COTTON Innovate

Weekly Newsletter from Central Institute for Cotton Research, Nagpur

Visit : www.cicr.org.in

Issue : 4, Volume :11, November 24-30, 2013

RESEARCH ROUND-UP

Mirid bug (*Hyalopeplus lineifer*) Walker recorded as a minor pest of cotton

V.S.Nagrare, Vrushali Deshmukh & Bhausaheb Naikawadi

Mirid bug *Hyalopeplus lineifer Walker* (synonyms: *Capsus vitripennis* Stal, *Hyalopeplus amboinae* Carvalho, *Hyalopeplus uncariae* Roepke, Capsus lineifer Walker, *Hyalopeplus uncariae* Roepke, *Hyalopeplus amboinae* Carvalho, *Hyalopeplus vitripennis* Stal) measuring about 7.31 mm (range 5.93-7.95mm) was recorded with average infestation 0.3 mirid/plant during present season. This is a minor pest of cotton in central India. The species also prevails in south India. Presence of brownish parallel streaks on the pronotum is the distinct identifying character of the species. Diverse colour morphs (green, yellow and red) have been noticed in *H. lineifer.* Both nymphs and adults of *H.lineifer* were observed to feed on squares and small developing bolls. They pierce the plant tissues by stylet while feeding. The affected area rapidly changes colour, then blackens ultimately resulting in necrosis of the cells in the region. Feeding by these insects result in heavy shedding of medium sized squares and tiny bolls.

Adult *Hyalopeplus lineifer*

Nymph *H. lineifer*

SCIENTIFIC TALK

Dr R.A. Meena, Principal Scientist, Seed Technology, delivered a scientific talk on 'Physiological and Nutritional Disorders of cotton' on 30th November, 2013 under the seminar series at CICR, Regional Station, Sirsa. The talk included symptoms of various physiological & nutritional disorders, their causes and management with highlights on current scenario due to decreasing organic matter and imbalanced use of soil nutrients in north zone. The physiology of plants with respect to these disorders was also discussed at length.

As part of the weekly scientific seminar at CICR, Regional Station, Coimbatore, a scientific talk on "Forecast models An overview" was delivered by Dr. K. Sankaranarayanan, Principal Scientist (Agronomy) on 30th November, 2013. He emphasized the requirement of reliable and timely forecasts by models for various policy decisions relating to storage, distribution, pricing, marketing, import-export, etc. The features of models for yield forecast includes crop simulation, empirical statistical method, plant characters based, spectral data, farmers appraisal and data driven techniques were discussed. Linear time series model of ARIMA and ARIMAX and non-linear time series model ARCH were explained with suitable examples.

Dr. J. Gulsar Banu, Principal Scientist (Nematology) delivered a lecture "Temperature optima for infectivity and multiplication of three native entomopathogenic nematodes against *Spodoptera litura*" in 3rd International Congress of Global Warming on Biodiversity of Insects: Management and Conservation (GW-BIMC,2013) held at Bharathiar University, Coimbatore during November 26-28, 2013. She also delivered a lecture "On the natural occurrence of *Cladosporium cladosporioides* (Fresen.) deVries from Cotton Aphid, *Aphis gossypii* Glover" in the 4th Biopesticide International Conference held at St. Xavier's College, Palayamkottai, Tamil Nadu, during November 28-30, 2013.

CICR In Press

Promising yields with non-Bt Varieties
Yemmiganur Agriculture: News Today

Dr. Sitaram Sharma. Scientist, Regional Agriculture Research Station, Nandyal, ANGRAU, visited the non-Bt field trials in Thimmapuram. He said that after the introduction of Bt hybrids the area under non-Bt varieties has declined. This is likely to result in resistance development of bollworms and Spodoptera to Bt cotton which can reduce yields. He said that some farmers were encouraged to cultivate the non-Bt variety NDLH 1938 in the division. The non-Bt varieties were grown at high density of 74,000 plants per acre while the Bt hybrids are grown at 9600 plants per acre. He said that the non-Bt plants were able to overcome the pest attack and yield as high as the Bt crops. This year the non-Bt fields in Kharif were expected to yields 10 quintals per acre. BTM Pullaiah of ATMA and Papi Reddy of the Agricultural Department were present.

