



IIMR

Millets

Monthly
Newsletter



ICAR-Indian Institute of Millets Research, Rajendranagar, Hyderabad. 500 030.

An ISO 9001: 2008 Certified Institute

Serial No. 157

Hyderabad ■ Solapur ■ Warangal

November, 2016

In this issue.....

1. World diabetes day observed
2. Millet and More – A Workshop for Media at Bengaluru
3. Millets Field day for tribal farmers
4. Meeting on creating sustainable biomass supply chain for Ethanol projects.
5. Training Programme on “Empowering millet stakeholders through Processing & Commercialization of Value-added technologies”
6. Sorghum Field day at Kalavacharla
7. Farmers Day organized at Solapur
8. Visitors from China
9. Guest Lectures
10. Institute Bio-Safety Committee (IBSC) meeting
11. Constitution Day Observed
12. Sorghum Stalls
13. Meeting on Biofuel collaborative programme
14. Big mill test to produce ethanol from sweet Sorghum.

World diabetes day observed

World diabetes day on 14 November is a day when millions of people around the world come together to raise aware-



ness of diabetes. It's a global campaign led by the International Diabetes Federation (IDF) with activity taking place around the world. This year, Indian Institute of Millets Research (IIMR) in association with M/s Diabetes Research Society, Panjagutta, Hyderabad, M/s Changing Diabetes in

समाचार सारांश

विश्व मधुमेह दिवस

भारतीय कदन्न अनुसंधान संस्थान, हैदराबाद ने सर्वश्री डायबेटिज रिसर्च सोसाइटी, हैदराबाद, सर्वश्री चेंजिंग डायबेटिज इन चिल्ड्रन, डॉ. अब्दुल कलाम, बेंगलुरु द्वारा संचालित संस्थान तथा पुष्पगिरि आई इंस्टिट्यूट, सिकंदराबाद के सहयोग 14 नवंबर, 2016 को विश्व मधुमेह दिवस का आयोजन किया गया, जिसमें अपने माता-पिता/अभिभावकों के साथ टाइप-1 मधुमेह से ग्रस्त 110 से ज्यादा बच्चों ने भाग लिया। समारोह के प्रारंभ में डॉ. विलास ए टोणपि, निदेशक, भाकअनुसं ने आगंतुकों का स्वागत किया तथा मधुमेह की रोकथाम में कदनों के प्रयोग पर प्रकाश डाला। इस अवसर पर कुछ सांस्कृतिक कार्यक्रमों का आयोजन भी किया गया।

जनजातीय कृषकों हेतु कदन्न प्रक्षेत्र दिवस

भाकअनुसं, हैदराबाद ने एमएस स्वामिनाथन रिसर्च फाउंडेशन, जेस्पोर के संयुक्त तत्वाधान में जनजातीय उप-परियोजना के अंतर्गत 8 नवंबर, 2016 को ओडिशा के कोरपुट जिले के माचरा ग्राम में कदन्न प्रक्षेत्र दिवस का आयोजन किया। इस कार्यक्रम का प्रमुख उद्देश्य उन्नत कदन्न उत्पादन प्रौद्योगिकियों को अपनाने हेतु जागरूकता व विश्वास पैदा करना तथा जनजातीय कृषकों के समाजार्थिकी उत्थान हेतु उनकी लाभप्रदता को बढ़ाना था। लगभग 60 कदन्न कृषकों ने इस कार्यक्रम में भाग लिया। इस कार्यक्रम में डॉ. आर आर चापके, प्रधान वैज्ञानिक ने संस्थान का प्रतिनिधित्व किया।

इथेनॉल परियोजना हेतु निरंतर जैव-भार आपूर्ति शृंखला के सृजनार्थ बैठक

इक्रिसेट में क्रिएटिंग सस्टेनेबल बायो मास सप्लाई चेन फॉर द प्रपोज्ड लिग्नो-सेलुलॉसिक (2जी) इथेनॉल प्रॉजेक्ट्स अंडरटेकन बाय ऑयल पीएसयू विषय पर आयोजित बैठक के प्रतिनिधियों ने 16 नवंबर, 2016 को भाकअनुसं का दौरा किया। भाकअनुसं में लिग्नोसेलुलॉसिक बायोफ्युल उत्पादन को बढ़ावा प्रदान करने हेतु बायोमास सप्लाई चेन मैनेजमेंट के लिए योजना तैयार करने हेतु विचार-विमर्श किया गया। डॉ. विलास ए टोणपि, निदेशक, भाकअनुसं ने भावी बायोइथेनॉल उत्पादन में मीठी ज्वार की निर्णायक भूमिका पर प्रकाश डाला।

प्रसंस्करण एवं मूल्य-वर्धन प्रौद्योगिकियों के माध्यम से कदन्न पणधारकों के सशक्तिकरण पर प्रशिक्षण कार्यक्रम

भारतीय कदन्न अनुसंधान संस्थान में रा.खा.सु.मि. के अंतर्गत आंध्र प्रदेश तथा तेलंगाना के कृषकों के लिए 22-23 नवंबर, 2016 के दौरान प्रसंस्करण एवं मूल्य-वर्धन प्रौद्योगिकियों के माध्यम से कदन्न पणधारकों के सशक्तिकरण पर दो दिवसीय प्रशिक्षण

कार्यक्रम का आयोजन किया गया। इस कार्यक्रम में 42 सहभागियों ने भाग लिया। डॉ. विलास ए टोणपि, निदेशक ने सहभागियों का स्वागत किया तथा इस प्रशिक्षण के उद्देश्य के बारे में संक्षिप्त जानकारी प्रदान की। डॉ. बी दयाकर राव, पाठ्यक्रम निदेशक ने ज्वार मूल्य शृंखला परियोजना एवं उसके प्रभावों के संबंध में जानकारी प्रदान की। डॉ. संगप्पा तथा डॉ. सी दीपिका, वैज्ञानिक इस कार्यक्रम के समन्वयक थे तथा श्रीमती विशाला ए डी ने इस कार्यक्रम को सुकर बनाया।

