

**Agroforestry
Newsletter**

National Research Centre For Agroforestry, Jhansi-284 003

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NRCAF WELCOMES NEW DIRECTOR GENERAL

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Dr. S. Ayyappan assumes the charge of Secretary, Department of Agricultural Research and Education (DARE) and Director General (DG), ICAR from Dr. Mangala Rai, who retired from service on 31st December, 2009.



Prior to the present assignment, Dr. Ayyappan has served as the Deputy Director General (Fisheries) during 2002-09. Director, Central Institute of Fisheries Education, Mumbai (Deemed University) during 2000-02; Director, Central Institute of Freshwater Aquaculture, Bhubaneswar during 1996-2000; Scientist, Central Inland Fisheries Research Institute, Barrackpore (1978-84); Sr. Scientist and Principal Scientist in the ICAR system (1984-98).

Dr. Ayyappan has made significant contribution to administration and research management of the National Agricultural Research System since 1996. Under his leadership CIFA received the Best ICAR Institute Award 1996. He was the Founder Chief Executive of the National Fisheries Development Board, DAHD &F, Hyderabad.

Dr. Ayyappan has represented the country in several important international fora. He has been invited to serve as Member/Chairman of the Boards of several International institutions/organizations.

Dr. Ayyappan has over 200 publications in reputed journals/proceeding and books. He also has two patents and one design to his credit. He has received a number of prestigious awards and honours - Zahoor Qasim Gold Medal (1996-07), ICAR Award for Team Research for 1997-98 and V.G. Jhingaran Gold Medal (2002). He is fellow and Vice President of National Academy of Agricultural Sciences, India; Asian Fisheries Society, Manila, Phillipines (2004-10) and Vice President, Indian Society of Coastal Agricultural Research (2008-11).

Dr. Ayyappan has served in different capacities in several important committees viz., Chairman, High Level Expert Committee of Development of Freshwater Aquaculture in the country, Govt. of India; Chairman, Working Group and Fisheries for Eleventh Plan, Planning Commission; Chairman, Task Force on Aquaculture and Marine Biotechnology, Department of Biotechnology (2006-09) and Member

of the Project Steering Committee on 'More Crop and Income per Drop of Water', Ministry of Water Resources, Govt. of India (2006-07). He is the member of the Mid-Term Review (MTR) Committee on Agriculture and Allied Sectors for the 11th Plan (2007-2012), Planning Commission, Govt. of India, 2009.

Forthcoming Events

NRCAF Foundation Day (8th May; World Environment Day (5th June); (3) IRC Meeting(24-26 June)

Issue Highlights

- Visit of Hon'ble Secretary, DARE and DG, ICAR New Delhi.
- Training on "Statistical Analysis and Interpretation of Agroforestry Experimental Data"
- Training on "Development of TBOs"
- Trainers Training on "Cultivation of tree borne oil seeds under agroforestry system"
- NRCAF observes "Earth Hour"
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The Director and Staff of NRCAF, Jhansi welcome the New Director General and wish him all the best in his future endeavour.

An overview of Robinia Research in India

Robinia pseudoacacia L. (Black Locust) is a nitrogen-fixing legume, native to southeastern North America and now naturalized extensively in the temperate regions of North America, Europe, and Asia. This tree is useful but underutilized for lumber, poles, wood fiber, land reclamation, beekeeping, fuel and forage. It grows very rapidly, survives droughts and severe winters, tolerates infertile and acidic soils and produces livestock feed nutritionally equivalent to alfalfa (*Medicago sativa* L.).

Significant research has been carried out on *Robinia pseudoacacia* in India from 1970's till date. However, this research work is scattered and available in the form of reports, bulletins, newsletter, articles etc. An attempt has been made at NRCAF, Jhansi in this direction to compile all the published research information on Robinia at one platform in the form of a database, so that it is easily accessible to the students, researchers, planners and policy makers etc. The basic purpose behind designing this database was to bring maximum possible published research information on Robinia species in the country at one platform in the form of easily searchable web pages. The information on the research papers pertaining to Indian context from early 1977 to 2009 has been feeded in this database. This database can be used to trace the following information; the names of all researchers working on Robinia with their affiliation addresses; the names and address of all institutes/ universities working on Robinia; the list of all papers published from an institute; the list of the paper published by an author; list of all papers under a particular subject category out of several pre defined categories, and many more queries.

