

CITRUS NEWSLETTER



ISO 9001: 2015 CERTIFIED INSTITUTE



Vol. 26 No. 4 October to December, 2020

CONTENTS

•	From	the	Director	's	Desk		1
---	------	-----	----------	----	------	--	---

- From the Institute 2
- Regional Research Centre for Citrus, Assam 6

From the Director's Desk......

Dear Readers,

Institute is continuously enlightening the citrus growers on the various initiatives taken by the Government for the benefit of the farmers and in this regard 'Krishi Samwad' and 'PM Kisan Samman Nidhi' programmes were organized through virtual mode with more than 280 beneficiaries. Also conducted the 24th RAC and 37th IMC Meeting of the institute. Published 12 research papers in peer reviewed journals. Initiatives were taken to introduce new varieties of sweet orange on raised bed planting system at RRCC, Assam. The Scientists were recognized / awarded at various forums for their research contribution and achievements.

FROM THE INSTITUTE

Research Highlight

Pathogenicity of entomopathogenic nematode, *Heterorhabditis indica* against developmental stages of citrus fruit piercing moth, *Eudocima materna* L.

Pathogenicity assessment of *Heterorhabditis indica* against citrus fruit piercing moth, *Eudocima materna* under laboratory conditions indicated that *H. indica* strain was capable of infecting and killing 3rd, 4th and 5th larval instars of *E. materna* with fewer IJs concentrations. Pupae of *E. materna* appeared susceptible to *H. indica*. However, fully developed pupae were less susceptible to EPN than 3rd, 4th and 5th instar larvae. Reproduction potential of *H. indica* in larval instars of *E. materna* was also tested under lab conditions. Results indicate that *H. indica* successfully

reproduced in the 3rd, 4th and 5th larval instars of *E. materna* and their offspring were emerged from the larval cadavers. Overall results showed that *H. indica* represent a potential biological agent that may be used in the control of fruit piercing moth, *E. materna* in citrus orchards as well as on weed host, *T. cordifolia*. The different concentrations of IJs per larva tested in this study showed optimal results in laboratory tests.



Dead 3rd, 4th and 5th instar larvae of *E. materna* infected by *H. indica*



Multiplication of *H. indica* life stages inside the dead larvae of *E. materna*



Multiplication of *H. indica* life stages inside the dead pupa

Institute Activities / Events Organized

Swachh Bharat Mission

Institute celebrated 150th Birth Anniversary of Mahatma Gandhi on 1st October, 2020. Eminent personalities well conversant in Gandhian Philosophy Shri Girishji Gandhi Trustee, President, Vanrai Foundation, Nagpur and Shri Aprup Adawadkar visiting Faculty Gandhian Thoughts Nagpur University, Nagpur were the Chief Guest and Guest of Honour. They spoke on the life, society and other

application of his ideas principles, practices, and beliefs Followers and international influence of Mahatma Gandhi. On 2nd October, Dr. M.S. Ladaniya, Director administered the 'Swacchta Pledge' alongwith all the staff members. Undertaken intensive cleaning campaign in the Institute premises administrative building, cleaning of road side grass and unwanted plants, children's park, Farmers' Hostel and institute lawn.



Dr. Girish Gandhi addressing the staff

Krishi Samwad

Krishi Samwad organized on 7th October, 2020 to create awareness among farmers about recently passed three historical bills on farm sector in the Parliament. The Chief Guest of the programme Padmashri Dr. Vikas Mahatme, Hon'ble Member of Parliament (Rajya Sabha) highlighted various benefits that farmers will get from the recently passed farm bills. These bills will give more freedom and opportunities to farmers in selling their farm produce. Other dignitaries present were Dr. M. S. Ladaniya, Director, Dr. M.S.S. Nagaraju, HOD, Division of Remote Sensing, NBSS & LUP, Nagpur, Shri. Prakash Gajbhiye, Member of Maharashtra Legislative Council & BJP President, Nagpur District, Shri. Sagar Sarode, District President of Kisan Morcha and Shri. Anandrao Raut, progressive farmer. There were around 100 farmers from Nagpur District.



