFICATE OF MERIT

The participants will be honoured with appreciation certificate for his/her best oral and poster presentation.

REGISTRATION DETAILS

Registration FEE Details for Participation:

* Students	: Rs. 250
* Research Scholars	: Rs. 300
* Faculties	: Rs. 500
* Industrial experts & others	: Rs. 500
* School Students & Farmers	: Free

Spot Registration Extra Rs. 100
Registration fee includes Kit, Lunch, Refreshment and Certificate.

JOIN FOR EXPO

- **Milleto Foods**
- **Millet Products**
- **Fun with Millets**
- **Millet Kitchen**
- **Millet Bank**
- **Millet Jewels**

BANK DETAILS

Bank Name	: Indian Overseas Bank
Account Number	: 170101000011993
Branch Name	: NGM College Pollachi
IFSC Code	: IOBA0001701

Kindly fill the transaction details and upload the transaction proof during registration.

ACCOMMODATION

Participants shall make their own arrangements for stay, however, accommodation assistance will be provided by the organizing committee on request. The registration fee does not include accommodation charges.



DETAILED REPORT OF THE EVENT

NALLAMUTHU GOUNDER MAHALINGAM COLLEGE (AUTONOMOUS), POLLACHI-01 DEPARTMENT OF BOTANY

Title of the Seminar: “Celebrating Millets Legacy and Contribution to Agriculture- CMLCA-2023”

Organizing Secretary:

Dr. A. Sarvalingam, Assistant Professor of Botany, NGM College, Pollachi, Tamil Nadu.

Objectives:

- Encourage neighbourhood agriculturists to develop millets to broaden agribusiness and pay sources.
- Support small-scale millet producers and empower rural communities
- Educate consumers on the nutritional benefits of millets for better health
- Raise awareness about the wide variety of dishes that can be prepared from millets
- Promote millet-based snacks as a healthier alternative to processed foods
- Work with schools and colleges to include millets in their meal plans
- Collaborate with chefs to create innovative millet recipes



INAUGURATION

A warm welcome was given to the Principal, Convenor, Coordinator, heads of the various Departments, Professors, Resource Persons, and Participants by the M.O.C. team. PG final year botany students sang the state song. The lamp was lit by all the dignitaries on the dais. The welcome address was delivered by Dr. A. Logamadevi, Associate Professor and Head, Department of Botany. She gave a warm welcome to our resource person and Chief Guest of this workshop, Dr. K. Dharmar. She extended her welcome to the principal and staff members of our own Department, PG and Research Department of Botany, Chemistry, Zoology, Yoga, and Commerce, the deans of various Departments, Managers, Research Scholars, and Students.

Felicitations were made with a shawl and memento.

Principal Dr. R. Muthukumaran felicitated the three-day national-level seminar on Celebrating Millets Legacy and Contribution to Agriculture by emphasizing the need to understand the importance of millets. He mentioned the role of millet and millet products. Dr. K. Dharmar, the chief guest of this seminar and expo, elaborated on the role of ICSSR in spreading **the message of millet importance across society**. He also highlighted the role of the chief guest in disseminating scientific knowledge among the farmers, students, research scholars, and faculty.





TECHNICAL SESSIONS

TECHNICAL SESSION 1

The first lecture was delivered by **Dr. K. Dharmar**. He delivered an excellent lecture and shared information on the necessity of millet's contribution to agriculture. He extended his lecture on how millets act as an alternative source of macronutrients. **Key points addressed in this lecture are:** The International Year of Millets stands as a pivotal moment, drawing global attention to the vital role of these small-seeded, resilient grains in nourishing both people and the planet. This designated year serves as a platform to raise awareness, celebrate diversity, and promote the sustainable production and consumption of millets worldwide. Finally, he concluded the speech by saying that this year of small grains serves as a platform to promote sustainable production and consumption of small grains worldwide to create awareness and diversity.



TECHNICAL SESSION 2

The second lecture was delivered by **Mr. V.S. Arunachalam**. He explained about millet production. He added that millets are one of the oldest food grains known to mankind and possibly the first cereal grain used for domestic purposes. **He also mentioned that:** For centuries, millets have been a prized crop in India and are the staple diet of nearly 1/3 of the world's population. They can adapt themselves to marginal soils and varied environmental conditions. Millets are tasty grains that have a mildly sweet, nut-like flavor. Millets are rich sources of protein, dietary fiber, energy, and minerals when compared to rice. He explained the production methods of food products made from small grains and how to market them.