బీటీయేతర పత్తి దిగుబడి ఆశాజనకం

ఎమ్మిగనూరు వ్యవసాయం, న్యూస్‌టుడే :కె.తిమ్మాపు రంలో ప్రయోగాత్మకంగా సాగుచేసిన బీటీ యేతర పత్తి పంటను ప్రాంతీయ వ్యవసాయ పరిశోధన స్థానం శాస్త్రవేత్త డాక్టర్ సీతారామశర్మ పరిశీలించారు. మంగళవారం ఆయన మాట్లాడుతూ బీటీ పత్తి రాకతో బీటీ యేతర పత్తి సాగు పూర్తిగా పడిపోయిందన్నారు. బీటీ పత్తి ఒక్కటే సాగు చేయడంతో శనగపచ్చ లద్దె పురుగుల రోగ నిరోధకశక్తి పెరిగి బీటీ పత్తి దిగుబడి పూర్తిగా తగ్గే అవకాశం ఉంద న్నారు. అందువల్ల బీటీ యేతర ఎన్‌డీఎల్ హెచ్-1938 రకాన్ని ప్రయోగాత్మకంగా డివిజన్‌లో కొంతమంది రైతులతో సాగు చేయించినట్లు వెల్లడించారు. బీటీ యేతర పత్తిలో మొక్కల సాంద్రత ఎకరానికి 74వేలు కాగా, బీటీ పత్తి మొక్కల సాంద్రత 9600 ఉంటుందన్నారు. బీటీ యేతర పత్తి పురుగు బెడద తట్టుకొని బీటీ పత్తి పలే దిగుబడినిస్తుంద న్నారు. ఈ ఏడాది ఖరీఫ్‌లో ప్రయోగత్మకంగా సాగు చేయిం చిన భూముల్లో ఎకరాకు 10 క్వింటాళ్ల దిగుబడి వచ్చే అవ కాశం ఉందని చెప్పారు. ఆత్మ బీటీఎం పుల్లయ్య, వ్యవసాయా ధికారి పాపిరెడ్డి ఉన్నారు

పంటను పరిశీలిస్తున్న శాస్త్ర వేత్త

VISITS

Dr. K. R. Kranthi. Director CICR, accompanied by Dr. Sandhya Kranthi, Head, Crop Protection Division, Dr. R. B. Singandhupe, Principal Scientist and I/c KVK, Nagpur, Dr. M. V. Venugopalan, Principal Scientist and Dr M.S. Yadav, Chief Technical Officer reviewed the implementation of HDPS demonstration in Digdoh Pandey Village, Hingna Tehsil Nagpur, on 29-11-2013. Sri. Gubir Singh, SMS, KVK, Nagpur and Shri. S. A. Gharpure coordinated the visits. In all, 16 demonstrations with Suraj, AKA 7 and PKV 081 varieties were laid out in the village and majority of them were on shallow to very shallow soils with surface stony surface. The farmers narrated their experience and the difficulty in controlling weeds due to heavy and continuous rainfall. The members reinforced the basic tenets of HDPS viz. early (pre monsoon) sowing, maintaining adequate plant population (45 or 60 cm spacing between rows and 10 cm between plants in a row) and use of recommended plant protection measures based on scouting. Farmers were keen to continue the HDPS system next year. Dr. Kranthi, Director CICR, requested the farmers to visit CICR immediately and take a look at the trials and convince themselves about the advantages of the system.

Dr. R. R. Hanchinal, Chairman, Protection of Plant Varieties & Farmers Right Authority, New Delhi, visited CICR Regional Station, Coimbatore on 28th November, 2013. Dr. A.H. Prakash, P.C & Head briefed him about the activities carried under the DUS Project. Dr. R.R. Hanchinal also inspected the experimental trials conducted under the DUS Project.

PUBLICATIONS

Nalayini, P., Sankaranarayanan, K., and Velmourougane, K. 2013. Herbigation in cotton (*Gossypium spp*): Effects on weed control, soil microflora and succeeding green gram (*Vigna radiata*). *Indian Journal of Agricultural Sciences*. 83 (11): 11448.

FAREWELL

Dr. A.R. Reddy, Senior Scientist, Economics Division of Crop Production was relieved from CICR, Nagpur on Nov. 30, 2013 on transfer to join at Zonal Project Directorate, Hyderabad. He was accorded warm farewell on November 25, 2013 by Division of Crop Production, CICR, Nagpur. IRC meeting was also held on November 30, 2013 to felicitate and bid farewell to Dr. A.R. Reddy. Dr. Reddy was felicitated and lauded by Director and Scientists for his professional and personal attributes.




IRC meeting was also held 30th November, 2013 to felicitate and bid farewell to Dr. A.R. Reddy

Mrs. Sushilabai Nagdavne Skilled Supporting Staff was accorded warm farewell on her superannuation on November 30, 2013 in a function organized by ICAR-CICR Staff Welfare Club.


Produced and Published by : Dr. K. R. Kranthi, Director, CICR, Nagpur
Chief Editor : Dr. Nandini Gokte-Narkhedkar
Editors : Dr. J. Annie Sheeba, Dr. Vishlesh Nagrare, Dr. J. Amutha, Dr. M. Saravanan
Media Support & Layout design : Mr. M. Sabesh
Production Support : Mr. Sanjay Kushwaha

Citation : Cotton Innovate, Issue-4, Volume - 11, 2013, Central Institute for Cotton Research, Nagpur

Publication Note: This Newsletter presented online at http://www.cicr.org.in/NewsLetter.html
Cotton Innovate is the Open Access CICR Newsletter

The Cotton Innovate - CICR Newsletter is published weekly by
Central Institute for Cotton Research
Post Bag No. 2, Shankar Nagar PO, Nagpur 440010
Phone : 07103-275536 Fax : 07103-275529; email: cicrnagpur@gmail.com