Dr. Vikas Mahatme addressing the farmers and staff

PM Kisan Samman Nidhi

The live telecast programme of Hon'ble Prime Minister Shri. Narendra Modi was organized at ICAR-CCRI. Nagpur on 25th December, 2020. Hon'ble Prime Minister virtually interacted with farmers from six states along the country. Dr. M.S. Ladaniya, Director ICAR - CCRI, Nagpur and other officials of the institute were present. On the occasion, PM digitally deposited a total of Rs.18,000 crore in the bank accounts of nine crore farmers under the "Pradhan Mantri Kisan Samman Nidhi" scheme. The programme was attended by around 80 people some of them had present virtually. Later on Dr. M. S. Ladaniya, Director briefed the audience regarding the scheme. The coordinated by Miss. programme was Sangeeta Bhattacharvya following all the safety protocols of COVID - 19 instructed by Government of India.





Dr. M. S. Ladaniya, Director and other officials participated in the programme

Training Programmes

• A webinar on "Citrus Production Technology" was organized for farmers on Kisan App during 12-14 October, 2020 in which CCRI scientists delivered the lectures and answered the queries of the farmers. About 200 farmers from more than 10 major State of India were benefitted through the webinar.

Training under SC Sub-Plan (SCSP)

• Training on "Production Technology of Citrus" on 11-12 November, 2020 through Webex platform and You Tube Livestream. Scientists from CCRI Dr. M. S. Ladaniya, Director, Dr. A. K. Srivastava, Pr. Scientist, Dr. (Mrs.) N. Vijayakumari, Pr. Scientist, Dr. A. D. Huchche, Pr. Scientist, Dr. R.K. Sonkar, Pr. Scientist, Dr. A. K. Das, Pr. Scientist, Dr. Dinesh Kumar, Pr. Scientist, Dr. A.A. Murkute, Dr. G.T. Behere, Pr. Scientist, Pr. Scientist, Dr. Kiran Kumar Kommu, Scientist and Ms. Sangeeta Bhattacharyya, Scientist and Dr. D.M. Panchbhai, Associate Dean from College of Agriculture, Nagpur delivered the lectures and answered the queries of the farmers which was attended by 82 (61 male and 21 female) farmers.

Meetings organised

• The Twenty-fourth (XXIV) Research Advisory Committee (RAC) meeting was held under the Chairmanship of Dr. D.P. Ray, Former VC, OUAT, Bhubaneshwar on 4th December, 2020 at CCRI, Nagpur in virtual mode due to COVID – 19 Pandemic. Other members present were Dr. M.S. Ladaniya, Director, CCRI, Dr. P.P.S. Pannu, Dr. D.V.K. Samuel, Dr. R.K. Rattan and Dr. D.K. Ghosh, Member Secretary. Sh. A.M. Raut farmer representative was also present.



Virtual RAC meeting in progress

Institute Management Committee (IMC) meeting

The virtual XXXVII meeting of the IMC was held on 11th December, 2020 under the Chairmanship of Dr. M. S. Ladaniya, Director, CCRI, Nagpur. Members present were Dr. B.K. Pandey, Assistant Director General (HS-II), ICAR, New Delhi, Dr. D.V. Sudhkar Rao, Pr. Scientist, IIHR, Bengaluru, Dr. Anuradha Upadhyay, Pr. Scientist, NRC Grapes, Pune, Dr. Govindrao Hande, Technical Consultant for export to the Agri. Dept, Representative of Director of Horticulture Pune (MS), Dr. V.K. Kharche, Director of Research, Dr. PDKV, Akola, Shri Anand Motiram Raut, Progressive farmer, Nagpur, Sh. Y.V. Sorte, AF&AO, ICAR-CCRI, Nagpur and Dr. A.K. Das, Pr. Scientist and I/c AO, ICAR-CCRI, Nagpur was the Member Secretary.

Skill development and Capacity Building of Institute Staff

- Dr. A.K. Das, Pr. Scientist (Plant Patho.): MDP on PME in Agricultural Research Project (virtual) organized by ICAR-NAARM, Hyderabad during 12-17 October, 2020.
- Dr. G.T. Behere, Pr. Scientist (Ento.): Management Development Programme (MDP) on Leadership Development (virtual) organized by ICAR-NAARM during 8-19 December, 2020.