कालवचर्ला ग्राम में ज्वार प्रक्षेत्र दिवस

तटवर्ती जिलों के धान-पड़ती क्षेत्रों में ज्वार के महत्व के संबंध में कृषकों को जागरूक करने के उद्देश्य से आंध्र प्रदेश के पूर्वी गोदावरी जिले, राजमंड्री के समीप कालवचर्ला ग्राम में 5 नवंबर, 2016 को ज्वार प्रक्षेत्र दिवस का आयोजन किया गया। इस कार्यक्रम में 200 से ज्यादा कृषकों ने भाग लिया। इस अवसर पर मीठी ज्वार कृष्य किस्मों, धान्य एवं चारा संकर बीजों एवं ज्वार खाद्य पदार्थों का प्रदर्शन भी किया गया।

सोलापुर में कृषक दिवस

भाकअनुसं, हैदराबाद के रबी ज्वार केंद्र, सोलापुर के द्वारा मेरा गांव मेरा गौरव कार्यक्रम के अंतर्गत 18 नवंबर, 2016 को महाराष्ट्र में सोलापुर जिले के मालेगांव में ज्वार प्रक्षेत्र दिवस का आयोजन किया गया। इस कार्यक्रम का प्रमुख उद्देश्य अग्रिम पंक्ति प्रदर्शनों के माध्यम से उन्नत कदन्न उत्पादन प्रौद्योगिकियों को अपनाने हेतु जागरूकता व विश्वास पैदा करना तथा खेतों से होने वाली आय को बढ़ाना था। लगभग 50 कृषकों ने इस कार्यक्रम में भाग लिया। डॉ. आर आर चापके, भाकअनुसं., डॉ. के के शर्मा, प्रभारी अधिकारी, रज्वाके, डॉ. एम वाई सम्दुर तथा डॉ. परशुराम पत्रोटी तथा श्री ब्रह्मनाथ पाटील, सरपंच, मालेगांव ने सहभागियों को संबोधित किया।

चीन से आगंतुक

डॉ. हे चुंगुई, वाइस-प्रसिडेंट, गंसु एकेडमी ऑफ एग्रिकल्चरल साइंसेस, अन्निंग डिस्ट्रिक्ट, चीन ने अपने तीन सहकर्मियों के साथ 8 नवंबर, 2016 को भाकअनुसं का दौरा किया। इसके अलावा डॉ. यानन गौन, मिलेट व सोरघम प्रोग्राम के प्रमुख, क्रॉप रिसर्च इंस्टिट्यूट, डॉ. वेइ लिउ, रिसर्च प्रोफेसर, बायो-टेक इंस्टिट्यूट, सुश्री लिंग किन, रिसर्च असोसिएट प्रोफेसर, मिलेट एंड सोरघम प्रोग्राम, क्रॉप रिसर्च इंस्टिट्यूट, शेंडोंग एकेडमी ऑफ एग्रिकल्चरल साइंसेस, इक्रिसेट ने 10 नवंबर, 2016 को भाकअनुसं का दौरा किया। डॉ. विलास ए टोणपि, निदेशक, भाकअनुसं ने उन्हें संस्थान में संचालित अनुसंधान गतिविधियों तथा ज्वार एवं कदन्न को प्रोत्साहन प्रदान करने संबंधी विषयों, व उनके वैकल्पिक उपयोग के संबंध में जानकारी प्रदान की। डॉ. ए वी उमाकांत, डॉ. आर मधुसूदन तथा डॉ. बी वैकटेश भट ने उक्त दौरे का समन्वय किया।

अतिथि व्याख्यान

डॉ. इमरान सिद्दीकी, दल प्रमुख, सीसीएमबी ने 7 नवंबर, 2016 को भाकअनुसं., हैदराबाद में कंट्रोल ऑफ मिरॉसिस इन प्लांट्स पर व्याख्यान दिया। इसके पश्चात भाकअनुसं तथा सीसीएमबी के मध्य सहयोगी अनुसंधान पर परस्पर चर्चा का आयोजन किया गया। डॉ. आर मधुसूदन ने इस परस्पर चर्चा का समन्वय किया। डॉ. एस एन उमाकांत, वरिष्ठ प्रबंधक, वेलबिडिंग आउट ऑफ वेस्ट

(डब्ल्यू ओ डब्ल्यू), आईटीसी लि. हैदराबाद ने 25 नवंबर, 2016 को स्वच्छ भारत की ओर आईटीसी की डब्ल्यू ओ डब्ल्यू पहल पर व्याख्यान दिया। डॉ. सुजय रक्षित ने इस व्याख्यान का समन्वय किया।

संस्थान जैव सुरक्षा समिति की बैठक

संस्थान में अनुसंधान परियोजनाओं में तथा जैव सुरक्षा के कार्यान्वयन में प्रगति पर चर्चा हेतु डॉ. विलास ए टोणपि, निदेशक, भाकअनुसं की अध्यक्षता में 23 नवंबर, 2016 को संस्थान जैव सुरक्षा समिति की बैठक का आयोजन किया गया। समिति ने संस्थान में जारी पराजीनी अनुसंधान परियोजनाओं तथा कार्यान्वित जैव-सुरक्षा उपायों की समीक्षा की।

संविधान दिवस

भाकअनुप के दिशा-निर्देशों के अनुसार भारतीय कदन्न अनुसंधान संस्थान, हैदराबाद में 26 नवंबर, 2016 को संविधान दिवस समारोह का आयोजन किया गया। डॉ. विलास ए टोणपि, निदेशक, भाकअनुसं ने संविधान की प्रस्तावना का वाचन किया तथा डॉ. बी आर अम्बेडकर का अभिनंदन किया। इस कार्यक्रम में संस्थान के संपूर्ण स्टाफ ने भाग लिया।

ज्वार स्टाल

भाकअनुसं, हैदराबाद में स्टाल

भाकअनुसं, हैदराबाद ने 13 नवंबर, 2016 को भारतीय चावल अनुसंधान संस्थान, हैदराबाद में कृषक दिवस-2016 के दौरान कदन्न स्टाल लगाया। लगभग 2000 कृषकों ने इस कार्यक्रम में भाग लिया। डॉ. जे एस संधू, उप महानिदेशक (फसल विज्ञान) भाकअनुप ने उक्त कृषक दिवस का उद्घाटन किया तथा भाकअनुसं के द्वारा किए जा रहे कदन्न मूल्य-वर्धन की सराहना की।

