आई.एस.ओ. 9001:2015 केन्द्र ISO 9001:2015 Centre

NCIPM

भाकृअनुप-राष्ट्रीय समेकित नाशीजीव प्रबंधन अनुसंधान केन्द्र

ICAR-National Research Centre for Integrated Pest Management

भाकृअनुप ICAR

समाचार पत्रिका Newsletter

खण्ड 29 (1) / Vol. 29 (1) जनवरी-जून 2023 / January-June 2023

Inside

Research Activities

Meetings

Trainings

Events

From the Director's Desk

How information and communication technology (ICT) can contribute to Integrated Pest Management (IPM) in India

Undoubtedly, chemical pesticides continue to play a major role in minimising locust control in India. However, indiscriminate use of pesticides caused several detrimental effects on agro-ecosystem and environment such as harm to beneficial flora and fauna, pest resurgence, human and animal health hazards, pesticides residues, ecological imbalances and environmental pollutions. Realising this, Govt. of India promptly adopted Integrated Pest Management (IPM) as a cardinal principle to mitigate the ill effects of chemicals on inaugurated during 1988 with its HQ at New Delhi with the main objective to synthesize, validate and refine IPM modules for major crops across the country. Since then, the institute is actively involved and has successfully formulated location specific IPM modules in collaboration with various stakeholders across different agro- climatic zones of the country. Despite concerted efforts for wide area dissemination of IPM, its acceptance and implementation over large acreage has not reached the desired level with adoption by less than five per cent or so by Indian farmers. For large scale implementation and wide area spread of IPM technology, farmers require timely access to the relevant pest management information/knowledge and expertise and non-chemical inputs. Recent advances accessing the pest management information and expertise. ICT facilitates reporting of pest situations at different locations at a click of mouse and plays an important role in pest management decision making in local languages. These tools are designed to support the end-users by providing early detection, diagnosis and warnings based on regular pest monitoring and forecasting pest dynamics with sound information on thresholds for need based application of pesticides. With growing popularity of smart mobile phones, hand held to access relevant information anywhere and anytime to create and standardize IPM information relevant to pests of specific area at appropriate time. Decision Support Systems (DSSs) are software tools of ICT that support decision-making activities. They collect, organize, integrate and analyse all types of information required for decision making and finally use the analysis to recommend the most appropriate action. ICT includes both the internet-enabled as well as the mobile-powered technologies. These devises have capability to generate data in a format that an illiterate user can easily understand the multimedia content even in the absence of networks. Many DSSs have been developed in the field of plant protection by various public and private organizations in the country aiding millions of farmers across the country.

Severe pest attack on soybean during 2008-09 in Marathwada and Vidarbha regions of Maharashtra, led to ICT based area-wide pest advisory implementation for IPM in the country. During the same year, NCIPM and Maharashtra State Agriculture Department joined hands to develop and implement ICT based pest surveillance and advisory system (CROPSAP) for cotton and soybean crops in the state. Presently the area under ICT has reached whopping 17.5 million ha covering additional six crops of rice, pigeonpea, chickpea, maize, sorghum and sugarcane. Dissemination of pest management advisories through SMSs based on ETL resulted in no major outbreak of major pests in the targeted crops. Immense success of CROPSAP motivated Department of Horticulture, Maharashtra to adopt ICT-based pest surveillance for horticultural crops (HortSAP) since 2011-12 onwards that is still continuing. Presently, it is operational in 30 districts covering 0.66 mha covering nine major horticultural crops. Both *CROPSAP* and *HortSAP*helped in creating awareness among farmers for identification of the pests and timely ETL based IPM interventions. On the side-lines of CROPSAP and HortSAP, many ICT initiatives have been brought into operation by ICAR-NCIPM in collaboration with organization. E-National Pest Reporting and Alert System in pulse crops is a unique ICT based decision support system implemented in Uttar Pradesh, Madhya Pradesh, Andhra Pradesh, Maharashtra and Karnataka covering 76,000 ha in collaboration with State Agricultural Universities (SAUs). In a similar mode, project on e-pest surveillance and advisory for major Horticultural crops is being implemented in Haryana addressing 10 crops covering nearly 15,000 ha with 13,500 registered farmers. ICT-based pest surveillance and advisory services for rice in Tripura was strengthened with *whatsapp*, timely advisory and SMSs. ICT based Pest Surveillance and Advisory services for Rice in Raisen district (MP) was successfully carried out in 20,000 ha area during 2017-18 by M/S Dawat Foods Private ltd with ICAR-NCIPM as a consultant. M/s TildaHain India Pvt Ltd in association with ICAR NCIPM implemented ICT based pest surveillance and advisory system in Basmati rice during 2017-19 in more than 8,000 ha in Haryana and Punjab. Under Online Pest Monitoring and Advisory Services (OPMAS) program, weekly advisory services were issued to extension agencies and farmers in 23,134 ha of cotton involving 19,956 farmers during 2014-15 with ICAR-NCIPM as a coordinating centre. eSAP (Electronic Solutions against Agricultural Pests), a path-breaking ICT application developed by UAS, Raichur provides real time solution to crop health management. eSAP assists in pest identification, pest information, surveillance and management on real time basis benefitting > 1,00,000 farmers in Karnataka.