Publications

Research Papers (In peer Reviewed Journals)

- Ghosh, D.K., Kokane, S.B., Gowda S. (2020). Development of a reverse transcription recombinase polymerase based isothermal amplification coupled with lateral flow immunochromatographic assay (CTV-RT-RPA-LFICA) for rapid detection of Citrus Tristeza virus. Scientific Reports, 10, 20593. (NAAS rating: 10.00)
- Ghosh, D.K., Kokane, A.D., Kokane, S.B., Tenzin, J, Gubyad, M.G., Wangdi, P., Murkute, A.A., Sharma, A.K., Gowda, S. (2020). Molecular evidence on association of *Candidatus* Liberibacter asiaticus and Tristeza virus with citrus decline in Bhutan. *Phytopathology* (NAAS rating: 9.23)
- Kokane, S.B., Kokane, A.D., Misra, P. and Ghosh, D.K. (2020). In-silico characterization and RNAbinding protein based polyclonal antibodies production for detection of citrus Tristeza virus. *Molecular and Cellular Probes*, p.101654. (NAAS rating: 7.95)
- Firake, D. M., Sankarganesh, E., Yeshwant H.M. and Behere, G. T. (2020) Mirid bug, Helopeltis cinchonae MannL a new pest of economically important crops in Northeast India. *Phytoparasitica* DOI: 10.1007/s12600-020-00855-y. (NAAS rating: 7.02)
- Meshram, D.T., Babu, D.K. Nair, A.K., Panigarhi P. and Wadne, S.S. (2020). Response of pomegranate (*Punica granatum* L.) to deficit irrigation system under field condition. *Journal of Agrometeorology*, 22: 126–135. (NAAS rating: 6.64)
- Kumar Rakesh, Deka, Bidyut C., Kumawat N., and Thirugnanavel, A. (2020). Effect of integrated nutrition on productivity, profitability and quality of French bean (*Phaseolus vulgaris*). *Indian Journal of Agricultural Sciences*, 90(2), 431-435. (NAAS rating: 6.25)
- Marathe, R.A., Murkute, A.A., Ladaniya, M.S., Sonkar, R.K. and Kolwadkar, J. (2020). Standardization of potting media and nutrition protocol for raising acid lime seedling in containerized nursery. *Indian Journal of Horticulture*, 77(2): 267-272. (NAAS rating: 6.11)

- Som. S., Roy, A., Das, B.K., Bera, A.K., Pandit, A., Bhattacharya, S., Saha, A. and Naskar, M. (2020). Exploring Bennett's hierarchy for developing methodology for training impact assessment. *Journal of the Inland Fisheries Society of India*, 52 (2): 214-221. (NAAS rating: 5.71)
- Hota D., Srivastava, A.K., Dahat S. and Dubey S. (2020). Rhizosphere engineering through microbes enhances agronomic performance of acid lime. *Progressive Horticulture*, 52(2): 120-23. (NAAS rating: 4.49)
- Kokane, A., Lawrence, K., Surwase, D., Misra, P., Warghane, A. and Ghosh, D.K. (2020). Development of Reverse Transcription Duplex PCR (RT-d-PCR) for simultaneous detection of the citrus Tristeza Virus and Indian citrus Ringspot virus. *International Journal of Innovative Horticulture*, 9(2), 131-138. (NAAS rating: 3.4)
- Kumar, D., Ladaniya, M.S., Gurjar, M. and Kumar, S. (2020). Bioactive compounds and antioxidant potential retention in thermally processed juice of GI tagged mandarin fruits (*Citrus reticulata* Blanco). *International Journal of Innovative Horticulture*, 9(2): 150-157. DOI: 10.5958/2582-2527.2020.00019.6 (NAAS rating: 2.21)
- George, A. (2020). Arthropod biodiversity of citrus ecosystem with special reference to citrus leaf miner. *Journal of Plant Health Issues*, 1(2):033-03

Papers Presented (Oral) in Seminar / Symposia / Conferences etc.

• Meshram D.T. (2020) 29th National Web Conference and presented research paper in "Response of inorganic mulches in Pomegranate (*Punica granatum* L.) Cv. Bhagwa" during 29-30 December, 2020.

Papers / Abstracts in Proceedings / Souvenir of Seminar / Symposia / conferences etc.

- Bardhan, Tannishtha, DeyAbir, Bhattacharya Sangeeta, Mohanty Shraddha and Bhardwaj Neelam (2020): Online Assessment Tools for E-Teaching and Learning: Making ICT more Handy': Global Conference on 'Emerging Agricultural Research to Endure the Predicament of COVID-19 Pandemic' on 12-13 December, 2020 at Triveni Devi Bhalotia College, Lazi Nazrul University, Paschim Bardhaman, West Bengal, India
- Meshram D.T., Babu Dinesh, Wadne S.S., Pangul C.S. (2020): Response of inorganic mulches in Poegranate (*Punica granatum* L.) Cv. Bhagwa National Webconference held at NASC Complex, New Delhi during 29-30 December, 2020.