इंडियन इंटरनेशनल ट्रेड फेयर 2016 में स्टाल

भाकअनुसं, हैदराबाद ने कदन्न के स्वास्थ्यवर्धक उत्पादों एवं प्रसंस्करण प्रौद्योगिकियों के प्रदर्शनार्थ 14-27 नवंबर, 2016 के दौरान प्रगति मैदान में आयोजित इंडियन इंटरनेशनल ट्रेड फेयर 2016 में कदन्न कीओस्क का आयोजन किया गया। भारत के राष्ट्रपति श्री प्रणव मुखर्जी ने उक्त फेयर का उद्घाटन किया। लगभग 7000 लोगों ने इस फेयर में भाग लिया। इस फेयर में श्री रामस्वरूप मीणा तथा श्री डी एन मुखर्जी ने संस्थान का प्रतिनिधित्व किया।

रागाविसं, द्वारा आयोजित क्राफ्ट मेला, हैदराबाद में स्टाल

भाकअनुसं, हैदराबाद ने राष्ट्रीय ग्रामीण विकास तथा पंचायती राज संस्थान, हैदराबाद के द्वारा 22-28 नवंबर, 2016 के दौरान आयोजित क्राफ्ट मेले में कदन्न स्टाल लगाया। दो हजार से ज्यादा लोग स्टाल पर आए।

जैव-ईंधन बैठक

शर्करा मिलों में बायोइथेनॉल उत्पादनार्थ मीठी ज्वार की संभावनाओं का पता लगाने हेतु डॉ. एस रघु, अनुसंधान एवं विकास प्रमुख तथा ए नागशेषरेड्डी, वरिष्ठ महाप्रबंधक, ईआइडी पैर्री (इंडिया) लि. ने 28 नवंबर, 2016 को संस्थान का दौरा किया।

आगंतुक

उद्यमी

श्री अर्जुन राव, प्रबंधक, राही सीड्स तथा हेल्थ फूड्स, राजमंड्री ने दो मार्केटिंग अधिकारियों के साथ 27 नवंबर, 2016 को भाकअनुसं का

दौरा किया। उन्होंने ज्वार व अन्य कदन्न खाद्य पदार्थों के उत्पादन एवं मार्केटिंग में रुचि दर्शायी। डॉ. विलास ए टोणपि, निदेशक तथा डॉ. बी दयाकर राव, प्रधान वैज्ञानिक ने उक्त चर्चा में भाग लिया।

एमएसएसआरएफ, कोरापुट से पदाधिकारी

एमएस सावामिनाथन रिसर्च फाउंडेशन, जेयपोर, कोरपुट, ओडिशा से श्री तूसार नायक, वरिष्ठ वैज्ञानिक, श्री अजीत कुमार साहू, तकनीकी सहायक एवं प्रक्षेत्र कर्मचारी श्री राजदीप बेहरा तथा श्री पूर्ण सीएच सामंत्रेय ने 5 नवंबर, 2016 को भाकअनुसं का दौरा किया। उन्होंने डॉ. विलास ए टोणपि, निदेशक से भेंट की तथा डॉ. टोणपि ने उन्हें संस्थान की अनुसंधान एवं विस्तार गतिविधियों से अवगत कराया।

दूरदर्शन वार्ता

डॉ. टी जी नागेश्वर राव, प्रधान वैज्ञानिक, भाकअनुसं ने तेलंगाना कृषकों हेतु वार्ता शो में दूरदर्शन लाइन में भाग लिया तथा 20 नवंबर, 2016 को डीडी यादगिरि चैनल, हैदराबाद पर सायं 6.30-7.30 बजे के दौरान जोन्ना पंटलो सस्य रक्षण पर बल दिया।

पारंगत हिंदी प्रशिक्षण कार्यक्रम

भाकअनुप - भारतीय कदन्न अनुसंधान संस्थान, हैदराबाद में केंद्रीय हिंदी प्रशिक्षण उप-संस्थान, राजभाषा विभाग, गृह मंत्रालय, भारत सरकार के सहयोग से 01 - 29 नवंबर, 2016 के दौरान "पारंगत हिंदी प्रशिक्षण कार्यक्रम" का आयोजन किया गया। इस प्रशिक्षण कार्यक्रम में भाग लेने हेतु संस्थान के कुल 15 पदाधिकारियों को नामित किया गया। इस प्रशिक्षण कार्यक्रम के दौरान श्री जयशंकर प्रसाद तिवारी, सहायक निदेशक, केंद्रीय हिंदी प्रशिक्षण उप-संस्थान, हैदराबाद ने प्रशिक्षक के रूप में अपनी सेवाएं प्रदान की। कार्यक्रम के प्रारंभ में डॉ. के बी आर एस विशारदा, प्रधान वैज्ञानिक तथा प्रभारी अधिकारी, हिंदी कक्ष ने कार्यक्रम में उपस्थित पदाधिकारियों का स्वागत किया तथा प्रशिक्षक के रूप में पधारे श्री तिवारी जी का परिचय प्रस्तुत किया। डॉ. विलास ए टोणपि, निदेशक, भाकअनुसं के द्वारा औपचारिक से रूप उक्त प्रशिक्षण कार्यक्रम का उद्घाटन किया गया। श्री तिवारी जी ने उक्त प्रशिक्षण कार्यक्रम की संक्षिप्त रूपरेखा प्रस्तुत करते हुए कहा कि राजभाषा कार्यान्वयन हमारा दायित्व है और उसमें आने वाली समस्याओं का निराकरण इस पाठ्यक्रम के द्वारा किया जाता है। डॉ. टोणपि ने उक्त प्रशिक्षण कार्यक्रम की उपयोगिता के संदर्भ में कहा कि संस्थान में राजभाषा कार्यान्वयन हेतु हम पूरी तरह प्रयासरत हैं और इस तरह के कार्यक्रमों के आयोजन से संस्थान के कार्मिकों के द्वारा हिंदी में कार्य करने के कौशल में वृद्धि होगी और हम राजभाषा विभाग द्वारा निर्धारित लक्ष्यों तक पहुंचने में सक्षम होंगे। कार्यक्रम के अंत में डॉ. महेश कुमार, तकनीकी अधिकारी (राजभाषा) के द्वारा धन्यवाद ज्ञापन के पश्चात समारोह का समापन हुआ। इस 20 दिवसीय प्रशिक्षण के दौरान प्रशिक्षार्थियों में राजभाषा नियम-विनियम से अवगत कराने के अलावा हिंदी में टिप्पण व आलेखन का अभ्यास भी कराया गया। प्रशिक्षण के अंत में 29 नवंबर, 2016 को आयोजित दो परीक्षाओं अर्थात् प्रश्न पत्र -1 तथा प्रश्न पत्र - 2 के साथ उक्त प्रशिक्षण कार्यक्रम का समापन हुआ। उक्त परीक्षा सत्रों के दौरान डॉ. जी श्याम प्रसाद, प्रधान वैज्ञानिक तथा डॉ. महेश कुमार, तकनीकी अधिकारी (राजभाषा) ने क्रमशः केंद्र अधीक्षक तथा सहायक अधीक्षक की भूमिकाएं निभाई। इस पूरे प्रशिक्षण कार्यक्रम का समन्वय एवं संचालन डॉ. टोणपि के दिशा-निर्देश में डॉ. विशारदा तथा डॉ. महेश कुमार के द्वारा किया जा रहा है।