Android based smartphones provide users faster access to services of choice with mobile Apps, taking advantage of software designed for targeting desired needs of farmers. NCIPM developed mobile App for pest forewarning under NICRA project. *PestPredict*- Rule Based System (RBS) assists researchers, extension personnel and farmers to get location specific forecasts of desired insect pests and diseases of major agricultural and horticultural crops. NCIPM has developed android based mobile apps (PMIS v 2.0) for pest management in brinjal, tomato, okra and chilli crops in Hindi and English languages. Insecticide and fungicide calculators (IFCs) –CROPSAP for rice, cotton, pigeonpea, soybean, maize and chickpea and FAW -IPM have been developed as mobile Apps and hosted on Google play. ArkaBagwani is a mobile App developed by ICAR-IIHR, Bengaluru in English, Kannada & Hindi showcasing all technologies and researches useful for the farmers. ICAR-IIHR, Bengaluru also developed mango and papaya cultivation App to cater to the needs of farmers on various aspects of crop production and pest management. Cashew India App developed by ICAR-Directorate of cashew Research, Puttur provides comprehensive information on cashew grafts, nursery and main field cultivation and plant protection at one place. Crop Doctor developed and hosted by IGKV, NIC Raipur covers major aspects of plant protection in paddy, vegetables, pulses and oil seeds. ‘Soil Test Methods’ serves as an instant soil testing guide. Meghdoot weather App. developed by ICRISAT in association with IITM, Pune and IMD Delhi forecasts and provides historic weather information to the farmers at fingertip touch. Many such android mobile App have been developed and hosted in Google store on various aspects of crop production and protection by various agencies across the country.

For area wide spread of IPM in the country, a sound data recording system with standard ETL and well defined management practices blended in ICT system is the need of the hour. Gadgets, traps, lures and bio-pesticides etc. must be locally available and easy to adopt. At least one pest scout for every five villages with android based mobile phone is required for real time data recording with full signals in the villages for data transmission in addition to ICT infrastructure. Effort must be made to accommodate multi-pest intelligence while devising software which help field user to select the best management strategy when multiple problems affect a particular crop. Extension services to farmers in the form of training and FFS must be on continuous basis in order to sustain long-term adoption of IPM through ICT tools. Mobile phones must also be designed to provide service to older farmers who are otherwise either hesitant to use smartphone due to a lack of familiarity or rely on educated persons to help them. While infrastructure/ connectivity issues are improving, there is still plenty to be done for mass adoption and usage of App-based services. Finally, it would be pertinent to say that in the coming years, Artificial intelligence (AI) and related algorithms will contribute to the advanced growth of Indian agriculture.

New Initiatives

Drone application of biopesticides under Agri-Drone project of Ministry of agriculture.

The neem oil was sprayed using drone application on marigold, cucumber, chickpea, bitter gourd, kinnow and guava crops under drone demonstration program in the farmer's fields under MGMG program during 27-29 March 2023.

