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Soybean News सोयाबीन समाचार भाष्ट्र, अनु.प- भारतीय सोयावीन अनुसंधान संस्थान भाष्ट्र, अनु.प- भारतीय सांघार्या क्रि अनुसंधान संस्थान

<u> निर्देशक की डेस्क से</u>

ICAR-IISR की तरफ से बधाई! सोयाबीन भारत एवं विश्व की एक महत्वपूर्ण तिलहनी फसल है। यह मनुष्यों, पशुओं एवं मछलियों के लिए अच्छी गुणवता वाले प्रोटीन के सबसे किफायती स्रोतों में से एक है। इसके क्षेत्रफल एवं उत्पादकता में वृद्धि हमारे शोध का मुख्य लक्ष्य है। भा. कृ. अनु. प.- भारतीय सोयाबीन अनुसंधान संस्थान, इंदौर से "सोयाबीन समाचार" के वर्तमान अंक को प्रस्तुत करने में मुझे बहुत खुशी है।



From Director's Desk

Greetings from ICAR-IISR!

Soybean is an important oilseed crop of India and world. It is one of the cheapest source of good quality protein for humans, animals and fish. Increasing area and productivity of soybean is the main focus of our research plan. I have great pleasure in presenting the current issue of "Soybean News" from ICAR-Indian Institute of Soybean Research (ICAR-IISR), Indore.

यह अंक जनवरी से जून, 2022 की अवधि के लिए समाचारों और घटनाओं, और प्रमुख अनुसंधान उपलब्धियों की झलक प्रदान करेगा। इस अवधि के दौरान सोयाबीन उत्पादकता बढ़ाने के लिए कई नई पहल की गई। पंजाब, हरियाणा, बिहार, पूर्वोत्तर राज्यों, बोरोलैंड के गैर-पारंपरिक क्षेत्रों में सोयाबीन उत्पादन के विस्तार के प्रयास किए गए। नई जारी किस्मों के बीजों की उपलब्धता बढ़ाने के लिए कृषि एवं सहकारिता विभाग, भारत सरकार के सहयोग से उएसावाई नामक एक अनूठा कार्यक्रम शुरू किया गया। हमने 29-31 मई 2022 को तीन दिवसीय किसान मेला और प्रदर्शनी सोया महाकुंभ-आत्म से आत्मनिर्भर भारत की अयस्क का सफलतापूर्वक आयोजन किया है। 5000 से अधिक किसानों ने भाग लिया और इस आयोजन की सराहना की।

भा.कृ.अनु.प.- मध्य भारत समाचार किसानों और अन्य हितधारकों को सोयाबीन की खेती की विभिन्न गतिविधियों के बारे में बहुमूल्य जानकारी प्रदान कर रहा है। संस्थान ने मेरा गांव मेरा गौरव, और स्वच्छ भारत मिशन जैसे आउटरीच कार्यक्रमों का आयोजन किया है, और सोयाबीन उत्पादन को बढ़ाने के लिए हालिया तकनीकों के बारे में प्रशिक्षित संख्या में किसानों को प्रशिक्षित किया है। कई महिला किसानों को विभिन्न सोया-खाय पदार्थों को तैयार करने के बारे में भी प्रशिक्षित किया गया, जो इसके स्वास्थ्य को बढ़ावा देने वाले लाभ हैं। It will provide glimpses of news and events, and salient research achievements for the period January to June, 2022. During this period several new initiatives were taken up for increasing soybean productivity. Efforts for area expansion in non-traditional areas of Punjab, Haryana, Bihar, NEH, Boroland were done. For increasing the availability of seeds of newly released varieties a unique program named, 3S1Y was launched with the support of DAC, Government of India. We have successfully conducted the three day farmers fair and exhibition *Soya Mahakumbh- Atm se Atmnirbharta kee ore* on 29th-31st May 2022. More than 5000 farmers participated and appreciated this event.

The ICAR Madhya Bharat Samachar is providing valuable information about various activities of soybean cultivation to the farmers and other stakeholders. Institute has organized outreach programs like *Mera Gaon Mera Gaurav*, and *Swacchh Bharat Mission*, and trained number of farmers, including regarding the recent technologies to enhance the soybean production. A number of women farmers were also trained regarding preparation of various soya-foods its health promoting benefits.

Farmers' Seminar on "Awareness Programme for biofortification for soybean for food uses" under Annadata Devo Bhav Abhiyan commemorating 75 years of India's Independence at ICAR-IISR, Indore on 24th April 2022

The Institute organized a Farmers' Seminar on "Organic Soybean Production" today on 24rd April 2022 jointly in association with Solidaridad and ITC Limited under "Azadi Ka Amrit Mahotsav" and "Annadata Devon Bhava: Abhiyan" under the theme "Organic Soybean Production" The seminar was organized virtually using zoom app and the YouTube channel of the ICAR-IISR. More than 1200 soya farmers/women associated with Indian Soybean Research Institute, Solidaridad, Bhopal and ITC limited participated in this farmers' seminar. At the outset, Shri Shyam Kishore Verma welcomed the speakers and other dignitaries and participating farmers along with a brief note on activities being organized under Annadata Devon Bhava Abhiyan as per the guidelines of the GOI and the Indian Council of Agricultural Research. In her opening remarks, Dr Nita Khandekar, Acting Director of the Institute said that lack of protein in the diet of rural people of the country is one of the main problems for which the inclusion of soybean based foods in the diet is a worthwhile solution. She also told that there is immense potential for



entrepreneurship development and income growth in this area which should be tapped. On this occasion, Mr Bhuvnesh, I.T.C. Ltd., Madhya Pradesh and Dr Suresh Motwani, Manager of Solidaridad Bhopal, interacted about the programs being carried out in the field of technology transfer with the ICARIISR for increasing the soybean production of farmers adopting the technology developed by the institute praised Indian Soybean Research Institute. The key speaker of this seminar, Dr Vineet Kumar, Principal Scientist, in his lecture, first of all, while discussing the nutritional and medicinal properties of soybean, said that according to a report of the National Institute of Nutrition,