Children (CDiC), Institute floated by Dr. Abdul Kalam, Bangalore and Pushpagiri Eye Institute, Secunderabad organized the world diabetes day on 14 November, 2016. More than 110 children diagnosed for type -I diabetes participated along with their parents and guardians in this programme.

At the outset, Dr. Vilas Tonapi, Director, IIMR, welcomed the group and briefed about the role of millets in controlling diabetes, their low glycaemic index and nutritional values. Dr. PV Rao, renowned diabetologist from Diabetes Research Society (DRS), Hyderabad, which is currently generous to adopt 450 diabetic children, was the Chief Guest. Dr. Rao in his address stressed the need for regular check-up and timely treatment for diabetics. He also announced this year, his society will accept another 50 children with the help of "Changing diabetes in Children – (CDiC)", Bangalore. Sh. Ramesh represented the CDiC Bangalore, and appreciated the efforts put by IIMR and DRS together in organizing this awareness campaign. Prior to this Sh. Vijay S Kiran, Optometrist from Pushpagiri Eye Institute, Secunderabad explained in detail about the "Diabetic retinopathy", which affects blood vessels in the light-sensitive tissue called the retina. It is the most common cause of vision loss among people with diabetes and the leading cause of vision impairment and blindness in type - I diabetic children and adults. Dr. B Dayakar Rao, PI - CoE on Sorghum, IIMR explained IIMR's efforts in novel and value addition initiatives from millets. He also assured to bring out some more delicious millet food products with low GI value in coming days.

As 14 November is also celebrated as Children's Day in India, to mark this occasion, cultural programmes and painting competitions were also conducted and prizes were distributed to the winners. Dr. P Indrasen Reddy, Diabetologist from DRS and Sh. MSR Sharma, Drs. KN Ganapathy, B Venkatesh Bhat, Sangappa C, Amasiddha B, Sh. Vilas Aghav, Raghunath Kulakarni, Harshal Gawali, V Ravi Kumar, S Narender and Dr. KV Raghavendra Rao coordinated to organize this event.

Millet and More – A Workshop for Media at Bengaluru, Karnataka

An exclusive workshop was organized by Government of Karnataka in collaboration with ICAR- Indian Institute of



Millets Research (IIMR), Hyderabad and ICRISAT, Patancheru for Print and Electronic Media persons including Journalists, Editors, Bloggers and Writers on 18 November 2016 at Green Path 'Organic State'- Malleswaram, Bengaluru, Karnataka. Where in a Media Information, discussion was conducted as a curtain raiser to a new campaign to Popularize Millets.

Various experts in millets research, nutrition, food and the environment participated in the workshop and had sample a range of foods. The session was hosted and chaired by the Hon. Mr Krishna Byre Gowda, Minister of Agriculture, Karnataka, Dr. Vilas A. Tonapi, Director, IIMR, and Dr. B. Dayakar Rao, Principal Scientist were a part of the workshop and Joanna Kane-Potaka, Director –Strategic Marketing and Communications, ICRISAT, and her team coordinated this programme.

Millets Field day for tribal farmers at Orissa

Indian Institute of Millets Research (IIMR), Hyderabad and MS Swaminathan Research Foundation (MSSRF), Jeypore jointly organized a Millets Field day exclusively for tribal farmers on 8 November, 2016 at Machara village in Koraput district, Odisha under tribal sub plan (TSP). The main objective of the programme was to create awareness and build-up confidence to adopt improved millets production tech-



nologies and increasing profitability for socio-economic upliftment of the tribal farmers. Around 60 millet farmers attended this programme. Dr. Rajendra Chapke, Principal Scientist, IIMR welcomed the participants and provided orientation about improved millets cultivation, and IIMR efforts to enhance the grain and fodder yields from millets cultivation. Dr. Prashan Kumar. Parida, Sr. Scientist, Dr. Akshaya Kumar Panda, Sr. Scientist, Mr. Neeranjan Gauda, Mr. Pratap Chandra Jena, Mr. Jagannath Khillo, SRF, Dr. S Malavannan, MSSRF, Jespore. Scientists from MSSRF addressed the farmers.

Prior to this programme, farmers visited the demonstration plots of Finger Millet (Subra, Chilika, GPU 66, GPU 67). The farmers were highly impressed with the performance of demonstrated in comparison with their local cultivars. It was followed by interactive session where IIMR and MSSRF scientists who addressed the gathering on advanced production and protection technologies, health advantages and overview of TSP program. IIMR also set up a millet stall at the venue and showcased the millets seeds and millet health food products. Useful literature was also distributed to them.

Meeting on creating sustainable biomass supply chain for Ethanol projects.