Synthesis of published information on Robinia in India (1977-2009):

Year wise: The database covers 126 Indian Robinia research records in all from 1977 to 2009, with maximum records published in 1992 (10) followed by 2006 (8) and 2001 (7) records.

Species wise: All the available published articles traced through literature pertains to *Robinia pseudoacacia* only.

Journal wise: The database includes 116 Journals and 9 proceedings. Maximum papers have been published in Indian Forester (28) followed by Indian Journal of Forestry (16).

Author wise: The database conceals 210 Indian authors who have researched on Robinia. The database consists of 159 Indian Institutes/ Universities/ Organizations researching on Robinia with maximum records published from University of Horticulture and Forestry, Solan, Himachal Pradesh (48), followed by Regional Station, Indian Veterinary Research Institute, Kangra, Himachal Pradesh (6).

Subject category wise: One of the important finding of the work is that maximum research has been reported on seed studies having 14 records followed by Growth / Yield Performance consisting of 11 records and Composition/Chemical properties (9).

State wise: Maximum research has been reported from the states of Himachal Pradesh (83), Uttrakhand (20) followed by Jammu & Kashmir (12).

National Research Centre for Agroforestry, Jhansi
Hon'ble Secretary, DARE & DG, ICAR, New Delhi visits NRCAF on 17th
March, 2010

Hon'ble Dr. S. Ayyappan, Secretary DARE and Director General, ICAR & , New Delhi alongwith Dr. Swapan K. Dutta, DDG (CS), Dr. H.P. Singh DDG (Horti.), Dr. M. M. Pandey, DDG (Engg.), Dr. K.D. Kokate, DDG (Ag. Extn.) Dr. Arvind Kumar, DDG (Edn.) and Dr. C.S. Prasad, ADG (ANP) who were at Jhansi in connection with meeting of "National Consultation in Fodder" visited the Centre on March 17th, 2010. They visited the experimental fields and also planted saplings on this occasion. The Hon'ble Director General discussed about the Agroforestry research initiative with particular reference to Bundelkhand region and showed keen interest in research on TBOs by the Centre. All the dignitaries appreciated the research work as well as campus development work specially gardens, etc. On the request of Director, NRCAF and Dr. A. Venkatesh, PI (HPVA of NRG) , Hon'ble Director General released a video film on "**Natural Resin & Gum Yielding Trees**" which gives a brief account of natural resin and gum yielding trees of Bundelkhand in India during the meeting at IGFRI Auditorium.

Hone'ble Dr. H.P. Singh, Deputy Director General (Horti.), ICAR, New Delhi
visits NRCAF, Jhansi

Hon'ble Dr. H. P. Singh, DDG (Horti.), ICAR, New Delhi visited NRCAF, Jhansi on 7th February 2010. During the visit, Director NRCAF gave the account of research activities being carried out by the Centre and it's All Indian Coordinated Research Project on Agroforestry, Network. During the visit to the experimental fields of the Centre, Dr. Singh was very keen to know about the Tree Borne oilseed and Biofuel programme and the technology developed in this area by the Centre. He emphasized that the work on Karanj (*Pongamia pinnata*) is very significant due to its potential for biofuel. He showed keen interest on the research work in the context of climate change on indigenous species such as *Acacia*, *Hardwickia* and others. He was of the opinion that the agroforestry technology based on Horticulture (fruit trees) should get input from the Horticulture institutes of the Council. At the end of the visit he appreciated the research work of the Centre and complemented for the landscaping and beautiful gardens being maintained at the Centre.

TRAINING PROGRAMME ON "STATISTICAL ANALYSIS AND
INTERPRETATION OF AGROFORESTRY EXPERIMENTAL DATA"

Project Coordinating unit of AICRPAF organized a three day training programme on "*Statistical Analysis and Interpretation of Agroforestry Experimental Data*" for the scientists and technical staff working in the AICRP on Agroforestry from 11th – 13th February, 2010 at NRCAF, Jhansi. Total 25 participants from twenty three SAUs attended the programme. The resource persons Dr. Rajendra Prasad, IASRI, New Delhi and Dr. Ajit, Sr. Scientist NRCAF, Jhansi were instrumental in conducting the programme.

TRAINING ON DEVELOPMENT OF TREE-BORNE OIL-SEEDS

NRCAF Organized Two Days Training programme on "Development of Tree Borne Oil Seeds" during 25th to 26th February, 2010 at village Dhikoli of Jhansi district. Fifty farmers of nearby villages attended the programme.