MoU signed

An MOU was signed between ICAR-NCIPM, New Delhi and Draslovka Services India Pvt Ltd (DSI) on 6th June 2023. The objective of the MOU is to test the chemicals against stored food grain and timber insects.The multi-locational data generated in the proposed activity may be used for registration of the tested molecules with CIBRC.

Research Activities

Horizontal spread of IPM in basmati rice in Gautambudhnagar District, U.P.

Horizontal spread of IPM in basmati rice was carried out in 1,700 ha in 26 villages around the Bambawad area with the participation of about 1,100 farmers in GautamBudhNagar district of UP. This was achieved by the constant efforts of ICAR-NCIPM in organizing regular farmers' field schools, field visits and IPM advisories through *Whatsapp* and phone call and with the help of trained progressive farmers, Mr Om Vir Singh and Mr. Mukesh of village Bambawad who acted as IPM ambassadors.

Validation, refinement and promotion of IPM in rice-based cropping system for export-oriented basmati rice production

A trial on IPM validation in *basmati* rice was initiated during *kharif* 2023 in 200 ha in Nidana, Rohtak, Haryana. Farmer field schools were organized at fortnightly interval to train farmers on pest identification and natural enemies, ETL, use of Trichocards and good agriculture practices (GAP). IPM interventions included seed treatment with *Trichodermaharzianum*, seedling root dip *Pseudomonas fluorescens*, installation of pheromone trap @5/ha for yellow stem borer (YSB) monitoring, weekly pest monitoring by pest scout, need-based application of safer pesticides and judicious use of fertilizers.

Farmer field School on Rice IPM at Nidana, Rohtak, Haryana

A Farmer Field School was organized at village NidanaRohtak on 19th May 2023 in which 50 IPM farmers participated. Farmers were apprised on IPM concept, ETL, pest and natural enemy identification, monitoring, balanced nutrition, water and weed management, healthy rice nursery raising technique and the importance of *Trichoderma harzianum* seed treatment. Various queries of farmers about IPM and rice crop cultivation were also addressed during the meeting. *Trichoderma harzianum* powder prepared at ICAR-NCIPM was provided to IPM farmers for rice seed treatment for 200 ha.

Farmer field school at Behnichanderpal village of Rohtak, Haryana

A Farmers' Field School was organized by cotton team of ICAR-NCIPM on 9th June 2023, at Behnichanderpal village, Rohtak, Haryana in which 25 farmers participated. Cotton team from ICAR-NCIPM, interacted with the farmers and discussed various components of IPM, important pests and their natural enemies and importance of seed treatment. Proper identification of boll rot and pink bollworm and congenial condition for their incidence and management strategies were explained during the occasion. A novel technique, SPLAT (Specialized Pheromone and Lure Application Technology) was introduced in the village for the management of pink boll worm. Critical IPM inputs such as yellow sticky traps, pheromone traps and lures and azadirachtin, 1500 ppm neem oil were distributed to cover 50 ha area.

Farmer Field School on 'IPM in Mustard' at SirmorkaPura, Morena, Madhya Pradesh

A team of scientistsfrom ICAR-NCIPM visited RVSKVV-*KVK*, Morena, Madhya Pradesh for monitoring IPM in Mustard on 25th February 2023. The team along with the collaborators from KVK Morena, organized a Farmers' Field School (FFS) on IPM mustard at village SirmorKaPura, Morena. More than 200 farmers attended the FFS, during which farmers were apprised about oilseed requirements in the country and importance of increasing the productivity by reducing the losses due to biotic stress. Also, lectures were delivered on biological control, identification of major pests and weeds, agronomical practices and IPM in mustard. Dr. SubhashChander, Director, ICAR-NCIPM, New Delhi, reiterated the importance of adoption of good agricultural practices (GAP) for sustainable plant protection.The significance of International Year of Millets -2023 and that of millet food / products was highlighted during the discussion.