The delegates who attended a meeting on “Creating sustainable bio mass supply chain for the proposed Lignocellulosic (2G) ethanol projects undertaken by oil PSUs” jointly organized by working group Bio fuels, Ministry of Petroleum and Natural Gas, Department of Biotechnology, ICRISAT and IIMR-Hyderabad, during 15-16 November, 2016 at ICRISAT, Patancheru visited IIMR on 16 November,



2016. The Indian Institute of Millets Research, hosted half a day session to discuss the road map for biomass supply chain management for promotion of lignocellulosic biofuel production. Dr. Vilas A Tonapi, Director, IIMR enlightened the team on the pivotal role of Sweet sorghum as a most potent source in bioethanol production. A total of 70 high level delegates from Ministry of Petroleum and Natural Gas, Department of Biotechnology, Ministry of New and Renewable Energy, Oil marketing companies including HPCL, BPCL, IOCL, MRPL, PEDDA, PRESPL, Reliance Industries, Praj Industries, GUJCOT, CSMCRI and ICRISAT participated in the deliberations.

Training Programme on “Empowering millet stakeholders through Processing & Commercialization of Value-added technologies”

Indian Institute of Millets Research organized a two-day training programme entitled “Empowering millets stakeholders through Processing & Commercialization of Value-added technologies” during 22- 23 November, 2016, for Andhra Pradesh and Telangana farmers under NFSM project. A total of 42 participants from different districts of AP and Telangana participated in this programme. Dr. Vilas A Tonapi, Director, IIMR welcomed the participants and briefed them about the purpose of organizing this training programme. Dr B Dayakar Rao, Course Director, IIMR presented the overview of sorghum value chain project and experiences and its impact. Guest lectures were delivered

by Mr. Sai Krishna Popuri MD, Fountainhead Foods Pvt Ltd. Hyderabad, Dr. Bhaskarachary, Scientist-D, NIN, Hyderabad,



Dr. K Uma Maheswari, Principal Scientist, Hyderabad besides IIMR Scientists Drs. C Aruna and PG Padmaja. The other topics covered during these lectures were: Crop improvement in Millets; Nutritional value of millets; Establishment of Millet Processing Unit – Learning experiences; Post-Harvest Technologies; Product development technologies. Demonstration and operation of primary processing equipment was done by Mr. Thomas Nicodemus, Ex-ICRISAT, Mrs. Vishala Devender and Ms. Arlene Christina. A. Kiranmai and other staff demonstrated the preparation of recipes from millets Drs. Sangappa and C. Deepika, Scientists were the course coordinators and facilitator for this event was Mrs. Vishala AD.

Sorghum Field day at Kalavacharla, Andhra Pradesh

The Sorghum field day was successfully conducted at Kalavacharla village, near Rajahmundry, East Godavari district, Andhra Pradesh on 5 November 2016. This program was organized to make the farmers aware about importance of sorghum in the rice-fallows of coastal districts and uplands of Andhra Pradesh in general, and particularly in



Agency areas in Godavari districts. The program was also intended to serve as pre-sowing campaign for transfer of sorghum crop management practices in a mega scale. More than 200 farmers participated and got acquainted with the techniques of sorghum cultivation.

Dr. TG Nageshwar Rao, Principal Scientist, IIMR, in his inaugural address explained the benefits of sorghum cultivation in rice fallows and their higher economic returns and the health benefits of the sorghum. Dr. Shiva Rao, Principal Scientist and in-charge, KVK, Kalavacharla, was the Chief Guest. Dr. AV Umakanth, Principal Scientist, IIMR delivered a lecture on the cultivation of sweet sorghum and forage sorghums and their alternate uses. Dr. S Ravi Kumar, Sr. Scientist, IIMR explained the farmers about the package of

practices for the cultivation of grain sorghum and forage sorghum, and Dr. KV Raghavendra Rao, CTO briefed about the value addition, other millet food products and their nutritional values. Sh. Raghunath Kulakarni, Technical Officer discussed the seed related issues. Sorghum cultivation practices were screened by Sh. HS Gawali, ACTO. The other dignitaries who spoke on this occasion were: Dr. Krishna Rao, ADA, Rajanagaram, Mr. Maheashwer Rao, Chairman, ATMA, Rajanagaram, Mr. John babu, ACTO, KVK, Kalavacharla. On the other hand, Sweet sorghum cultivars, Seeds of grain and forage hybrids and sorghum food products were displayed at the venue. This event was organized with the cooperation of Mr. Arjuna Rao, Manager, Rahi seeds and the programme was widely covered in the local print media.

Farmers Day organized at Solapur, Maharashtra

Centre on Rabi Sorghum, a regional station of Institute of Millets Research (IIMR), Hyderabad organized a “Sorghum Farmer’s Day” at Mulegaon village in Solapur district, Maharashtra under Mera Gao Mera Gaurav programme on 18 November, 2016. The main objective of this programme was to create awareness and build-up confidence to adopt improved sorghum production technologies through frontline demonstrations (FLDs) and enhance farm income of the farmers. About 50 sorghum farmers attended and actively participated in the interactive sessions.

The Scientists from IIMR, Dr. Rajendra R Chapke, Dr. KK Sharma, Officer In-charge, CRS, Dr. MY Samdur, and Dr.



Parsuram Pathroti, Mr. Bramhanath A Patil, Sarpanch, Mulegaon village and State Government officials addressed the gathering on sorghum development and alternative uses emphasizing its health advantages. There was a scientists-farmers interaction session, where scientists clarified various questions raised by the farmers. At the end of the programme, Farmers visited exhibition stall and queried about procedures for preparation of different sorghum food products and its marketing.

Visitors from China

Dr. He Chungui, Vice-President, Gansu Academy of Agricultural Sciences, Anning district, Lanzhou, Gansu, China along with 3 colleagues who were attending a training program at ICRISAT, Patancheru, visited IIMR to learn the progress in forage sorghum research on 8 November, 2016.



Also delegates from Shandong Academy of Agricultural Sciences, Shandong, China visited IIMR on 10 November, 2016 as per their curriculum of the training programme held at ICRISAT, Hyderabad. The team consisted of Dr Yanan Guan, Head of Millet and Sorghum Program, Crop Research Institute, Dr. Wei Liu, Research Professor, Bio-tech Institute, Ms. Ling Qin, Research Associate Professor, Millet and Sorghum Program, Crop Research Institute, Shandong Academy of Agricultural Sciences. ICRISAT.