Hyderabad by the World Health Organization, most of the people of our country. The protein per gram required for certified per kg body weight is not being met. So soybean based proteins are a

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good option. According to Dr Kumar, along with protein, soybean has many other nutritious and medicinal properties, which can be taken advantage of. He discussed the problems faced so far for not increasing the edible use of soybean and told that its edible use has not yet become popular due to the non-poisonous Kunitz trypsin inhibitor available in soybean and the characteristic odor coming from soybean based foods. Therefore, he along with other scientist of the institute Dr Anita Rani did extensive research work in this regard for the last 15 years. In this way, the Indian Institute of Soybean Research has succeeded in the development of the first in the country, non-trophic Kunitz trypsin inhibitor free variety "NRC 127", which matures in 103 days on an average as well as drought and excessive rainfall. Similarly, another soybean variety "NRC 142" which are free from Kunitz trypsin inhibitor, an



antinutritional compound beside having characteristic of null lipoxygenase-2 acid that causes the characteristic odor of soybeans". Apart from this, he also introduced another soybean variety "NRC. 147" in which containing high content of oleic acid which increases the oxidative stability to soy oil b. In his brief presentation, Dr B.U. Dupare, Principal Scientist of ICAR-IISR on this occasion said that along with protein, soybean has many other nutritional and medicinal properties, due to which soybean can be referred a perfect "functional food plant". According to him, soybean rich in protein should be used as food. After that, he discussed method of preparation of various food items of soybean which can be prepared at domestic level particularly soymilk, soya paneer (tofu), soya flour, soya nuts, soya pakoras and other nutritious food based on soya like sev, mathri, papad, biscuits, chakli, shakkarpare etc. He also talked about use of byproduct soy okara for making of nutritious ant tasty items such as Upma, Halwa, Gulab Jamun etc. According to Dr Dupare, soybean can be used to enhance the nutritional properties of various traditional food items like curd/milk, namkeen etc. He also briefed about the activities being undertaken by the Agri Business Incubation Centre recently established at ICAR- IISR facilitating the youth and small entrepreneurs for taking up start up in the soy food sector.

Farmers' Seminar on "Kisan bhagidari prathmikta hamari abhiyan" under "Azadi ka Amrit Mahotsav" commemorating 75 years of India's Independence at ICAR-IISR, Indore on 28 th April 2022 at ICAR-IISR, Indore.

The Institute organized an Online Seminar on "Biofortification-Nationwide Campaign" today on 28th April 2022 jointly in association with Regional Wheat Research Centre, Indore; Solidaridad, Bhopal and ITC Limited, Madhya Pradesh under "Azadi Ka Amrit Mahotsav" The seminar was organized virtually using zoom app and the YouTube channel of the ICAR-IISR.

More than 650 soya farmers associated with Indian Institute of Soybean Research, Solidaridad, Bhopal and ITC limited participated in this farmers' seminar. At the outset, Dr B. U Dupare, Principal Scientist of ICAR-IISR briefed about various activities being undertaken throughout the country especially the efforts related to development of nutrient rich crops varieties enabling the food uses. He said that the health of people especially those living below the poverty line are affected due to the deficiency of protein and other nutrients. Therefore, we need to develop and promote such varieties which are able to integrate in our daily diet. The programme was also addressed by Mr Bhuvnesh, of ITC Limited Madhya Pradesh as well as Shri Himanshu Bais, Solidaridad, Bhopal who informed about the



collaborative programs being carried out promotion of technologies developed by ICAR-IISR and its adoption among the farming community. During the seminar, Dr K.C. Sharma, Head of Indore based Wheat Research Center of Indian Agricultural Research Institute, New Delhi, a center popular for development of durum wheat informed that the varieties like HI 1636 (Pusa Bakula) and HI 8877 (Pusa Prabhat) developed by this center have already been dedicated to the nation by Hon'ble Prime Minister, Shri Narendra Modiji. Dr Sharma also briefed about the



development other bio-fortified variety HI-8777 having more zinc and iron content along with yellow pigments. The variety is capable of giving more yield with application of just 4 irrigations. In another lecture "Bio-fortification in Soybean by Agronomic Techniques", Dr Raghavendra Madar and Dr Rakesh Kumar Verma of Indian Institute of Soybean Research have discussed about the use of zinc and iron element for increasing the availability of micronutrients in soybean crop. For realizing higher yield levels in soybean, it was recommended to apply 25 kg zinc sulphate and 50 kg Iron sulphate/ ha at the time of sowing of soybean or foliar spray of 0.5% zinc sulphate and 1% iron sulphate

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3 times in soybean before flowering till the pod formation stage.