Extension Bulletins / Folders

Ladaniya, M. S., Huchche, A. D., Das, A. K., Marathe, R. A., Shirgure, P. S. Rao, C. N. and George A. (2020).
 High density cultivation in acid lime. Extension bulletin No. 65. ICAR- CCRI, Nagpur, Maharashtra. 46p.

Popular Articles

- Meshram, D.T., Babu, K.D., Wadne, S.S. and More, B.A. (2020). Water management in Pomegranate (Punica granatum L.) during Hasta bahar. Agricultural Observer. ISSN 2582-6611.1(4):26-31.
- Meshram D.T. and Babu K.D. (2020). Innovation of micro-irrigation systems for sustainable production of pomegranate (*Punica granatum* L.). Agricultural Observer. 1(7):34-39.
- Som, S., Bhattacharyya, S. and Roy, P. (2020). Crime and Pandemic: Hidden Face of Covid-19. *Food and Scientific Reports*, 1(10): 31-36.

Participation of Scientist in workshop/meeting etc.

- Dr. M.S. Ladaniya, Director:
 - Preliminary meeting of EFC/SFC of schemes of Horticultural Science Division on 22nd October, 2020.
 - ➤ 48th Joint Agricultural Research and Development Committee on 27th October, 2020.
 - Director Conference on 5th December, 2020 on virtual mode.
- Ms. Sangeeta Bhattacharyya, Scientist (Extension):
 - Dialogue 2020 on "Future of Agricultural Extension and Advisory services" MANAGE, Hyderabad during 18-20 November, 2020 (virtual).
 - Online Workshop on "Psychometric scale construction techniques: Basic to advances" organized by ICAR-NDRI, Karnal during 24-28 November, 2020.
 - ➤ "Emerging Agricultural Research to Endure the Predicament of COVID-19 Pandemic" held at Triveni Devi Bhalotia College, Kazi Nazrul University, Paschim Bardhaman, West Bengal, India during 12-13 December, 2020.
- Dr. M.S. Ladaniya, Director alongwith Scientists: Global Summit on Responsible AI for Social Empowerment (RAISE 2020) (virtual) from 5-9 October, 2020.
- Dr. A.A. Murkute, Pr. Scientist (Hort.): Nursery Accreditation at Varhokar Nursery, Shedurjana Ghat Tah. Warud, Dist. Amravati on 10th November, 2020.

- Dr. A.D. Huchche, Pr. Scientist (Hort.): Steering Committee meeting through video conferencing of Crop surveillance and advisory project (CROPSAP) 2020-21, Commissionerate of Agriculture, Maharashtra, Pune on 11th November, 2020.
- Dr. D. T. Meshram, Pr. Scientist (L&WME): 29th National Web Conference, SCSI, NASC Complex, New Delhi on 29-30th December, 2020.

AICRP (Fruits): Citrus research

Dr. A.K. Das, Pr. Scientist and Nodal Officer (AICRP) attended meeting on 3-4th November and 18th December, 2020 related to various AICRP experiments and issues.

Lectures delivered by CCRI Scientists in training at other Institute / Organisation

- Dr. A.K. Srivastava, Pr. Scientist (Soil Science):
 - ➤ Keynote Presentation: "Climate Smart Soil Fertility Management in Perennial Fruits", International Web Conference on Perspective on Agricultural and Applied Sciences in COVID-19 Scenario (PAAS-2020) Jointly Organized by Agricultural and Environmental Technology Development Society, Uttarakhand, India; Nagar, Bangladesh Agricultural Research Institute, Gazipur, Bangladesh; Shobhit Institute of Engineering and Technology, Meerut, India; Soils, Water and Environmental Research Institute, Agriculture Research Center, Giza, Egypt, Rajiv Gandhi Central University, Itanagar, and Corteva agriscience during 4-6th October, 2020.
 - ➤ Keynote Lecture: "Climate-smart soil fertility management in perennial fruits", Webinar on Plant Science and Biosecurity organised by Innovinc group, Great America PKWY, United State held during 12-13th October, 2020.
 - ➤ Keynote Speaker: "Climate smart soil fertility management in fruit crops and its impact on nutritional value", International Virtual Conference on "Plant based food: Potential for food security and pandemic management" organised by Department of Food Science and Technology, MNS University of Agriculture, Multan (Pakistan) on 15-16th October, 2020.
 - ➤ "Integrated Nutrient Management in orange fruit crop" in the online training of "Orange fruit crop management" organized by Vasantrao Naik State Agriculture Extension Management training Institute, Dharampeth, Nagpur during 9-10th November, 2020.
 - ➤ Guest Lecture: "Research opportunities in citrus" through virtual mode to students of Shri Mathuradas Mohota College of Science, Nagpur during 3rd December, 2020.