TECHNICAL SESSION 3

Mr. R. Mahendramani gave his lecture. He enthusiastically shared information about wild millet varieties and clearly explained the types of small grains, their detection methods, and their cultivable locations. **The valid points of his special talk are:** Small millets are more than just finger millet (*Eleusine coracana* (L.) Gaertn.) and include kodo millet (*Paspalum scrobiculatum* L.), little millet (*Panicum sumatrense* Roth. Ex Roemer and Schultes), foxtail millet (*Setaria italica* L.), proso millet (*Panicum miliaceum* L.), and barnyard millet (*Echinochloa frumentacea* Link). Millets are most commonly available in the form of pearled and hulled kinds. Millets are a group of small-seeded grasses that have been cultivated for centuries. They are highly resilient and well-adapted to diverse climates, making them a reliable source of nutrition in challenging agricultural conditions. In the face of climate change and unpredictable weather patterns, millets emerge as a resilient and sustainable option for food production. Finally, in his speech, he said that it is very important to identify small grains and protect them.



TECHNICAL SESSION 4

The last session of the first-day seminar was handled by **Mr. E. Senthil Kumar**. He explained about organic farm management practices. He extended his lecture on crop rotation, which is used to maintain soil fertility and improve crop protection from various pests. **His speech included:** Organic nutrient management is based on the improvement of soil organic

The first session of the second day was handled by the resource person, **Dr. M. Girija**. She mentioned that the key advantage of millets is their nutritional value. **She also elaborated the following points in the lecture:** These grains are rich in nutrients such as fiber, vitamins, and minerals. Introducing millet into our diets can contribute to a more balanced and healthier nutrition profile, addressing malnutrition and related health issues. In conclusion, recognizing the importance of millet in the context of food security is crucial. Embracing these resilient grains can lead to a more sustainable and nutritionally diverse food system. As individuals, communities, and nations, let us join hands in promoting the cultivation and consumption of millets to ensure a more secure future. She concluded her speech by saying that it ensures a sustainable future and gave some ideas regarding.



TECHNICAL SESSION 6

The next session was continued by the resource person, **Mr. G. Maren**. He explained the importance of millets and consumption methods. **The point he emphasised in his talk are:** They are also glycemic index-low and gluten-free, making them perfect for anyone with diabetes or celiac disease. Throughout the world, they are being promoted as alternatives to regular cereals to deal with lifestyle-based common diseases such as diabetes, heart disease, etc. He concluded the speech by saying that grains are the best food in the world.



TECHNICAL SESSION 7

This session was handled by **Mr. M. Chandrasekar**. He briefly explained the advantages of organic millet cultivation. **He explained the following key points in his lecture:** Organic farming helps to prevent environmental degradation and can be used to regenerate degraded areas. Organic farming helps to avoid chain reactions in the environment from chemical sprays and dust. Organically grown crops are believed to provide healthier and nutritionally superior food for humans and animals than those grown with commercial fertilizers. Organically grown crops are more resistant to diseases and insects, so only a few chemical sprays or other protective treatments are required. There is an increasing consumer demand for agricultural products that are free of toxic chemical residues. Organically grown products gain importance because of their high quality and premium price, in addition to being free from toxic residues. Organic fertilizers are considered complete plant food. Organic matter restores the pH of the soil, which may become acidic due to the continuous application of chemical fertilizers. As a whole, the adoption of organic farming provides a better and more balanced environment, better products, and better living conditions for human beings.



TECHNICAL SESSION 8

The session was handled by **Dr. V. S. Ramachadran**. He explained about climate change and biodiversity loss in millets. **The key points of his lecture were:** Human activity has already altered over 70 percent of all ice-free land. When land is converted for agriculture, some animal and plant species may lose their habitat and face extinction. But it is playing an increasingly important role in the decline of biodiversity. Climate change has altered marine, terrestrial, and freshwater ecosystems around the world. It has caused the loss of local species, increased diseases, and driven mass mortality of plants and animals, resulting in the first climate-driven extinctions. The threat posed by climate change to biodiversity is expected to increase, yet thriving ecosystems can also help reduce the impacts of climate change. If current rates of warming continue, by 2030 global temperatures could increase by more than 1.5°C (2.7°F) compared to before the Industrial Revolution. A major impact of climate change on biodiversity is the increase in the intensity and frequency of fires, storms, or periods of drought.



Millets Expo

On the third day, Millets exhibition was held. In this exhibition, students of the botany department exhibited more than 25 millet exhibits. More than 20 types of small-grain dishes were also prepared by the students and they explained the importance of small grains to other

department students and farmers at this special expo. More than 300 students, teachers, and farmers visited this expo and enjoyed it.



Valedictory session

The valedictory address was given by the former principal, Dr. N. Rajakumar. He exclaimed the arrangement of the seminar and expo and appreciated the faculty, Department of Botany, their academic innovation, and student empowerment. He advised the students that they should be like an ascending cell sap and be self-confident.



Vote of thanks

The vote of thanks was proposed by Dr. A. Sarvalingam Organizing secretary, department of Botany, NGM College. He conveyed his gratitude to the ICSSR and IOB, NGM College branch, the principal, management, head of the department, participants from other colleges, staff members of the UG and PG Department of Botany, Department of Zoology and Chemistry, scholars and students of UG and PG departments, photographers, technical and non-teaching staff.



Poster Presentation:



Oral Presentation:

