

Proceedings of the Rythu Bharosa Training and Visit (T & V) Workshop for the Month of February 2022

Rythu Bharosa Training and visit workshop was held through virtual mode for the Agriculture and line departments of West Godavari district on 05-02-2022. Dr. M. Rama Bhadra Raju, Senior Scientist (Plant Pathology) introduced the scientific staff from RARS, Maruteru, KVK Undi, ARS, Peddapuram, ARS, Vijayarai and DAATTC, Undi to the group and later welcomed Sri Jagga Rao, Joint Director of Agriculture, Sri. Ramakrishna, Deputy Director of Agriculture and all the ADA's to the virtual workshop.

Dr. G. Jogi Naidu, Associate Director of Research, RARS, Maruteru & President of the workshop hearty welcomed Joint Director of Agriculture to the workshop. Dr G. Jogi Naidu discussed about progress of paddy transplantation during *rabi*. He asked the ADA's to discuss about pests and diseases, rodent management and problems regarding cultivation during *rabi* 2021-2022 and asked them to send data regarding minikits.

Dr. T. Srinivas requested information on varietal distribution in *rabi*, actual area, total sown area, area cultivated under bore wells, marketing problems and minimum supporting price (MSP) for different varieties of paddy.

Feedback on Crop Situation by Department of Agriculture, West Godavari district

Sri Jagga Rao, Joint Director of Agriculture, West Godavari district informed that transplanting in 100% area has been completed. He requested the remedial measures for excessive consumption of urea, an action plan regarding water management for cultivation of paddy during *rabi* season. He informed that minikits data will be sent at the earliest.

ADA, T. P. Gudem: Paddy transplanting is completed in 10700 ha and the crop is in active tillering stage, panicle initiation stage and grain filling stage. MTU 1121 is cultivated in over 95% area and MTU 1153, MTU 1156 are grown in 5% area. Direct sowing in 60 acres and machine transplanting in 240 ha, remaining area is by Bengal planting. Stem borer and leaf spot is observed in some fields. Maize is sown in 12 ha, blackgram in 1550 ha and Maruca pod borer infestation is observed in fields. MTU 1318 is cultivated in *kharif*, due to cyclone 20-25 bags/ac yield is produced. In some places 30-32 bags/ acre yield was obtained. It is procured as Swarna in market.

ADA, Maruteru: Transplanting is completed in 100% area in which MTU 1121 is major variety being cultivated. Due to excessive use of urea Stem borer, stem rot incidence is observed.

ADA, Chintalapudi: Maize is sown in 1550 ha, redgram in 35 ha. Turcicum leaf blight is observed in maize fields.

ADA, Kovvur: Transplanting of paddy is completed with MTU 1121 being major variety (95% area), Maize in 2906 ha, Tobacco in 4962 ha and Groundnut in 29 ha. Stem borer, stem rot incidence in paddy and Turcicum leaf blight in maize fields is observed.

ADA, Akiveedu: Total area under paddy is 32000 ha, transplanting is completed in 26216 ha. MTU 1121 is major variety in *rabi*. Even though N is applied in less quantity stem borer incidence is there. Zn deficiency is observed in some fields. Due to heavy rains during *kharif*, lodging of crop, yield of 20-25 bags/ac is obtained in MTU 1318. In minikits, crop condition is satisfactory.

ADA, Bhimavram: Paddy is cultivated in 42000 ac in which MTU 1121 is majorly grown variety, in remaining area MTU 7029 and MTU 1061 are grown for seed purpose. He requested about information on fertilizer usage, pest and disease management and management of salinity in paddy fields surrounding aquaculture ponds.

ADA, Bhimadolu: In the four mandals 15213 ha area is under paddy, transplanting is going on. Stem borer and leaf folder incidence is observed in some fields. He requested information on forecast for blast and sheath blight diseases. In *kharif*, paddy is procured through RBK and MSP was given. Requested information on the paddy varieties during *kharif* for better price in market. In maize cabbage is grown as trap crop. He requested for the management as to reduce the broken rice in late planting/ upland conditions. He urged for the millers view on grade A/ grade B rice varieties categorization including MTU 1318.

* Assistant Directors of Agriculture from Tanuku, K R Puram, Eluru, Palakol and Nidadavolu could not present information on the current status of crops during the workshop.

Dr. K. Mohana Rao, Principal Scientist (ARS, Vijayarai): 15-20% of Maize crop is damaged due to Fall Army Worm (FAW) and rust is observed in some fields. To control rust, spraying of Mancozeb 2.5 g/l is recommended.

KVK, Undi, Dr. N. Mallikarjuna Rao, Program Coordinator has presented the progress of nursery production and field problems in various crops.