On this occasion, Dr B.U. Dupare, Principal Scientist of ICAR-IISR discussed about the "nutritional properties of soybeans, soy based foods, processing technology suitable bio-fortified soybean varieties" for promotion in the form of soy food on regular basis in rural areas enabling the poor people for supplementation of cheapest protein source. According to him, soy protein is one of the most economical sources among the various protein sources, which should be included in the Indian diet in the form of various



items. He said that the scientists of ICAR-Indian Institure of Soybean Research, Indore has succeeded in removing "antinutritional KTI" as well as lypoxygenase acid, an enzyme associated with beany/odd flavor, two major constraints for behind utilization of soy food uses. He mentioned that the scientist of ICAR-IISR have developed the country's first Kunitz trypsin inhibitor free soybean variety "NRC 127" already notified for its cultivation in Central India. Similarly another variety "NRC 142" free from Kunitz trypsin inhibitors as well as lipoxygenase acid. He also mentioned about the development of another soybean variety NRC 147 having high content of oleic acid. On this occasion, Dr Dupare also discussed about the facility recently established at ICAR-IISR for training on entrepreneurship development / start up program of soya based food items being made by the Agri Business Incubation Center for the upcoming entrepreneurs.

52nd Annual Meeting of the All India Co-ordinated Soybean Research Project conducted by the Indian Institute of Soybean Research, Indore 17th and 18th May 2022

The two-day National Level Annual Group Meet of the All India Coordinated Research Project on Soybean was organized. It was attended by about 150 scientists across the country. Seven technical sessions covering research experiments conducted in the discipline of Breeding, Agronomy, Pathology, Microbiology, Food Technology, Breeder Seed Production, and Transfer of Technology in which the scientists presented their research achievements made during the year 2021 and also finalized their research programmes for the coming soybean season. The soybean

scientists have identified potential bio-inoculants and plant growth promoting bacteria that can fix nitrogen and mitigate abiotic stress. Being a leguminous crop, soybean has a capacity to fix atmospheric nitrogen and make it available to the plants. However, the identified bio-inoculants and plant growth promoting bacteria may help in case of adverse climatic conditions being experienced in the recent past. Therefore, it was recommended to upscale these bioinoculants to the real farm situation by making it available on commercial scale. In another session on Food Technology, potential soybean lines and genotypes with respect to soymilk and tofu have been identified. Similarly, breeder seed production programme was reviewed and variety wise demand for the coming year was finalized. The strategies to meet out the breeder seed demand for the year 2023, which is 15919 qt as per DAC, have been formulated. Scientists have presented the different frontline demonstrations of technologies across the country. Technologies like varieties, package of practices, spacing, seed-rate have been evaluated under farmer's fields across the country. In addition to it, different technologies have been evaluated for off-season soybean cultivation. Under the Trial Sub-Plan Scheme, it was informed that various programmes are being conducted with the basic objective of improving the livelihood status of the marginalized triabal farmers in the remote area. The tribal farmers were provided the technical assistance through organization of training programmes, organization of demonstration plots as well as capacity building for income generating activites like small scale production of tofu/fermented soy products in north Eastern region along with distribution inputs needed for farming. Before the plenary session, The ICAR-IISR Director, Dr Nita Khandekar urged the scientists to serve the farming community with sincere efforts through different technological interventions. She also informed about the soybean varieties which are identified in the



Varietal Identification Committee meet organized during the occasion. During the AGM, the specially constituted Varietal Identification Committee has recommended identification of six soybean varieties suitable for cultivation in three agro-climatic zones of the country. These included soybean variety VLS 99 (for Northern Hill Zone), NRC 149 (for Northern Plain Zone and four soybean varieties, NRC 152, NRC 150, JS 21-72, and Himso-1689 suitable for cultivation in Central India. Out of all the six soybean varieties identified, the ICAR-IISR has been successful in identification of 3 soybean varieties. Soybean variety NRC 149 has a characteristic of resistant to the Yellow Mosaic Disease, Rhizoctonia Aerial Blight as well as Girdle beetle and defoliators, major insects causing yield losses in Northern Plain Zone. Another variety NRC 150 is early maturing (91 days) and free from lypoxygenase-2 enzyme (responsible for beany or off-flavor to soy



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products) and resistant to charcoal rot disease. Whereas variety NRC 152 is an extra early maturing soybean variety (less than 90 days), also suitable for food uses, free from both the undesirable traits like Klunitz Trypsing Inhibitor as well as Lypoxygenase acid-2. Another soybean variety, JS 21-72 developed from Jabalpur centre belonging to JNKVV has a high yield and medium maturity duration (98 days) with multiple disease resistance against Yellow Mosaic Virus, charcoal rot, bacterial pustule and leaf spot disease. . At the end, the plenary session was conducted under the chairmanship of Assistant Director General (Olilseed & Pulses), ICAR, Dr Sanjeev Gupta who after listening to the technical interventions propsed by the scientists of different centre, expressed happiness and provided valuable guidance for their effective execution in the respective states. He also emphasized to make concerted efforts in taking the technologies to the farmers doorstep along with technological backstopping. During the programme, the Society for Soybean Research and Development have facilitated Dr Sunil Datt Billore (ICAR-IISR), Dr Philip Verghese (Agharkar Research Institute, Plune), Dr G.J. Patel (Anand Agricultural University, Anand, Gujarat), Dr Ramgiri (RAK College of Agriculture, Sehore), Dr K Annapurna (Indian Agricultural Research Institute, New Delhi) and Dr Dev Vrat Singh (ICAR-IISR, Indore)

