



Shri. Bijay Kumar, Principal Secretary (Agriculture) and Shri. S. P. Singh, Agriculture commissioner visited CICR



Shri. Bijay Kumar, Principal Secretary (Agriculture) and Shri. S. P. Singh, Agriculture commissioner, Agriculture Department, Government of Maharashtra visited ICAR-CICR, Nagpur along with Sh. Vijay Ghavate, Mrs. Pradyna Golghate, SAO, Nagpur, Mr Milind Shende, SAO on 25th January, 2018. Interaction was held between them and Dr. V. N. Waghmare, Director (Acting), CICR, Dr. V. S. Nagrare, Dr. Chinna Babu Naik, Dr. R.B. Singandhupe, Dr. G. Balasubramani, discussed the issues related to pink bollworm and

herbicide tolerant (HT) cotton. They visited biotechnology lab, Bt referral lab, tissue culture lab and insectary. Scientists Dr. K. P. Raghavendra, Mr. Rakesh Kumar, Dr. Vivek Shah showed research work on these aspects.



Stop the Global Warming with one Miracle Plant Kenaf

D. Kanjana, K. Sankaranarayanan and S. Usharani

Kenaf – *Hibiscus cannabinus* is coming under the Malvaceae family, related to both cotton and okra and probably native to southern Asia. In English language, it is called as Deccan hemp or Java Jute, in Bengali language, it is Mesta and in Tamil is Pulichakeerai. This 4,000-year-old crop was mainly used for its fiber and is cultivated in India, Bangladesh, United States of America, Indonesia, Malaysia, South Africa, Viet Nam, Thailand and parts of Africa. It has the astonishing ability to grow up to 14 feet in 4 -5 months, yielding 6 – 10 tons of fibre per acre and making it a great source of pulp for paper. There are many different varieties of kenaf, and certain varieties will perform better in certain locations, or under certain conditions than other varieties. The kenaf leaves are rich in

protein (34 percent) and is being consumed by human and animals. Particularly the kenaf fibre was used for making of twine, rope, coarse cloth and paper. Apart from that it is being used for engineered wood, insulating material, grade cloth, soil-less potting mixes, animal bedding, packing material, automobile bodies of vehicle like Ford and BMW and hydro mulch for erosion control. Kenaf seed oil is considered as edible oil, it contains higher amount of omega poly unsaturated fatty acids which are very essential for human health. Recently kenaf plant has been identified as the new weapon to fight against the climate change and related problems. The plant has the ability to inhale huge quantities of our most abundant global warming gas i.e., CO₂ and the plant can absorb 3-8 times more CO₂ than a tree. Approximately, 1.5 tons of CO₂ is needed for the production of 1 ton of dry matter of Kenaf. It means that every hectare of Kenaf consumes 30-40 tons of CO₂ for each growing cycle. During a single growing cycle, each hectare of kenaf consumes the amount of CO₂ that exhaust from 20 cars in whole year. So, with proper management, the kenaf plant can absorb 60-80 tons of CO₂ per year (two crop cycles/yr).

In recent years, CO₂ sequestration was achieved permanently by the building contractor Bill Loftus. He has worked for decades in the green building industry and he realized the abundant fiber of the Kenaf plant would be perfect as a filler to produce light-weight, super-insulating, fireproof concrete blocks that can permanently sequester the carbon. He patented the block, which weighs under 9 lbs, and is currently using it in two pilot projects in Haiti and South Africa, areas that have been hard hit by natural disasters and famine.

References : Khalatbari, A. M., Jaafar, H.Z.E. and Khalatbari, A.A. 2014. The impact of CO₂ enrichment on fiber dimension and lignocellulose properties of three varieties of kenaf (*Hibiscus cannabinus* L.) *Journal of Soil Science and Plant Nutrition*, 14 (3): 676-687

Republic Day - 2018 Celebrations

The 69th republic day was celebrated on 26th January, 2018 at ICAR-CICR, Nagpur. The Indian national flag was hoisted at the hands of Dr. V. N. Waghmare, Director (Acting) and Head, Division of Crop Improvement. On the occasion recreational programs were organized. All the staff including their children enthusiastically participated in the various programs.



At ICAR-CICR, Regional Station, Coimbatore the National flag was hoisted by Dr. A. H. Prakash, Project Coordinator and Head, CICR, Regional Station, Coimbatore. All the staff members of the centre participated in the programme.



Superannuation

Dr. Punit Mohan, Principal Scientist (Economic Botany), Division of Crop Improvement superannuated on 31st January, 2018 from the service of ICAR-CICR on the completion of 62 years of age. On behalf of Institute Research Committee (IRC) a farewell function was organized on 30th January 2018 at seminar hall. Dr. Punit Mohan presented his life time research achievement before IRC. Scientists shared their experiences for their long association with Dr Punit Mohan. Staff welfare club bid farewell to Dr Punit Mohan on 31st January, 2018. CICR staff wishes him a happy and healthy post retired life. At the end of farewell, Dr Dipak Nagrale, Joint Secretary, IRC proposed the vote of thanks.





Produced and Published by:
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Citation : Cotton Innovate, Issue-4 Volume-1, 2018,
ICAR-Central Institute for Cotton Research, Nagpur.

Publication Note: This Newsletter presented online at
http://www.cicr.org.in/cotton_innovate.html

Cotton Innovate is the Open Access CICR Newsletter

The Cotton Innovate – is published weekly by
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