TRAINERS TRAINING ON IMPROVEMENT AND CULTIVATION OF TREE-BORNE OIL-SEEDS

Two Days Trainers Training programme on “Cultivation of tree borne oil seeds(TBOs) under agroforestry system” was organized during 22nd to 23rd March, 2010 at the Centre. Sixty State Agriculture officials, Scientists and NGO representatives attended the programme. The training was aimed at disseminating scientific knowledge on production and cultivation of tree borne oil seeds to grass root level workers for proliferation to end user of technologies.

PME MEETING

PME meeting was held on 05th March, 2010. All the Scientists participated in the PME meeting.

ICAR ZONAL SPORTS

A contingent of 06 participants from the Centre participated in ICAR Zonal Sports Meet at CSWRI, Avikanagar (Raj.) from 10th -14th February, 2010. Sh. Attar Singh got First prize in cycle race.

HUMAN RESOURCE DEVELOPMENT

- Dr. P. Rathakrishnan, Scientist (Forestry) participated in the 97th Session of Indian Science Congress from 3rd to 7th January, 2010 held at University of Kerala, Tiruvanthapuram (Kerala).
- Sh. Hoob Lal, PA attended Hindi Training and Workshop on ”Hindi Ka Vashvikaran Avam Rajbhasha Karyanvayan” from 11th to 16th January,2010 at CIFE, Mumbai(M.H.).
- Dr. Sunil Kumar, Pr. Scientist participated in National Seminar on “Soil Salinity & Water Quality” and presented a paper on “Forage Production on Salt Affected Soils: Constraints and Opportunity” from 19th to 21st January, 2010 at CSSRI, Karnal(H.R.).
- Dr. Sunil Kumar, Pr. Scientist attended training on “Science and Law for Scientists” from 1st to 5th February, 2010 at Administrative Staff College of India, Hyderabad (A.P.).
- Dr. Ramesh Singh, Sr. Scientist participated in the “XXIII National Convention of Agricultural Engineers” organized by Institution of Engineers during 6th to 7th February, 2010 and presented a paper entitled “Estimation of runoff of Nagini watershed using GIS and Remote Sensing” at MPKV, Rahuri (M.H.).
- Dr. R. K. Tewari, Pr. Scientist and Dr. Ramesh Singh, Sr. Scientist of the Centre participated in the Travel Workshop on ‘Extension Strategy for Bundelkhand Region’ organized by the Zonal Project Directorate, Kanpur from 21st to 22nd February,2010 at Chitrakoot(U.P.).
- Ms. M. Kamalvanshi participated in the International Symposium on “Current Status and Opportunities in Aromatic and Medicinal Plants” from 21st to 24th February,2010 organized by CIMAP, Lucknow (U.P.). Presented a poster entitled “Occurrence of Arbuscular Mycorrhizal Fungi in *Jatropha curcas* in arid and semiarid regions of India” and received best poster presentation award.

- Dr. R. H. Rizvi, Sr. Scientist attended 21 days CAFT programme on “Recent Advances in Web Technologies for Information Management in Agriculture” from 16th February to 08th March, 2010 at IASRI, New Delhi.
- Dr. Sunil Kumar, Pr. Scientist, Dr. A. Datta, Sr. Technical Officer and Ms. Rupali Tiwari, RA (IPR project) attended “National Training on Fundamentals of IPR” during 5th to 6th March, 2010 at UPCAR, Lucknow (U. P.).
- Dr. Sunil Kumar, Pr. Scientist attended Meeting cum Workshop on “ICAR Zonal Technology Management and Business Planning and Development (North Zone II)” during 26th to 27th March, 2010 at IVRI, Bareilly(U.P.).

SELECTION

- Dr. R. V. Kumar, Sr. Scientist (Plant Breeding) of the Centre has been selected as Pr. Scientist (Plant Breeding) at IGFRI, Jhansi. He was relieved from his present assignment on 29th January, 2010.
- Dr. A.K. Handa, Sr. Scientist (Agroforestry/Forestry) has been selected as Pr. Scientist (Forestry/ Agroforestry) at the Centre w.e.f. 8th February, 2010.

PROMOTION

- Dr. R. H. Rizvi, Scientist (Sr. Scale) promoted to the post of Sr. Scientist (Computer Application) w.e.f. 20th November, 2008.
- Sh. Sunil Kumar, Tech. Officer (T-6) promoted to the post of Sr. Technical Officer (T – 7/8) w. e. f. 14th May, 2009.