Soya Mahakumbh- Atm se Aatmnirbhartaa kee ore- 2022

The three day conglomeration "Soya Mahakumbh" representing stakeholders soybean growers, scientists, officials from development departments was inaugurated at the University auditorium of Devi Ahilya Vishwa Vidyalaya, Indore on 29th May 2022. About 2500 farmers have attended the event on the first day. The Soya Mahakumbh is hosting this event along with agricultural exhibition involving 54 exhibition stalls belonging to the input dealers, seed processors, R&D organizations, and development agencies. The programme is jointly organized by the ICAR-Indian Institute of Soybean Research; Society for Soybean Research & Development, Solidaridad, Bhopal and SOPA, Indore during 29-31 May, 2022. The inaugural programme was conducted in the august presence of Honble Shri Kailash Chaudhary Union Minister of State for Agriculture; Shri Kamal Patel, Minister of Agriculture, Madhya Pradesh; Dr Trilochan Mahapatra, Secretary DARE and Director General, Indian Council of Agricultural Research, New Delhi, Honble Shri Shankar Lalwani, Member of Parliament from Indore, ICAR-IISR Director Dr Nita Khandekar and other eminent personalities. At the outset, Dr Nita Khandekar welcomed the dignitaries and briefed about the efforts being carried out by the institute for taking research output to the field level using different approaches. Dr Mahapatra on the occasion opined that per hectare productivity of soybean is hovering around 1ton/ha since last few decades which needs to be increased. For this to happen, coordinated efforts of extension personnel, farmers, input dealers and others involved in supportive services are

Issue 32 necessary. He said that, the quality seed production of new





soybean varieties and its efficient multiplication alone can increase the soybean productivity by 20%. He expressed the satisfaction that the breeder seed production target of 14326 quintal has been achieved which will accelerate the seed production programme. He also called for increasing the Varietal Replacement Rate in order to have varietal diversification especially considering the prevailing aberrations. Dr Mahapatra, also hoped that the farmers of Central India have achieved the yield limits of about 2-3 ton/ha as reflected in the Frontline demonstrations. Therefore, he said that the agronomic



management should be a focused area for capacity building of the farmers and other stakeholders. In his brief address, Shri Shankar Lalwani, Honb'le Member of Parliament described that the Government of India did not allow the hike in prices of fertilizers particularly Urea, a major element for plant growth. He further said that the Union Government is committed to protect the interest of small and marginal farmers, the backbone of agricultural economy. Shri Kamal Patel, Minister of Agriculture,



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Madhya Pradesh has informed that the State Government has made farmer centric policies for the farmers of Madhya Pradesh.



He said that the maximum limit on purchase through MSP has been removed which has benefited the famers of the state. He highlighted the crop insurance scheme which has benefitted worth Rs. 17,000 crore during last two years. According to him, the state government has planned to promote third season crop i.e. summer



mung which will also contribute to the income of the farmers in the state. During the occasion, the dignitaries guest has launched "Ecofriendly soya bowl", Technical Bulletin on "Technology for increasing the soybean productivity" and seeds of "ISKA" under 3S1Y Project. The chief Guest of the function, Honble Union Minister of State for Agriculture, GOI Shri Kailash Chaudhary has applauded the hard work and contribution of farming community in country's economy especially in the pandemic situation. He said that the Government of India has increased the budgetary allocation to 1,32,000 crore which is a record hike since the 2014. Out of this Rs 65,000 crore is given as direct benefit through Kisan Samman Nidhi Yojana, benefiting about 50 lakh crore farmers. He further explained that the Union Government is committed for doubling the farmer's income through various programmes. According to him, the small and marginal farmers should come together and function as Farmer Producer Organizations for production, marketing and processing of their produce. He said that the GOI has allocated nearly 11akh crore for Agricultural Infrastructure Fund which is meant for creating the basic infrastructure in rural areas as well as processing & storage facility for value addition. Shri Chaudhary applauded the efforts of agricultural scientists in the development of 164 soybean varieties suitable for varied agro-climatic conditions of the country. He hoped that a day will come when the contribution of agriculture in India's GDP will be increased.



During second day of "Soya Mahakumbh" program, organized jointly by Indian Institute of Soybean Research, Society for Soybean Research and Development, Solidaridad, Bhopal, SOPA Indore in Devi Ahilya Vishwavidyalaya, auditorium, Indore, two technical sessions were organized through which problems of the farmers were addressed by the experts belonging to various subjects. The first "Fantastic seven-Soybean in food, feed, fodder, fertilizer, medicinal and cosmetics" was conducted under the chairmanship of Dr Sudha Mysore, CEO, Agri Innovate India, Delhi, Dr Sumit K. Agarwal, Director, Bionutrients (India) Pvt Ltd., Dr Deepika, Central Institute of Agricultural Engineering, Bhopal, Dr MM Ansari, Ex-PS, ICAR-IISR, Indore, Dr Lokesh Meena, Scientist, Dr RK Verma, Scientist, ICAR-IISR Indore, addressed the queries and problems of the farmers. This technical session was coordinated by Dr Manoj Srivastava. The second technical "Modern Extension Systems for Sustainable Soybean



Production" was organized under the chairmanship of Dr Shiv Kumar Agrawal, International Center for Dryland Agriculture, Food Legume, which was coordinated by Dr B.U. Dupare, Principal Scientist, ICAR-IISR. The experts included Dr Suresh Motwani, Solidaridad, Bhopal; Dr DN Pathak, Executive Director, SOPA Indore, Dr Amar Nath Sharma, Retired Principal Scientist, Dr Raghavendra Madar, Dr Sanjeev Kumar and Dr Rajat Saxena of Manthan Sanstha resolved the problems of the farmers. During the inaugural programme of "Soya Mahakumbh" following innovative farmers, who achieved higher yield levels and are involved in dissemination of soybean production technologies in different states have been felicitated by Dr Trilochan Mahapatra, Honble Secretary, DARE and Director General, ICAR New. These are; Shri Gajanand (Dist. Indore, Madhya Pradesh), 2. Shri Rashpal (Uttar Pradesh), 3. Shri Banesingh Chauhan (Dist. Dhar, Madhya Pradesh), 4. Shri Kumar Magdum (Karnataka), 5. Shri Anil Verma (Dist. Sehore, Madhya Pradesh). , 10. Shri