Farmer Field School (FFS) on pigeonpea at Kaushambhi, U.P

A farmer participatory farmer field school (FFS) was organised at KVK Kaushambhi, U.P. to educate the adopted farmers on IPM strategies before sowing of rainfedpigeonpea crop. Thirty five farmers of the five adopted villages participated in the programme. ICAR, NCIPM team deliberated on the importance on the importance of field sanitation, ploughing time, selection of seed variety (IPA-203) and seed treatment by *T. harzianum/viride*, preparation of NSKE and identification of major pests and their management. During the occasion, demonstration was made on flame syringe method for on-farm mass multiplication of bio-agents and adoption of ridge planter was suggested for *Phytophthora* management. Also, distributed IPM inputs such as *T. harzianum*, *P. fluorescens* ampules, pheromone traps and yellow sticky traps to the farmers.

***Kisan ghosti* on IPM in chilli**

A *kisan goshthi* was held on 3rd January 2023 at Dugutta village, Kunavaram Mandal, East Godavari district, AP in which 20 chilli farmers participated. KVK Pandirimmidi Scientist explained various components of IPM and urged farmers to follow IPM technology which is environment and user friendly. Farmers were informed about the benefits of IPM, such as low cost of cultivation, reduced chemical pesticide use, scope for use of bio-pesticides, traps and lures.

Major pests of chilli and their identification and management were also explained followed by interaction with farmers. During the occasion, demonstration on *Beuveria bessiana* spray preparation and installation of traps and lures was held.

Farmer field school organised at Gurugram, Haryana

A Farmers field school was organised at UnchaMajra village, Gurugram, Haryana on 9th, June 2023 to apprise farmers on importance of IPM in cole crops in which 20 cauliflower growing farmers participated. They were advised to adopt raised bed nursery and use effective and low cost IPM technologies such as *Trichoderma* for seed and soil application, FYM/vermi compost, neem based products, pheromone traps and need based application of label claim pesticides. Critical IPM inputs were also distributed to the farmers.

Demonstration on installation of traps and mass multiplication of *Trichoderma* in FYM

A demonstration on installation of yellow sticky traps and pheromone traps and mass multiplication of *Trichoderma asperellum* was conducted at Jakoli, Sonepat, Haryana during the first week of February, 2023 in which 30 okra farmers participated. During the occasion, Dr S. P. Singh apprised the farmers about the importance of traps and lures to manage whitefly and *Helicoverpa* borers and importance of reduction in chemical pesticide use. Also,*Trichoderma* and traps and lures were distributed to 30 okra farmers from Jakoli and nearby villages.

IPM technology in kinnow at Hisar, Haryana

IPM technology was validated in 20 ha in three villages (Kisangarh, Kharabarwala and Dadoli) in Hisar district, Haryana. In IPM, FP and control plots, the pest situation was respectively recordedas sooty mold 6.5, 8.3 and 9.8%; dieback 8.3, 10.5 and 12.4%; gummosis 3.9, 4.5 and 5.1%; citrus psylla 3.3, 4.9 and 6.0 nymphs and adults/infested shoot; whitefly - 2.2, 3.2 and 4.3/leaves; thrips- 3.3, 4.4 and 5.5 no./branch/tapping; leaf miner - 1.2, 1.2 and 3.3 no. of infested leaves. Among the natural enemies, population of spider was observed as 0.7, 0.5 and 1.0/m^2 in IPM, FP and control plots respectively.

Marigold with kinnow

Farmer Field School on kinnow IPM at Hisar

Three farmers field schools (FFS) were organized at Kisangarah and Dadoli villages in Hissar during February, May and August with the participation of >115 farmers. Multiplication of bio-agents with well rotten FYM, pruning of dieback infected twigs and preparation of NSKE (5%) were demonstrated during the training.

Population dynamics of fruit fly in cucurbitaceous crops

Population dynamics of fruit fly (*Bactrocera cucurbitae*) was studied in cucumber and muskmelon during standard metrological week (SMW) 19-30, 2023 at Samora and Shamgarh villages, Karnal, Haryana. An average fruit fly population of 11.35/trap/week (4.8-20.4) was recorded in cucumber with 15.0% infested fruits in (IPM) and 36.4% in non-IPM. Similarly, average population of 16.1/trap/week (11.2-24.8) with 22.2% infested fruits (IPM) and 46.4% (non-IPM) in muskmelon crop was observed. B: Cratio was highest in IPM (6.7 & 4.5) and lowest in non-IPM (3.7 & 3.2) in cucumber and muskmelon, respectively.