- ➤ Guest Lecture: "What is research? Plan and process of research and its importance", Online workshop on Research Methodology and Scientific Writing organised by Department of Biotechnology and Biochemistry, Dr. Ambedkar College, Deekshabhoomi, Nagpur, during 14-16th December, 2020.
- > Keynote Presentation: "Integrated nutrient management in different tropical fruits crops", Integrated Nutrients National webinar on Management in Horticulture Crops organised by College Horticulture, Maharana of Pratap Horticulture University, Karnal, Harvana during 16-17th December, 2020.
- Dr. A.K. Srivastava, Pr. Scientist (Soil Sci.) and Dr. P.S. Shirgure, Pr. Scientist (SWCE) "Water and Nutrient Management" Dr. A.D. Huchche, Pr. Scientist (Hort.) "Pre-harvest fruit drop management", "Management for growth in fruit size" and "Weed Management and Dr. A.K. Das, Pr. Scientist (Plant Patho.) and Dr. G.T. Behere, Pr. Scientist (Ento.) "Disease and Insect-pest Management" delivered lecture in HORTSAP Farm School training on 21st October, 2020 at Savangi Village under the jurisdiction of Hingna Taluka Krishi Adhikari Officer
- Dr. Dinesh Kumar, Pr. Scientist (Hort.): Value addition and post-harvest management (MO to SMO) on 26th October, 2020 Training of Marketing Cadre-I.
- Dr. A. Thirugnanavel, Scientist 'SS' (Hort.): "Preharvest operations to improve post-harvest shelf life of fruits and vegetables" for III year B.Sc. students of Imayam Institute of Agriculture and Technology, Tamil Nadu on 24th November, 2020.

Other Extension Activities

Visit of farmers to CCRI

States	District	No. of Famers	Date
Madhya Pradesh	Kasarawad, Khargaon	7	17/11/2020
Maharashtra	Pune	3 Experts 2 farmers	6-7/12/2020
	Metaumari, Nildoh, Mangrul,	60 farmers	18/12/2020
	Krishi Vigyan Kendra, Baramati, Pune	27 farmers with 3 officers	18/12/2020
	Girola, Khairi Pannase in Hingna Block	60 farmers	19/12/2020
	Total	162	

Academic / Educational collaboration of CCRI, Nagpur with other organisation

Student Name	Examine r/Co- guide from CCRI, Nagpur	Title of the thesis, dissertati on	Collabor ating organizat ion/SAUs /College	Type of collaborati on viva- voce examiner Research at CCRI
Mr. Debashish Hota	Dr. A.K. Srivastav a, Pr. Scientist (Soil Science)	Response of biofertiliz ers in acid lime	IGKV, Raipur	Ph.D. Scholar Co-Major advisor
Ms. Bhoyar Kajal Damodh arrao	Dr. A.K. Srivastav a, Pr. Scientist (Soil Science)	Response of nutrients on yield, soil nutrient status and carbon fractions under Nagpur mandarin in vertisol	College of Agricultur e, Dr. PDKV, Akola	Co-Guide, Advisory Committee Ph.D. student
Mr. Tushar Nakade	Dr. A.K. Srivastav a, Pr. Scientist (Soil Science)	Integrated nutrient managem ent in relation to sustainabl e quality productio n of Nagpur mandarin	Dr. PDKV, Akola	Co-Guide, Advisory Committee, M.Sc. student
Ms. Sanhita Malvi,	Dr. A.K. Das, Pr. Scientist (Plant Patho.)	'Studies on Phytophth ora diseases of citrus: Identificati on, genetic characteriz ation of the causal agent and its manageme nt	JNKVV, Jabalpur (MP)	Co-Guide, Advisory Committee, Ph.D. student

Regional Research Centre for Citrus, Biswanath Chariali, Assam

New Plantation

At RRCC, Biswanath Chariali, on raised-bed planting system new introduced of sweet orange *viz.*, Torvita, Delta, Saluatiana, Diller were planted as a new block during November, 2020

Disposal of fruits produced at RRCC, Biswanath Chariali, Assam

Considerable quantity of fruits were produced in 2nd year of bearing (2020-21) at RRCC and arrangements were made for sale of these fruits (Mosambi, Cutter Valencia and other sweet orange, grapefruit, acid lime and other citrus fruits) through Biswanath College of Agriculture.