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Gulnarayan (Madhya Pradesh), 11. Shri Mahantesh Pujar (Madhya Pradesh), 12. Shri Baljit Singh (Uttar Pradesh), 13. Shri Ch. Rangkhuplian (Manipur), and 14. Srijujhar Singh (Punjab). The major recommendations of the technical sessions include creation of Farmer Producer Companies, strengthening the seed production programme and popularization of the novel methods and varieties to more and more farmers. It was also informed that the Agri Business Incubation Centers of IISR Indore would extend the start up facility for promotion of entrepreneurship in soya food products. On the second day of the Soya Mahakumbh, more than 1000 farmers of Madhya Pradesh participated and visited the agricultural exhibition.



During the concluding session, Dr Nita Khandekar, Acting Director of ICAR-Indian Institute of Soybean Research informed that the event was organized to update the technical knowhow of soybean growers just before the sowing season of soybean. The last day of Soya Mahakumbh, the farmers also attended live webcast of "Distribution of Kisan Samman Nidhi" and "Garib Kalyan Sammelan" programme wherein Honb'le Prime Minister Shri Narendra Modiji has deposited Rs 11,000 crore directly in the bank account of the small and marginal farmers of the country. The webcast programme was conducted in the auspicious presence of Honb'le Shri Shankar Lalwani ji, Member of Parliament from Indore. He appreciated the activities conducted by the ICAR-IISR for dissemination of the new farm technologies and practices to the soybean growers through various approaches including use of electronic as well as social media. During the programme, Dr Sanjay Gupta, President, Society for Soybean Research and



Development, has committed to continue the collaborative activities in the larger interest of the soybean economy. At this occasion, the organizations who displayed their products, technologies and advisory services for soybean farmers were

awarded with the best exhibition stall Prize. The first three institutions in the government category included Department of Agriculture, Maharashtra State; ICAR-Central Institute of Agricultural Engineering, Bhopal and National Fertilizers Limited as well as IGFRI, Jhansi. Similarly the winners among the private companies included KRIBHCO, Bayer Crop Sciences, Eagle Seeds and Biotech Limited and JK Paper Limited. The event was concluded with the announcement to continue organizing "Soya Mahakumbh" every year.

Farmers' Seminar on "Fertilizer Management in Soybean for Balanced Nutrition" organized on 20.06.2022 at ICAR-IISR under "Aazadi ka amrit mahotsay" of India.

In the series of programs being organized under "Azadi Ka Amrit Mahotsav", an online farmer seminar on "Fertilizer Management in Soybean for Balanced Nutrition" was organized the Institute on 20th June. A total of 400 participants, including scientists, officers and progressive farmers of Krishi Vigyan Kendras and Agriculture Department of the states of Madhya Pradesh, Maharashtra,



Karnataka, Gujarat, Rajasthan and Haryana, participated in this this seminar webcasted through Zoom platform as well as YouTube Channel of the institute. At the outset, Dr B. U. Dupare, the Principal Scientist of the Institute, in his brief welcome address, explained about the importance of nutritional management in soybean crop, being cultivated in Central India since last 50 years but farmers have neglected the application of proper nutritional dose resulting in deterioration in productivity.



Therefore, it is important to supply nutrition through combination of organic as well as inorganic sources. During the event, the Acting Director of the institute, Dr Nita Khandekar, mainly emphasised on dissemination of knowledge and information to adopt management of balanced fertilizers along with importance of micronutrients. The speaker of the seminar, Dr S..D. Billore,

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Principal Scientist (Agronomy) of the Institute, deliberated about the importance of balanced nutrition in soybean and cautioned about the negative consequences of imbalanced fertilizers application. He also told if one element is applied in large quantity, the desired benefits are not reflected because of deficiency of other major elements. He also said that if quantity of fertilizer is to be reduced, instead of reducing any one element, the quantity of all the major elements like nitrogen, phosphorus, potash and sulfur should also be reduced. He briefed that soybean crop requires 20:60:40:20 kg/ha Nitrogen, Phosphorus, Potash and Sulphur which is recommended for soybean crop. This can be supplied through three fertilizer sources like (1) Urea 56 kg + 375 kg super phosphate and 67 kg. Murate of Potash or (2) DAP 125 kg + 67 kg Murate of Potash and 25 kg/ ha Bentonate Sulfur OR (3) Complex Fertilizer 12:32:16 @200 kg + 25 kg/ ha Bentonate Sulfur / 20:20:13 @300 kg +25 kg/ ha Bentonate Sulfur.

ICAR-IISR Indore joins hands with Bodoland Territorial Council, Assam for Soybean area expansion

Indore, Madhya Pradesh: ICAR-Indian Institute of Soybean Research, Indore has been playing a major role in increasing the area under soybean production in various regions of the country. As part of this, an initiative of expansion of soybean in the nontraditional areas of the country has been taken by the institute, the work of promotion of soybean cultivation is being started in the Bodoland territorial region of Assam. Hon'ble Shri Ghanshyam

Das, Executive Member, Agriculture Department of Bodoland Regional Council and Dr Manoranjan Das, Director, Agriculture Department and programme farmers from Assam visited the Indian Institute of Soybean Research, Indore. During this visit various aspects of soybean production were discussed with the main focus on how the crop is to be introduced in the Bodoland region. Demonstration of the process of Operating various equipment used in the seed production was shown and the details explained.