Fruit fly infested muskmelon fruit **Fruit fly catches in cue lure trap**

***Kisan goshthi* and agricultural input distribution programme under SCSP scheme organized**

To improve the livelihood of the Scheduled Caste (SC) population in Uttar Pradesh and Haryana, the ICAR - NCIPM, New-Delhi organized a series of *Kisan goshthis* and agricultural input distribution programmes during March, 2023. At Dungra Jogi and Sunana villages of the Bulandshahar District, 250 beneficiaries participated on 25th March, 2023 and on 26th March, 2023, at Jagdishpur and Jhundpur villages of the Sonepat district, 240 participants were registered and benefitted. The scheduled caste, BPL farmers including farm women were provided with agricultural mechanical tools like battery operated spraying machine, spade, sickle and torch. In addition to this, other agricultural inputs like seed storage bins, tarpauline sheet, animal nutrient mixture and Nano urea were also distributed during the occasion. Dr. Subhash Chander, Director, ICAR-NCIPM exhorted farmers to reduce pesticide use and expenditure and enhance crop productivity and their income. Dr. Ajanta Birah, Nodal Officer, SCSP scheme, requested the farmers to utilise the distributed items to become self-reliant and elaborated on health benefits of millet based products.

IPM awareness programme at KVK, Badgoun, Udaipur, Rajasthan

Krishi Vigyan Kendra, Badgoun, Udaipur in collaboration with ICAR-NCIPM, New Delhi organized one day training programme under the project "Integrated Pest Management in cereals, pulses, rice and horticulture crops" in tribal region of Udaipur. Director, ICAR-NCIPM stressed on management of sucking and other pests through neem oil, NSKE and use of Jeevaamrat and Neemastrain natural and organic farming. Farmers ware made aware of seedling treatment with *Pseudomonas* and *Trichoderma* bio-agents, management of soil borne diseases and importance of IPM technology in different crops. During the programme, knapsack sprayer and tarpaulin etc., were distributed to >90 tribal beneficiaries.

IPM awareness programme at KVK, Rajasamand, Rajasthan

A farmer - scientist interaction meeting was held on 20th March, 2023 on IPM of important fruits, vegetables and other crops in collaboration with KVK, Rajasamand, Rajasthan. During the training, Dr. Sehgal, made farmers aware of seed treatment with bio-agents, raised nursery beds, organic and natural farming, and use of pheromone, yellow, blue and fruit fly traps and dealt about negative effects of pesticides on natural enemies, microbes, soil and water. Dr.Meena elaborated importance of IPM in field crops, main goal of TSP scheme and benefits of millets for TSP farmers. IPM inputs like knapsack sprayer, chargeable batteries, fruit fly trap, grain storage bin and neem oil were distributed to >100 TSP farmers by ICAR-NCIPM team.

Project on 'IPM of plant parasitic nematodes' initiated at SasyaShyamala KVK (SSKVK), West Bengal

ICAR-NCIPM in collaboration with SasyaShyamala KVK (SSKVK) and Ramakrishna Mission Vivekananda Educational and Research Institute initiated "Integrated management of plant parasitic nematodes and other major pests of solanaceous vegetables in different agro-ecologies" in farmer participatory mode.Dr.MukeshSehgal, interacted with farmers and discussed the context of the IPM program, its relevance and prospects. He motivated the farmers to adopt IPM and formation of IPM clusters to create mass awareness to reduce cost of cultivation and higher yield.

International year of Millets (IYOM)

Celebration of International Year of Millet (IYOM), 2023

MGMG team led by Dr. S. P. Singh celebrated IYOM 2023 with a group of farmers at Mandawra village, Sikandrabad (Bulandshahr), UP on 13th February 2023 and 18th March 2023. Arrangements were made to connect the farmers online with the live telecast of address made by Hon'ble Prime Minister of India Shri Narendra Damodar Das ModiJi on the occasion of inaugural session of two days International Conference on Enhancing Productivity and Value Addition in Millets held at ICAR-NASC New Delhi on March 18th and 19th March 2023. Refreshments made of millets were also distributed among the farmers.