Good Governance / Swachh Bharat Mission Swachhata Pakhwada

• Institute observed "Swachhata Pakhwada" from 16-31 December, 2020 as part of Swachh Bharat Mission. Various activities were identified and staffs were motivated to take personal interest to make this campaign a grand success. Dr.M.S. Ladaniya, Director administered the pledge 'Swachhta Shapth' alongwith all the staff members and instructed to devote some time for Swachh Bharat Abhiyan.

Celebration

 Observed Vigilance Awareness Week during October, 2020; Constitution Day on 26th November, 2020 and Dr. B.R. Ambedkar Maha Parinirvan Diwas on 6th December, 2020.

Distribution of disease-free planting material under CCRI

A total of 28,122 disease free planting material of citrus rootstocks, fruits and seed distributed and revenue of Rs.13,26,483/- generated under Revolving fund Nursery Project.

Award, Honours and Recognition

- Dr. A.K. Srivastava, Pr. Scientist (Soil Science):
 - Chairman of technical session VII (Theme III: Life Sciences, Biomedical Sciences and Biotechnological aspect) in "International Web Conference on Perspective on Agricultural and Applied Sciences in COVID-19 Scenario (PAAS-2020)" Jointly Organized by Agricultural and Environmental Technology Development Society Uttarakhand, India; Bangladesh Agricultural Research Institute, Gazipur, Bangladesh; Shobhit

Institute of Engineering and Technology Meerut, India; Soils, Water and Environmental Res. Inst, Agriculture Research Center, Giza, Egypt, Rajiv Gandhi Central University, Itanagar, and Corteva Agri. Science during 4-6 October, 2020.

- ➤ Member of the Board of Studies for a period of two years at Banaras Hindu University, Varanasi, UP, w.e.f. 2nd November, 2020.
- ➤ Member of Organizing committee of the 14th International Citrus Congress (ICC 2020) in Mersin, Turkey (Theme: Reframing Citriculture: Better Connections for Future) during 8-13, November 2020.
- Member, Internal Review Committee, project entitled: Genetic Improvement of Kinnow mandarin for Fruit quality, Biotic and Abiotic stress Toleranceat Dr JC Bakshi Regional Research Station, Abohar, Punjab Agricultural University, Ludhiana, Punjab during 2020-21.
- Member, Editorial Board, Progressive Horticulture (Indian Society of Horticulture Research and Development, Uttarakhand).
- Ms. Sangeeta Bhattacharyya, Scientist (Extension)
 - Awarded Certificate of Excellence in reviewing in recognition of an outstanding contribution to the quality of the Journal- 'Journal of Social Sciences', 'Journal of Public Affairs', 'Journal of Education, Society and Behavioural Science', 'Asian Journal of Research in Animal and Veterinary Sciences', 'Asian Journal of Agricultural and Horticultural Research' in year 2020.
 - Second Best Oral Presentation Award: "Online Assessment Tools for E- Teaching and Learning: Making ICT more Handy" (Bardhan, T., Dey, A., Bhattacharyya, S., Mohanty, S., Bhardwaj, N.). In: Global Conference on "Emerging Agricultural Research to Endure the Predicament of COVID-19 Pandemic", 12-13 December, 2020 at Triveni Devi Bhalotia College, Kazi Nazrul University, West Bengal.
 - ➤ Best Article Award: "Gandhiji and his life: Gandhian Principles in Indian Agriculture" on the occasion of Gandhi Jayanti celebrations organised by Institute from 1st to 2nd October, 2020.
- Dr. A.A. Murkute, Pr. Scientist (Hort.) Chairman of Committee to decide the qualification criteria for M.Sc. and Ph.D. advisors for RVSKVV.