Considering the possibilities of introduction of soya-based food products the team also visited the Agri-business incubation centre of the Institute. Initially the crop is to be taken up in an area of 50 ha. And there after it is envisaged to be expanded to 40,000 hectares in the next five years, which will give a new identity to Bodoland area as a soybean producing region. Appreciating

this initiative, Dr Nita Khandekar, Acting Director of the institute assured the team to provide all possible assistance related to the production of soybean in the Bodoland region. Along with this, a WhatsApp group was created for the guidance of farmers to achieve this goal of soybean expansion.



राष्ट्रीय जनभावना

भोपाल - सीहोर भूमि 2 इंदौर 18 मई 2022 हरिभूमि 1 Mar 2022 शिविर में किसानों को गेहूं और सोयाबीन की उन्नत खेती करने दी जानकारी हरिभूमि न्यूज 🙌 आष्टा 🚽 अनुमधान करन अद्योजित संदय 13 सरवृत्तव्य तीत्र भाग आदा अनुस्तापा कर्तात भागित्व कित के प्राथ सरहार मालन अनुसार कर्तात भागित्व अनुसार स्ताल, अन्ति अनुसार कर्तात्र के स्वान्त प्रसार स्ताल, अन्ति, अन्ति, स्तान कर्तात कर्तात्र कर्तात्र प्रसार, स्तित्व, क्रिस्तवे ने नदेश स्तार कर्ता के संतीन्त्र प्रसार, स्तात्र, क्रिस्तवे क्रिस्तवे ने स्तात्र प्राय क्राय्ति के संतीन्त्र प्रसार क्रिस्त क्रिस्तवे ने नदेश स्तार क्राय के संतीन्त्र प्रतात क्रिस्त क्रिस्तवे ने नदेश स्तार क्राय के संतीन्त्र प्रतात क्रिस्त क्राय स्तात्रक अतित चालीच समीच अनुसार प्रतियोजना क 50वी वार्षिक साह देव का रक्षाटन जात सोध कारावर, प्रदेश ने माल-की तिक राज गर्न, रा मालिप्रेसार अनुसार प्रतिह, प्रति अनुसार प्रतिह, प्रति अनुसार प्रतिह, प्रति विद्या गया। की गेहूं और सोवाबीन की खेत ब्राइ बंड फैरों मशीन से करे जिसमे दोनों साइड नालिय बनती है एवं जो कम या ज्वाद पानी दोनों में लाभकारी है, कार्यक्रम के कि पाना दाना म लाभकता ह, कार्यक्रम के दौरान कहुर से देनद्र मेवाड़ा, कृषि विज्ञान केंद्र से देनद्र पाटिल, भारतीय सोवाबीन अनुसंधान संस्थान से सौरभ चतुर्वेदी, दुर्गेश कुमार घोरेसे, भगवान बामनिय, पीषुप अवस्था। pet sheder under softer

Need to increase soybean productivity for self-sufficiency in edible oil: Experts

OUR STAFF REPORTER

chyidore@bjc.un Ganiewa Carpie, additional dimestor general, aniewa Carpie, additional dimestor general, (Oliseed & Pulae) indiana (Connell of Agri-ultural Recarpie (ICAR), New Dehl, en-phasized increasing the productivity of soybean to achieve self-sufficiency in edi-ble oil of the country. He also spoke on spreading soy cultivation to new areas. Gupta said soybean farming methods in countries like Brazil and Argentina held relevance in India and scientific informa-tries. Gupta was addressing the inaugural coremony of the two day 52nd annual group meet of All-India Cordinated Re-search Paroject on Soybean hosted by the city-based Indian Institute of Soybean Re-search that began on Tuesday at SOPA au-ditorium.

search that began on 1 wound ditorium. Tilak Raj Sharma, deputy director gener-al (Crop Science). Indian Council of Agri-cultural Research (ICAR), New Delhi, in-augurated the meet, where about 150 soy-bean scientists belonging to different cen-tres associated with the All India Coordi-nated Soybean Research Project on Soy-

bean (AICRPS) are attending. The digni-traries include assistant director-general (Olecut & Pulses), ICAR, Samjeer Gupta, Sced, SC Hubes, JAC, Kamjeer Gupta, Sced, SC Hubes, JAC (Hant Protection), ICAR, Nachiket Kotwaliwale, director, ICAR CIPHET, Ludhiana. Sanjeev Gupta highlighted the current status of the soybean seed replacement rate which is relatively low as compared to other crops, and the need for the popular. Thak Raj Sharma, deputy director-gen-eral of the indian Council of Agricultural Research, emphasised promoting directing of soybean varieties as well as climate-re-silient, high-yielding soybean varieties among the farmers of different soybean-zowing states.

among the lattners of different soybean-size and the second second second second second Soyabean Research Institute, mentioned that25 soybean varieties were notified dur-ing 2021. She hoped that the institute as well as AICRF on soybean would be able to deliver climatesmart soybean varieties along with host of other technologies for management of ansect pest diseases in the changing climatic scenario.