Dr. Vilas A Tonapi, Director, IIMR explained the team on the



institute's research activities and on the issues related to promotion of sorghum and millets, and their alternate uses, Forage and sweet sorghum as a biofuel crop. The group also visited Centre of Excellence and other labs. The IIMR Scientists Drs. AV Umakanth, R Madhusudhana and B Venkatesh Bhat coordinated their visits at IIMR.

Guest Lectures

Dr. Imran Siddiqi, Group Leader, CCMB made a presentation on "Control of Meiosis in Plants" on 7 November, 2016



at IIMR, Hyderabad. This was followed by interactive discussion with scientists of IIMR on the issues associated with collaborative research between IIMR and CCMB. Dr. R Madhusudhana coordinated this interactive program. Prior to

this session, Dr. Imran Siddiqi, and his colleague Dr. Yelam Sreenivasulu, visited IIMR met Dr. Vilas A Tonapi, Director, IIMR, and discussed about the current research priorities and programs on various millet crops.

Mr. SN Umakanth, Senior Manager - Wellbeing out of Waste (WoW), ITC Ltd, Hyderabad, delivered a lecture on



"WoW initiative of ITC towards Swachh Bharat" on 25 November 2016 at IIMR. Dr. Sujay Rakshit, Principal Scientist, coordinated this lecture.

Institute Bio-Safety Committee (IBSC) meeting

Meeting of the Institute Bio-safety Committee (IBSC) was held on 23 November, 2016 at IIMR-Hyderabad, under the Chairmanship of Dr. Vilas A Tonapi, Director, IIMR to discuss the progress of research projects and implementation of the biosafety issues at the institute. Other members of the committee were: Prof. KV Rao, CPMB, Osmania University (DBT-Nominee), Dr. SM Balachandran, Principal Scientist, IIRR (External Expert), Dr. P Rajendra



Kumar, Principal Scientist, IIMR (Member Secretary), Drs. KBRS Visarada and D Balakrishna (IIMR members). The committee reviewed the progress of on-going transgenic research projects with the PIs and biosafety measures implemented by the Institute. No bio-hazards were recorded at IIMR-Hyderabad according to the Medical Officer, Dr Nuzhath Fatima.

Constitution Day Observed

The 'Constitution Day', also known as "Samvidhan Divas", was celebrated on 26 November 2016 at Indian Institute of Millets Research (IIMR) as per the guidelines from the ICAR. Dr. Vilas A Tonapi, Director, IIMR read the Preamble of the Indian Constitution, and paid compliment to Dr. BR Ambedkar, who played a seminal role in framing of the Indian Constitution as the Chairman of the Drafting Committee of Constituent Assembly. Director, IIMR also advised the staff of IIMR to spread awareness of Indian Constitution and its architecture because it implies exposing all to the Constitution, its salient features, enlightening about fundamental rights, shaping all to develop a positive attitude. On this occasion, Dr. DM Bahadure, STO,

explained about the events that took place in pre-independence era while constituting a committee on Indian constitution and the role of Dr. BR Ambedkar. All the staff of IIMR, including scientists, technical, administrative staff, RAs, SRFs, students and contractual staff, actively participated in this event.

Sorghum Stalls

Savayava (Organic) and Siri Dhanya (Millet) Mela, Bengaluru , Karnataka

The Indian Institute of Millets Research, Hyderabad organized a millet exhibition stall to showcase millet based value added products in a one-day organic trade fair 'Savayava and Siri Dhanya Mela', organised jointly by Jaivik Krishik Society, Department of Horticulture and the Department of Agriculture Govt. of Karnataka on 19th November. The exhibition was inaugurated by Honorable Agriculture Minister of State Karnataka, Shri. Krishna Byre Gowda and appreciated the efforts made by IIMR in creating the demand for millets



through various efforts in the value chain development He praised the products made by our institution and the brand "eatrite" and informed all dignitaries and the gathering. IIMR stall was visited by more than 400 participants including BSN. Reddy, Rt. IGP, Director of KSRTC; Pandurang B Naik, Commissioner of Agriculture; S. Raghu, MLA, CV Raman Nagar, Bengaluru; Delegates from Department of Agriculture and Horticulture; ICRISAT, Hyderabad and UAS Bengaluru delegates, Farmers/ entrepreneurs of millet stalls and local people resided in Bengaluru. The visitors were explained about the health benefits of millets, cultivation practices and role of millets in Indian food basket. Samples of millet food products were also distributed. The event was organized by Ms. KP Sravana Varalakshmi and Ms. S Geetha, project staff at ICAR-IIMR, Hyderabad.

IIMR Stall at IIRR, Hyderabad, Telangana

ICAR – IIMR, organized an exhibition stall during Farmer's Day – 2016 held at ICAR – Indian Institute of Rice Research, Hyderabad on 13 November 2016. More than 2000 farmers and dignitaries from various organizations across the state and India visited the stall. Millet Value added technologies were demonstrated to farmers, entrepreneurs and delegates during the Farmers' day. Dr. JS Sandhu, DDG (Crop Science), ICAR, inaugurated the exhibition, appreciated the efforts made by the IIMR on Millets Value Addition. Dr. Vilas A Tonapi, Director, IIMR appraised DDG about new initiatives on millets value addition. This activity was coordi-



nated by Dr. Sangappa, Scientist, Dr. Sashidar Reddy, Pr. Scientist, and NFSM Project Staff including Ms. Kiranmai.

Millets Stall at IITF 2016 trade show, New Delhi

ICAR – IIMR, set up a millets kiosk at Indian International Trade Fair (IITF) organized at Pragati Maidan, New Delhi from 14 Nov to 27 Nov, 2016 showcased mainly the millet health foods and processing technologies. The fair was inaugurated by the President of India, Shri Pranab Mukherjee on November 14, 2016. The IITF 2016 trade show has been known for its massive scale and carnival like atmosphere which has attracted wide variety of buyers and sellers from within the country and overseas. This year, over 150 companies from 27 countries took part in the fair and as many as 7000 participants visited this fair. The domestic participation profile covers all the States and Union Territories, Central Government Ministries,



Departments, Public Sector Undertakings, Export Promotion Councils, Corporate and non-government organisations. Hon'ble Union Minister of Agriculture, Sri Radha Mohan Singh appreciated the efforts of IIMR in promoting millet based nutritious products. Sh. RS Meena and Sh. DN Mukherjee represented the IIMR, Hyderabad.