Meetings

Mid-Institute research committee (IRC) meeting

Mid-IRC meeting was held during March 23-24, 2023 under the Chairmanship of Dr. Subhash Chander, Director, ICAR-NCIPM. All the ongoing research programmes of the centre were reviewed in the light of suggestions made during the previous Research Advisory Committee (RAC) meeting.

Farmer meeting for dissemination of IPM in Basmati rice at Barhi, Sonepat, Haryana

A farmers meeting was organized at village Barhi, Sonepat, Haryana on 9th May, 2023 for dissemination of IPM in Basmati rice. About 20 farmers participated in the meeting with the coverage of 40 ha area under rice. Farmers were educated about the importance of IPM during the meeting. Various queries of farmers about IPM and rice crop cultivation were addressed. *Trichoderma harzianum* powder prepared at NCIPM was provided to IPM farmers for rice seed treatment for about 40 ha.

Farmer - Scientist interaction meeting at KVK, Sirohi, Rajasthan

ICAR-NCIPM, New Delhi in collaboration with KrishiVigyan Kendra (KVK) Sirohi, Rajasthan conducted a ‘Farmer- scientist interaction meeting and training cum awareness programme on the occasion of ‘International year of Millets (IYOM)’ through TSP scheme under ‘Validation and Promotion of Integrated Pest Management in cereals, pulses, rice and horticulture crops’ in TSP region of India’ on 19th March, 2023. During the interaction and training, Director, ICAR-NCIPM, New Delhi, stressed on judicious use of pesticides and their harmful effect on natural enemies, crops, soil and water. He also laid emphasis on adoption of natural farming and use of neemastra and NSKE for management of sucking pests. During the occasion, vegetable seeds, knapsack sprayer, tarpaulin, sickle and spade were distributed to >80 tribal beneficiaries.

Trainings

HRD unit of ICAR-NCIPM is actively engaged in capacity building of various stake holders in the area of Integrated Pest management research, development and dissemination. In this context following activities were organised during January 2023 to June 2023.

Twenty-one days ICAR Sponsored Winter School on 'Integrated Pest Management: A Way Forward for Food Safety, Security & Sustainability' was organized during 9th -29th January, 2023 with the aim to create awareness about Integrated Pest Management (IPM) among different stakeholders and to evolve a platform to discuss the recent advances and roadmap for spreading IPM across the country. The program was inaugurated by Hon'ble Dr. T.R. Sharma, DDG (CS), ICAR, New Delhi on 9th January, 2023 in which 22 participants from 12 states participated. During this programme, 59 lectures including field and lab visits and inter institute visits were made. The Valedictory programme was chaired by Dr S. N. Puri, former Director, ICAR-NCIPM, New Delhi.

Training cum demonstration to scouts at HTI, Uchani, Haryana

A training cum demonstration on various aspects of pest management of Horticultural crops was conducted on 10th February 2023 at HTI, Uchani, Haryana in which Senior Research Fellows (SRF) and scouts working in the e- pest surveillance in Haryana project participated. During the program, an emphasis was laid on pest identification and its management in tomato, cauliflower, onion, okra, brinjal, cabbage, cucurbits (bitter gourd & bottle gourd), chilli and kinnow. Scouts were advised about the importance of sampling while recording the data. Dr Niranjan Singh explained about onion pest data entry and made a revision of data entry in other crops. During the occasion, a demonstration on sticky and pheromone traps installation was given to the scouts.

North Ester Hill region (NEH) Scheme

Awareness on Information and Communication Tools and Techniques in Lawngtlai district, Mizoram

ICAR-NCIPM & KVK Lawngtlai Mizoram, jointly organized a Farmer - Scientist Interaction and awareness program on 'Information and Communication Tools and Techniques' on 12th April 2023 at KVK, Lawngtlai, Mizoram under the Project "Impact of Access and Usage of Information & Communication Technology in IPM at North-Eastern Region of India". Dr. C. Lalfakawma from KVK highlighted the importance of the project and different activities carried out in Plant protection for the benefit of the farmers. Dr. Sehgal emphasized on the adoption of ICT for Promotion of IPM which will help in increasing the production and productivity for sustainable agriculture. More than 85 farmers participated in the program.