💧 अहिल्या नगरी 💧

वार्षिक समूह बैठक आज से, सोयाबीन तेल में आत्मनिर्भरता पर होगा मंथन

इंदौर 🗉 राज न्यूज नेटवर्क

भारतीय सोयाबीन अनुसंधान संस्थान की ओर से दो दिवसीय वार्षिक समूह बैठक आज से शुरु होने जा रही हैं। 17 व 18 मई को सोपा ऑडिटोरियम, इंदौर में अखिल भारतीय समन्वित सोयाबीन अनुसन्धान परियोजना की वार्षिक समूह बैठक में देशभर के सोयाबीन वैज्ञानिक, प्रजनक, सोयाबीन की खेती किये जाने वाले राज्यों के शीर्षस्थ अधिकारीयों के साथ साथ भारतीय कृषि अनुसन्धान परिषद् एवं कृषि एवं किसान कल्याण मंत्रालय के अधिकारी भागे लेकर वर्ष 2021-परियोग मंत्रालय के आवकारी मांग लेकर पर 2021-22 के दौरान प्राप्त अनुसन्धान निष्कर्षों पर विचार करेंगे। इसमें देशभर के 150 सोयाबीन साइंटिस्ट, एग्रीकल्चर तथा इंडियन एग्रीकल्चर रिसर्च कौंसिल के वरिष्ठ अधिकारी शामिल होंगे। काफ्रेंस में सोयाबीन तेल में आत्मनिर्भरता पर भी मंथन होगा। साथ ही प्रोडक्टिविटी बढ़ाने के लिए किसानों को सोयाबीन की नई वैरायटी की फसल उगाने पर जोर दिया जाएगा।

किसान अपनाएं सोयाबीन की नई वैरायटी

सेंटर प्रमुख नीता खांडेकर ने बताया पिछले साल हमने सोयाबीन की 25 नई किस्में लेकर आए हैं। इस बार चार नई किस्मों की अनुशंसा की जाएगी। उन्होंने बताया पिछले साल जो 25 नई वैरायटी लांच की थी, उसे सर्टिफाई होने के साल जा 23 गई परीवटा लोप की यो, उस सार्ट्या का प लिए तीन साल और किसान तक पहुंचने के लिए 1 साल का समय लगता है। इसके साथ ही इस साल की चार नई वैराइट्री भी तैयार हो चुकी हैं। उन्होंने बताया मध्यप्रदेश सोयाबीन उत्पादन के क्षेत्र में देश का सबसे बड़ा राज्य हैं। देश में जहां भी सोयाबीन की फसलें उगाई जाती हैं उसका करीब ५०–५५ प्रतिशत हिस्सा अकेला मप्र का है । हालांकि पहले यह हिस्सा अधिक था लेकिन इसमें कमी आई हैं। अब किसानों को चाहिए कि वे पुरानी परंपरागत सोयाबीन की किस्मों की खेती करने के बजाय नई वैरायटी को अपनाए। इससे फसल उत्पादन में भी लाभ मिलेगा और पहले से बेहतर क्वालिटी की सोयाबीन मिलेगी।

जनादेश वात

3-day soybean 'mahakumbh' starts today

OUR STAFF REPORTER

सोया अनुसंधान परियोजनाओं की समीक्षा संपन्न सोयाबीन की 6 नई किस्में

जारी, जैविक - प्राकृतिक

उत्पादन पर भी जोर

सोयाबीन को मौसम की

मार के अनुकूल बनाने पर भी जोर

भारतीय सीयाबीन अनुसंधान न झारा सोया अनुसंधान नाडारों की संसीक्ष बैठक में तेन पर चर्चा की गई। संयाबीन की किस्से आरी की है। ये 90 से 98 पर करर खेत से खरिष्ठान में आ मुक्त कर खेत से खरिष्ठान में आ

पत्रिका न्यूज नेटवर्व

A three-day soybean 'ma-hakumbh' will start in hakumbh' will start in the city on Swaday where experts will discuss new farming technologies and new seed varieties that farmers should adopt to especially in view of changing climate. The make the country self-sufficient in edible oil. An exhibition will also held on the occasion.

The 'mahakumbh' is being organised by Indian Soybean Research Institute in association with Society for Soybean

Research Institute in association with Society for Soybean Research and Development, Solidaridad, Bhopal, Soybean Processors Association of India (SOPA) and Manthan. The mega event is on the theme of Self to self-nilance'at Uni-versity auditorium. Thousands of farmers from all over the country are going to take part. Kailash Choudhary, Union minister of state for agricul-ture and farmers welfare will be the chief guest and Kamal Patel, agriculture minister, government of Madhya an Council for Agricultureal Research (CAR, New Delhi will be special guests of the inaugural programme.

इन्दौर।भा.क्.अन्.प.-भारतीय सोयाबीन खण्डवा रोड, इन्दौर सभागार में एल. के. बी. बेलगाम सिधिगिरी, अनुसंधान संस्थान, इन्दौर

तथा सोसाइटी फॉर सोयाबीन डेवलपमेंट इन्दौर सोलिडेरिडेड भोपाल सोयाबीन प्रोसेसर्स एसोसिएशन ऑफ इंडिया एवं मंथन के तत्वाधान में सोया महाकुम्भ २०२२ आत्म से आत्मनिर्भरता की ओर 29 से 31 मई के दौरान आयोजित किया जा रहा है।

किया जा रहा है। इस विशाल के. वी. के. कोलरापुर और अटारी कार्यक्रम के मुख्य अतिथि श्री बेंगतुरु के संयुक्त प्रयास से जाएगा। इस महाकुम्भ का मुख्य कैलाश चौधरी, राज्य मंत्री, कृषि किसानों के हित में 3 स्तृङ्घ आकर्षण होगा विशाल एवं और किसान कल्याण मंत्रालय. परियोजन के अंतर्गत एक ही वर्ष भारत सरकार होंगे। साथ ही विशिष्ट में तीन बीज उत्पादन चक्र के अतिथि कमल पटेल, कृषि मंत्री, माध्यम से प्रजनक बीज से उपयोग कैसे करें। सोयाबीन मध्य प्रदेश सरकार तथा डॉ प्रमाणित बीज उत्पादन करके आधारित कृषक संगोष्ठी, संग्रिशत त्रिलोचन महापात्र महानिदेशक किसानों को कम अवधि वाली खेती, तिलहनी एवं दलहनी (भा.क्.अनु.प.) एवं सचिव नवीन किस्मों के गुणवता पूर्ण बीज अंतरवर्ती एवं फसल चक्र पर (डेपर), नई दिखें विविष्ट अंतिथि उपलब्ध करवाने के लिए एक वैज्ञानिक जनकारी के साथ साथ