NEW STAFF

Sh. Tridev Chaturvedi joined the Centre as Stenographer (Gr. III) from CSWCR&TI, Research Centre, Datia (M.P.).

DIRECTOR’S VISITS AS PROJECT COORDINATOR, AICRPAF

Dr. S. K. Dhyani, Director & Project Coordinator AICRP on Agroforestry visited AICRPAF centre at BCKV, Kalyani, District Nadia, (West Bengal) from 12th to 13th January, 2010. He visited experimental sites and gave on the spot suggestions to strengthen agroforestry.

VISITORS

- Hon’ble Dr. S. Ayyappan, Secretary, DARE & DG, ICAR, New Delhi
- Dr. Swapan K. Dutta, DDG (CS), ICAR, New Delhi.
- Dr. H.P. Singh, DDG (Horti.), ICAR, New Delhi.
- Dr. M.M. Pandey, DDG (Edn.), ICAR, New Delhi.
- Dr. K.D. Kokate, DDG (Ag. Extn.), ICAR, New Delhi.
- Dr. Arvind Kumar, DDG (Edn.), ICAR, New Delhi.

- Dr. C. S. Prasad, ADG (ANP), ICAR, New Delhi.
- Prof. R. M. Singh, Professor Emeritus, Dept. of Genetics & Pl. Breeding, BHU, Varanasi (U.P.).
- Dr. P.S. Pathak, Ex. ADG (AF), ICAR, New Delhi.
- Dr. S.D. Rai, Ex. ADG, ICAR, New Delhi.
- Dr. A. K. Mishra, Ex. Addl. Commissioner (Horti.), DA&C, New Delhi.
- Dr. V.K. Mishra, Dean, College of Horti. & Forestry, CAU, PASIGHAT (Arunachal Pradesh).
- Sh. Sharma Puran, (Member, IMC), Atmadpur, Agra (U.P.).
- 25 AICRPAF Scientists from 23 SAUs.
- 60 Officials from State Departments and NGOs.

EXIBITION

NRCAF participated in the “Show Casing of Agricultural Technology” during 23rd to 26th February, 2010 at CISH, Lucknow and put up stall to popularize agroforestry technologies.

INSTITUTE JOINT STAFF COUNCIL

Institute Joint Staff Council (IJSC) meeting was held on 30th January, 2010 under the Chairmanship of Director Dr. S. K. Dhyani.

WOMEN CELL

A meeting of Women Cell was held on 30th January, 2010 under the Chairmanship of Director Dr. S. K. Dhyani at NRCAF Jhansi.

NRCAF, JHANSI OBSERVES EARTH HOUR

A brain storming session was held on 27th March, 2010 at NRCAF to observe “Earth Hour”. Efforts made by the Centre were highlighted by several speakers. To give momentum and awareness among the masses, Dr. S. K. Dhyani, Director urged all the staff to observe the Earth Hour and highlight the need to save energy. At the Centre, lights of residential complex and office premises were switched off between 8:30 to 9:30 pm. Dr. Dhyani emphasized that such small savings will lead to reduction in carbon emission which is the main factor responsible for climate change. Although, it is a symbolic activities but it will lead to large scale awareness for environmental conservation.

In addition, Centre has decided in phase manner to replace high energy requiring tube lights and bulbs with low energy requiring CFL to save energy. To encourage the use of renewable energy, Centre has planted different species of tree borne oilseeds (Jatropha, Karanj, Simarouba, Neem and Mahua) in 25 ha at the Centre and installed a bio-diesel plant with a capacity to estrify 40 liter of oil yielding 36 liter biodiesel per day. Tree improvement and



Evaluation trial of *Jatropha curcas L.* germplasm

standardization of improved agro techniques specially for biofuel species are being researched upon. In order to mitigate climate change effects, Centre is promoting agroforestry landuse for higher carbon sequestration and increase green cover as risk partitioning mechanism.

NRCAF, Jhansi is working since its inception towards eco-conservation through agroforestry interventions on watershed basis to secure livelihood in drought prone Bundelkhand region. Garhkundar-Dabar watershed is an exemplary work in this direction. This watershed has amply proved that surface water availability throughout the year can be ensured even with 21 per cent less than normal rainfall. This will not only save huge amount of money but also energy spent on water supply besides reduction in drudgery of women and children in collecting drinking water and migration to the metros.

Observation of Earth Hour at the Centre was widely covered by the local media.

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