Farmer Awareness program at Siaha district of Mizoram

ICAR-NCIPM and KVK Siaha, Mizoram jointly organized three Farmers - Scientist Interactions and awareness programs at different locations of Siaha district under the Project "Impact of access and usage of information & communication technology in IPM at north-eastern region of India". Dr.Vanlalmuliana, from local KVK, dealt at length about the importance of Information and communication technology in modern agriculture while Dr.MukeshSehgal, emphasized on the uses of ICT tools in plant protection. Dr. (Mrs.) Meenakshi Malik, shared her views on the use of various e- agri. tools in the effective and wider spread of Integrated Pest Management technologies. Eighty participants attended the program. An extension folder "Mobile based Apps for enhancing the Production and Productivity in Agriculture" was released by the dignitaries which shall be translated in the respective local languages by Mizoram, Meghalaya and Tripura KVK centers for awareness creation.

Scientist Seminar Talk

Topic	Scientist	Dates
Microbial insecticide : as a component of IPM	Dr. D. Raghavendra Scientist	23.02.2023
Drone Application in Agriculture	Dr A K Kanojia Scientist	25.04.2023
Role of Artificial Intelligence in Plant Protection	DrNiranjan Singh Senior Scientist	29.05.2023

Events

International Women's Day 2023

The ICAR-NCIPM celebrated the International Women's Day on 7th March, 2023 with the theme of "DigitALL: Innovation and technology for gender equality (#Embrace Equity.)". The event was organized in the training hall of the Centre and was chaired by Director, ICAR-NCIPM, New Delhi. The event started with the welcome address to the staff of the Centre by Dr. Sumitra Arora, Principal scientist and Chairperson, Women Cell. She apprised the gathering about the historical importance of the day, as well as the contributions and the achievements of the women in all spheres of life. Dr. Subhash Chander, Director NCIPM emphasized the multifaceted roles of women in different phases of life. The Guest Speaker Dr. Santosh Sahi, Sr. Gynecologist and Founder, Delhi Academy of Laughing Yoga delivered a lecture by conducting live demonstration on laughing yoga, which is supposed to be an alternative therapy for relieving physical and mental stress and pain. The lecture was well perceived by the participating staff who enjoyed the live demonstrations conducted in the lecture. Five progressive women farmers from Bulandsahar, UP, (adopted under SCSP plan of the Centre) were felicitated on the day to acknowledge their contribution in adoption and dissemination of IPM by Director, ICAR-NCIPM. The program was followed by lecture from Dr. Neeru Bhusan, ADG (IPTM), ICAR, New Delhi on the "Work Life Balance" to achieve maximum productivity at the work place.

Kisan Mela on 'IPM as Ecofriendly Crop Pest Management Strategy at Kiyit village, Pashighat Arunchal Pradesh

ICAR-NCIPM, New Delhi, KVK East Siang, Department of Plant Protection, College of Horticulture and Forestry and MTTC&VTC, CAU (I), Pasighat, Arunachal Pradesh jointly organized one day district level Kisan mela on ‘IPM as Ecofriendly Crop Pest Management Strategy, on 25th February, 2023 at Kiyit village, Pashighat .The programme was chaired by Dr. B. N. Hazarika, Dean, CHF, Pasighat and the Guest of Honor were Dr. Mukesh Sehgal, Principal Scientist cum Nodal Officer, NEH-TSP and Dr. Meenakshi Malik, Scientist (Agri. Statistics), ICAR-NCIPM, New Delhi. Dr. Mukesh Sehgal, Dr. Meenakshi Malik, Dr. B. N. Hazarika, Dr. Toge Riba, Dr. Ajaykumara K. M. and Dr. Senpon Ngomle shared their experiences on the successful implementation of IPM in various agricultural and horticultural crops and also demonstrated key IPM tools like Pheromone traps, Sticky traps, Delta traps, Fruit fly traps, and Neem oil and Bio-pesticides. Altogether 180 farmers participated in this programme from villages viz., Kiyit, Seram, Mebo and Namsing.