Millet Stall at NIRD "Crafts Mela", Hyderabad

IIMR organized the millets stall at the "Crafts Mela" organized by National Institute of Rural Development and Panchayat Raj (NIRD-PR), at Hyderabad from 22 to 28 December, 2016. More than 2000 visitors including dignitaries, Students, general public visited the millet stall. The visitors envisaged keen interest in the newly developed technologies especially on the health products from sorghum grain and multi millet grains.

Meeting on Biofuel collaborative programme

Dr S. Raghu, Head-R&D and A Nagaseshreddy, Senior General Manager, EID parry (India), Limited, Chennai visited IIMR on 28 November, 2016 to discuss the possible collaboration between IIMR and EID Parry on exploiting sweet sorghum for bioethanol production in the sugar mills owned by EID Parry. It was decided to continue the collaboration un-



der the existing MoU. Dr AV Umakanth, PI (Sweet sorghum) coordinated the meeting.

Millet Network convention at Teen Murty Bhavan, New Delhi

A meeting on Millet Network Convention was held on 29 November, 2016, to strengthen Millet improvement, popu-



larization and sustainable development of Millets across the drylands for food and nutritional security at Teen Murty Bhavan, New Delhi.

Visitors

Entrepreneurs

Mr. Arjun Rao, Manager, Rahi seeds and health foods, Rajahmundry along with two marketing officers visited IIMR on 27 November, 2016. In particular, they evinced keen interest in production and marketing of sorghum and other millets health foods. Mr. Arjun Rao had a detailed discussion with the Dr. Vilas A Tonapi, Director and Dr. B Dayakar Rao, Principal Scientist. He expressed his keen interest to sign a MoU with IIMR for technical support for production and marketing of millet health foods.

Officials from MSSRF, Koraput

Mr. Tusar Nayak, Sr. Scientist, Ajit Kumar Sahu, Technical Assistant and field staff Mr. Rajdeep Behera and Mr. Purna Ch Samantray of MS Swaminathan Research Foundation (MSSRF), Jeypore, Koraput, Odisha visited IIMR, Hyderabad on 5 November, 2016. They met DR. Vilas A Tonapi, Director, IIMR and were acquainted with the research and exten-

sion activities of IIMR. They visited the millets food value addition lab and later on served millet lunch. This MSSRF Centre is actively associated with IIMR in the popularization of improved cultivars of sorghum and millets in the tribal and hilly areas in the state of Orissa. This visit was coordinated by Dr. B Venkatesh Bhat, Principal scientist.

Home Science Students from Madurai

A group of 32 final year B. Sc. (Home Science) students from College of Agriculture, TNAU, Madurai, Tamil Nadu, visited IIMR on 5th November, 2016. They were made aware about research activities on sorghum improvement and processing of different millets food products and their nutritional value. They also visited the Centre of Excellence unit. Dr. Rajendra R Chapke, Principal Scientist coordinated this visit.

Students from Permbalur, Tamil Nadu

A group of 94 B.Sc. (Agri.) students along with 3 staff members from Agriculture College and Research Institute, Permbalur, Tamil Nadu visited IIMR on 16 November, 2016. They were briefed about the research activities at the institute and preparation of value-added products and health foods from sorghum. They also visited various laboratories. Relevant literature was also provided on latest improved technologies and different sorghum food products. This programme was coordinated by Dr. Rajendra R Chapke, Principal scientist.

Trainees from CRIDA

Fifteen trainees including Scientists and Agriculture Officers from various SAUs through CRIDA, Hyderabad visited IIMR on 24, November, 2016 as a part of their visits to local ICAR research institutes and to get exposure about the millet research and developments. Dr. B Dayakar Rao, Principal Scientist, IIMR briefed them on the institute's research activities and millet value added products and their nutritive values, in particular. It was followed by visit to the food processing lab where they interacted with the experts on sorghum and millet foods preparation and their marketing. The team was led by Dr. N Showri Raju, Scientist, CRIDA.

Students from Uttar Pradesh

A group of 30 students of final year B.Tech, M.Tech, and M.Sc., Biotechnology from Mangalyatan University, Beshwan, Aligarh, Uttar Pradesh, visited IIMR on 21 November, 2016. Dr. RR Chapke explained the team about the latest production technologies developed at the institute. The team also visited the centre of excellence on value addition to sorghum and millets.

Students from Tamil Nadu

A group of 73 student final year B. Sc. (Agri.) from College of Agricultural, Killikulam, TNAU, Tamil Nadu, visited IIMR on 29 November, 2016 as a part of their educational tour to Hyderabad. Dr R R Chapke, addressed the students and talked on the importance of sorghum and millets and its value addition. They also visited Centre of Excellence (CoE) to familiarize with the transfer of technology in sorghum and millet value added food products.

Dr. ASN Reddy , Vice President, National Seed Association

Dr ASN Reddy, Vice President, National Seed Association of India visited IIMR on 25 November, 2016 to discuss the pos-



sibility of creating Millets value chain clusters across India.

Millets germplasm exploration and collection in Jharkhand, Chhatisgarh and Orissa

The collaborative millets germplasm exploration programme was undertaken by Indian Institute of Millets Research (IIMR) – Hyderabad and NBPGR, Regional Station – Ranchi during 12-22 November 2016. Drs M Elangovan, Principal scientist, IIMR and Santhosh Kumar Bisnoi from NBPGR conducted these explorations from Jharkhand, Chhattisgarh and Odisha states. In the present millets exploration six districts in Chhattisgarh (Janjgir-champa, Jashpur, Korba, Koriya, Surguja and Surajpur), Jharkhand (Gumla and Ranchi) and Odisha (Bargarh and Sambalpur) were covered and collected total 126 accessions. The accessions were collected in the range of 168 – 1123 m altitude. There were 88 accessions of sorghum and other millets and 28 other than millet crops collected. The collection particulars are as follows: Sorghum (20 acc.), Niger (20 acc.), Barnyard millet (19 acc.), Horse gram (18 acc.), Finger millet (17 acc.), Kodo millet (15 acc.), Little millet (14 acc.), Foxtail millet (2 acc.) and Pearl millet (1 acc.). There were 10 wild relatives of millets collected which include *Echinochloa oryzicola* (4 acc.), *Echinochloa oryzoides* (2 acc.), *Eleusine indica* (1 acc.), *Setaria pumila* (1 acc.) and *Setaria viridis* (1 acc.) *Paspalum scrobiculatum* (1 acc.). The following ethnic groups extended co-operation to collect the material viz., Gond, Kanwar, Cherwa, Orawn, Munda, Ruhidash, Rajwade, Rathia, Saav and Samar.