- Dr. G.T. Behere, Pr. Scientist (Ento.) and Dr. Anjitha George, Scientist 'SS' (Ento.) received Scientist Award 2020 and Young Scientists Award 2020 respectively by Dr. B. Vasantharaj David Foundation, Chennai on 5th December, 2020.
- Dr. Anjitha George, Scientist 'SS' (Ento.) Young Scientist Award by Society for Biotic and Environmental Research, Tripura on 15th October, 2020.
- Dr. A. Thirugnanavel, Scientist 'SS' (Hort.): External examiner for evaluating the Experiential learning programme for final year B.Sc Agri students of Kalasilingam Academy of Research and Education, Tamil Nadu on 18th December, 2020.

Service offered

M/s. Sahyadri Agro Farms

This company wanted to import Mandarin variety LB 8 – 9 (Sugar Belle) from Spain. Permission / approval was given keeping in view post-entry quarantine facilities available with them. M/s. Sahyadri Agro farm, a Farmers Producer Company (Shri. Vilas Vishnu Shinde) of Nashik, Maharashtra to import "Sugar Belle" LB 8-9, a mandarin variety, claimed to be tolerant to greening, through Directorate of Plant protection, quarantine and storage, (Quarantine sub-station at Mumbai), as per plant quarantine order 2003. This company also imported other citrus varieties (budwood) from Spain like Fino, Eureka and Verna lemons, Oronules, Nova, Murcott, Owari, Iwasaki mandarins and Navelina, Lane Late, Valencia and Midknight Valencia sweet oranges during December 2020. Plants are maintained in post-entry quarantine (PEQ) facility (closed structure) at Post Adgaon, Dist. Nashik., Maharashtra.

Radio / TV talk

 Video documentation of success stories of two citrus growers of Telkamtee village, Kalmeshwar taluka in Nagpur district of Maharashtra was done and uploaded in CCRI YouTube channel on 6th November, 2020.

Personnel

Appointment

Permanent staff

 Dr. D.T. Meshram, Sr. Scientist (L&WME) joined on 12th November, 2020 on transfer from ICAR-NRCP, Solapur.

Contractual staff

- Sh. Rajkumar P. Bhure, Young Professional-I w.e.f. 1st October, 2020
- Ms. Krutika P. Fiske, Young Professional-I w.e.f. 1st October, 2020
- Ms. Dhanshree P. Deshmukh, Young Professional-II w.e.f. 24th October, 2020
- Sh. Dharmendra P. Sinh, Junior Research Fellow w.e.f. 2nd November, 2020
- Ms. Priya A. Zade, Young Professional-II w.e.f. 17th November, 2020
- Ms. Priya R. Uge, Young Professional-I w.e.f. 23rd November, 2020
- Sh. Nikhil Dhole, Young Professional-I w.e.f. 1st December, 2020.
- Sh. Trailukya Das, YP-II w.e.f. 2nd December, 2020 at RRCC, Biswanath Chariali, Assam.

Transfer

 Dr. P.S. Shirgure, Pr. Scientist (SWCE) transferred to ICAR-NRCP, Solapur from ICAR-CCRI, Nagpur on 10th November, 2020.

Resignation / relieving

- Sh. Bhakta Khanikar, Young Professional-I relieved on 28th October, 2020.
- Sh. Sachin A. Mendke, Young Professional-I relieved on 2nd December, 2020

Education

 Ms. Sangeeta Bhattacharyya, Scientist (Agril. Extension) received Provisional Degree Certificate in December, 2020 of the one year correspondence course on Post Graduate Diploma in Educational Technology Management (PGDETM) from ICAR-NAARM in collaboration with University of Hyderabad.

Edited by: Dr. Dilip Ghosh, Director, Dr. A. K. Das, Pr. Scientist (Pl. Patho.), Dr. Dinesh Kumar, Pr. Scientist (Hort.), Dr. A. A. Murkute, Pr. Scientist (Hort.) Dr. G.T. Behere, Pr. Scientist (Ento.) and Dr. Kiran Kumar Kommu, Scientist (Nematology)

Compiled by: Miss Lily Varghese, Chief Technical Officer

Published by: Dr. Dilip Ghosh, Director, ICAR-Central Citrus Research Institute, Nagpur, Maharashtra Citrus Newsletter is an official document of the Central Citrus Research Institute,
 P. B. No. 464, Shankar Nagar, P.O., Amravati Road, Nagpur – 440010 (Maharashtra)

Phone No.: 0712-2500249, 2500615, 2500813 **FAX:** 0712-2500813 **Website:** https://ccri.icar.gov.in, **E-mail:** director.ccri@icar.gov.in

e-published