सोया महाकंभ उदघाटित 6 पुस्तिका का प्रमोचन मुख्य अतिथि ु एवं गणमान व्यक्तियों द्वारा किया इन्दौर 🔳 जनादेश वार्ता आधनिक प्रदर्शनी, कृषि आदान, 3 आपूर्ति कर्ताओं का वैकल्पिक

एवरे व उसटेल करां आई मी ए आर - भार ती म मंग्रावने अनुसंधन संख्या, मंग्रावने अनुसंधन संख्या मंग्रावने अनुसंधन संख्या मंग्रावने अनुसंधन करां और संगण्ड संख्या करां के प्रीरत असंधित करां के प्रीरत असंधित करां मंग्रावने उत्पादन, वेंडाविन, आंध्रदीयिक बरते वाने तापना संग्राविद्येपिक बरते वाने तापना आध्रता संपर्धत के अधिवारी का प्रतिविधिक बरते वाने तापना कराया संपर्धत, केंडाव कृत प्रात à

कैलाश चौधरी, केंद्रीय कृषि राज्य मंत्री: श्री कमल पटेल, कृषि मंत्री,

मध्य प्रदेश; डॉ त्रिलोचन महापात्रा, मध्य इंदरी; डी प्रसावन महायाग्र, सचिव देखर और महानिदेशक, भारतीय कृषि अनुसंधान परिषट, नई दिक्षं, मननीय क्री रॉकर लालवानी, इंदीर से सांसद, मारू अनुरूप - आई आई एमआर निदेशक डी नीता खांडेकर और अन्य प्रतिष्ठित व्यक्तियों ने भाग दिक्षा ानदर अन्य लिया

अवसर पर डॉ. महापात्रा कि सोपाबीन न्हें नहि इसके कि किसानों, सहायक लोगों

स्वाओं में शानि लोगों के समन्वित आवश्यक हैं। उन्होंने ब सोयाबीन को नई किस-गुणवतापूर्ण बीज उत्पादन मं से सोयाबीन को प्रा तिया. भा से भारतीय सोयमंत्रीन आवश्यक हैं। उन्होंने का सि प्रात्मान्य संयक्ष के कार्यवास संयोधके को पर्य दिस्तारी का निरोक्त यो तीय क्रांकिस में गुलातपूर्व से उन्हारने का हि निरोक्त यो तीय क्रांकिस में गुलातपूर्व से उन्हारत के सुदि प्रात्मान्य व्यक्ति के सायगत से के से सोयाकेन की प्रात्मार क्रांती किंगि शिकालें का प्रात्मात से के से सेकोर का कि 14,326 उपयोग करते हुए अनुमोधन प्रतियों क्रिंटन के ब्रोटर से उपयादन को किसार्ग तक से वाने के लिए स्वरक्ष को प्राप्त से वा उपयादन को किसार्ग तक से वाने के लिए स्वरक्ष को प्राप्त का का स्वानिक प्राप्त के क्रांत में जनकारी थी। सा उत्पादन कार्यक्रम में तेनी आएगी।

इन्दौर में सोया महाकुम्भ २०२२ आत्म से आत्मनिर्भरता की ओर का आयोजन विश्वविद्यालय, तक्षणिला परिसर, अनसंधान संस्थान, इन्दौर द्वारा के, यथी सोयाबीन आधारित व्यंजन

कृषकि () otald भोषाल, 27 जून 2022 13

पूरे देख जिसके

पंजाब ने सोयाबीन की नवीन किस्मों को

बीज श्रृंखला में किया शामिल

इस नहीं किया जा स मॉरफेंट इसप्रेंकरन इ ठलके इस मुझाव पर निरेशक डॉ. पुर्वावर पूर्व रूप से सहमति ज्वीन किस्मों को बी

का प्रस्ताव धारित हरियामा संभवता ' सिंह दाहिया ने अनुसंधान संभवान | परीक्षम करवाए ज निरंशक का आभाग प्रदेश को उभरती हू होवा और किरान

Promotions

Name	Promoted to the post of	w. e. f.
Mr Anil Crasco	Assistant	May 2022

Transfers

Name	From	То	w. e. f.
Mr. Vikash Kesari	ICAR-IISR, Indore	ICAR-CRIJAF, Kolkata	01.06.2022
Dr. Prince Choyal	ICAR-DMAPR, Anand	ICAR-IISR, Indore	06.04.2022

Superannuation

.

Mrs. Bhurli Bai, SSS, (28.02.2022)



<u> प्रकाशक/ Published By</u>

डा नीता खांडेकर⁄ Dr Nita Khandekar

निदेशक/ Director भा. कृ. अनु. प. – भारतीय सोयाबीन अनुसंधान संस्थान/ ICAR- Indian Institute of Soybean Research खण्डवा रोड, इंदौर 452001 (मध्य प्रदेश)/ Khandwa Road, Indore (Madhya Pradesh) Phone: 0091-0731 2476188, 2362835 Fax: 0091-0731-2470520 Email: <u>dsrdirector@gmail.com/ dsraddimin@gmail.com</u> Website: www.iisrndore.icar.gov.in



संपादक/ Editors

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