TV talk

Dr. TG Nageshwar Rao, participated in TV line in talk show for farmers of Telangana and enlightened about “Jonna Pantalo sasya rakshana” (Disease management in Sorghum) on 20 November, 2016 during 6.30 - 7.30 hrs in DD Yadagiri channel, Hyderabad.

Hindi Parangat training programme

PARANGAT Hindi Training programme for IIMR Officials was organized by Central Hindi Training Sub Institute, Dept. of Official Language, Ministry of Home Affairs, Govt. of India at



IIMR, Hyderabad, during 01-29 November, 2016. The training was inaugurated by the Dr. Vilas A Tonapi, Director, IIMR, Hyderabad on 01 November, 2016. The Examination for the above training was conducted on 29 November, 2016. Drs. G Shyam Prasad and Mahesh Kumar respectively acted as Examination Superintendent and Invigilator. The programme was coordinated by Drs. KBRS Visarada and Mahesh Kumar.

Big mill test to produce ethanol from sweet sorghum

IIMR, Hyderabad in collaboration with ICRISAT and National Federation of Cooperative Sugar Factories Limited



has successfully conducted a bigmill test on ethanol production from sweet sorghum at Shree Ganesh Khand Udyog Sahkari Mandali Limited located at Ankaleshwar, Gujarat on 19 November, 2016. From the test, It was proven beyond doubt that sweet sorghum could be conveniently crushed with the existing machinery of sugar factory without changing a single nut and bolt. The sweet sorghum hybrids CSH 22 SS and Phule Vasudha were used for the big mill test. The mill management was satisfied with the test and it was felt that sweet sorghum juice could be directly fermented or added to sugarcane molasses for ethanol production. Dr AV Umakanth and HS Gawali from IIMR, Dr A Ashok Kumar from ICRISAT and Dr JP Singh from NFCFS, Ltd, New Delhi participated in this important event.

Meetings (M) / Symposia (S)/ Workshops (W)/ Trainings (T) Conferences (C) attended

S. No	Name of the Official	Participated in	Type	Venue	Dates
1	D Revati	Training programme on "Introduction to Bio-informatics"	T	IASRI, New Delhi	08-21 Nov., 2016
2	C Aruna , Sujay Rakshit, P Sanjana Reddy and R Madhusudhana	Workshop on Digitalization of Breeding Programs & Data Migration	W	ICRISAT, Patancheru	14-18 Nov., 2016
3	Saroj Kumar Singh	Training on "Management Development Programme on Public Procurement".	T	National Institute of Financial Management, Faridabad	14-19 Nov., 2016.
4	Vilas Tonapi, B Venkatesh Bhat & AV Umakanth	Meeting on Creating sustainable bio mass supply chain for the proposed Ligno-cellulosic (2G) Ethanol projects undertaken by Oil PSUs.	M	ICRISAT, Patancheru	15-16 Nov., 2016
5	V Ravikumar	National workshop on Mobile application developments in Indian languages	W	C-DAC, Hyderabad	15-19 Nov., 2016
7	Mahesh Kumar	Meeting on implementation of Official language organized by TOLIC-2 Hyderabad	M	NIRDPR, Hyderabad	15 Nov., 2016
8	S Ravi Kumar and HS Talwar	National workshop on Mainstreaming climate change and Adaptation in Agriculture and Allied Sectors	W	MANAGE, Hyderabad	16-17 Nov., 2016
9	B Venkatesh Bhat	Meeting of obstetrics and gynaecological society, Hyderabad	M	Hyderabad	16 Nov., 2016
10	TG Nageshwar Rao	4th International Agronomy Congress	W	IARI New Delhi	22-26 Nov., 2016
11	B Venkatesh Bhat	Meeting on "ICAR-ILRI collaborative project planning"	M	ILRI, New Delhi	23 Nov., 2016
12	Vilas A Tonapi	Meeting on 5th National Convention on Millets	M	NMML, Teenmurty Bhavan, New Delhi	29 Nov, 2016
13	Vilas D. Aghav	National workshop on "Recent advances in weed management strategies	W	NIPHM, Hyderabad	29-30 Nov, 2016
14	Vilas A Tonapi	National Workshop on OECD Varietal certification.	W	Hotel The Park, Hyderabad	30 Nov., 2016

Thought for the month

"The longer the excuse, the less likely it's the truth."

-- Robert Half



Compilation & Editing

Dr. KV Raghavendra Rao & Dr. B Venkatesh Bhat

Photos, Design & Lay-out

HS Gawali & K Sanath Kumar

Hindi Translation

Dr. Mahesh Kumar

Publisher & Chief Editor

Director,

ICAR-Indian Institute of Millets Research

कदन्न समाचार

IIMR Millets Newsletter

ICAR- Indian Institute of Millets Research (IIMR)

Hq. Rajendranagar, Hyderabad, 500 030
Tel: 040-24599300
Fax: 040-24599304
Email: dsrhyd-ap@nic.in
Website: www.millets.res.in

Centre on Rabi Sorghum (IIMR), NH 9
Bypass , Shelgi, Solapur - 413 006 (Mah.)
Tel: 0217-2373456
Telefax: 0217-2373456
E mail: solapur@millets.res.in

Sorghum Off-Season Nursery, Warangal
Officer-In-Charge
Indian Institute of Millets Research, RARS,
(PJ TSAU)
Mulugu Road,
Warangal.