Phani Kumar, DAATTC, Undi: Stem borer and stem rot is observed in MTU 1318. Salinity problem is observed in some fields. Sulphide injury is observed in Unguturu area. Reported FAW, Turcicum leaf blight in maize, Maruca pod borer in pulses and black thrips in Chilli.

Research Recommendations from Scientists of Godavari Zone

Dr. T. Srinivas, Principal Scientist (Rice): Clarified that broken rice during milling might be due to water stress during grain filling, reduced potash application, drying of produce under hot sun, pest and disease infected panicles and abdominal chaffiness. As Swarna sampada is a private hybrid, it should not be recommended for subsidy programme. Nitrogen should be applied in 2 doses only and ZnSO₄ @ 2 g/L should be applied during *rabi* season for correction of Zn deficiency. He also informed that direct seeding and machine transplanting should be recommended for farmers

Dr. K. M. Dakshina Murthy, Principal Scientist (Agronomy): N recommendation for *rabi* is 72 kg/ac, if urea is applied in wet conditions followed by irrigation, there could be high volatilization losses and crop response may not be good. Urea should be applied in muddy soil followed by irrigation after 2 days. In Maize, N recommendation is 240 kg/ha. As Zinc deficiency is more in *rabi*, apply ZnSO₄, before planting as once in two seasons is beneficial.

Dr. Ch. Sreenivas, Senior Scientist, (Soil Science): Sulphide injury in paddy is due to water logged conditions, the symptoms are bubbles in water, black root and rotten egg smell in fields. Iron toxicity can be observed by brown roots, oily appearance on soil surface. First identification of symptoms is important. Sulphide injury can be controlled by draining the lodged water, adding 10 kg urea and 10 kg phosphorous fertilizers per acre and leveling in the field. Zinc deficiency in paddy can be observed by reduction in no. of tillers, third leaf from top changes to white colour and rust type spots on the leaves. It can be controlled by spraying of ZnSO₄ (2 g/L) per week in field. Salinity problem can be controlled by gypsum application. Cultivation of paddy near aquaculture ponds: fish is cultivated in fresh water, there may not be salinity near fish ponds, but prawn culture is majorly in salt water, if the salt level is > 5 ds/m EC, prepare interceptor drain 1 m away from pond and the drain should be 1 ft. deeper than the paddy field. Fertilizer usage should be 25% more in saline soils than regular fields.

Dr. M. Nanda Kishore, Principal Scientist (Entomology): Stem borer incidence is observed 15 DAT, when granules are applied in nursery the incidence will not be observed initially in main field. Application of Carbofuran 10 kg/ac or Fertera @ 4 kg/ac followed by spraying of Chlorantraniliprole @ 60 ml/ac 10-15 days after granular application controls the stem borer. Initially if Carbofuran is used, at Panicle initiation stage using of Fertera and vice versa is advisable. Spraying of Chlorantraniliprole or Monocrotophos or Chlorpyrifos controls the leaf folder incidence. For the second spray the chemicals should be alternatively used. In pulses to manage Maruca pod borer, application of neem pesticides i.e. Azadiractin @ 3 ml/L or Neem oil @ 3 ml/l or Neem Seed Kernel Extract @ 5 ml/L before flowering is recommended. After flowering spraying of Novaluron @ 1 ml/l or Spinosad @ 0.2 ml/l or Flubendamide @ 0.2 ml/l reduces the pest incidence.

Dr. V. Bhuvaneshwari, Senior Scientist (Plant Pathology): Informed that to control BLB changing of water and spraying of Plantomycin @ 1 g/l, to control blast in nursery & main field spraying of Tricyclazole @ 0.6 g/L or Isoprothiolone @ 1.5 ml/L is advisable. Due to increased temperatures blast and sheath blight incidence will be reduced in the following months. To control sheath blight spraying of Hexaconazole @ 2.0 ml/l, to control stem rot spraying of Tebuconazole @ 2.0 ml/l is recommended.

Mr. P. Bharathchandra, Scientist (Plant Pathology), ARS, Peddapuram: Turcicum leaf blight is observed at 50-55 DAS in maize, to control the disease spraying of Mancozeb @ 500 g/ac followed by second spray at 10-15 days after first spray is advisable.

Dr. N. Srinivas, Senior Scientist (Entomology): Community rodent control campaign is organized two times in *kharif* season. Due to the increasing rains, aggravation of rodents is observed in *kharif*. Around 52.5 lakh burrows were treated under campaigning. In summer campaign Zinc Sulphide may be used in place of Bromodiolone, because continuous use of Bromodiolone leads to tolerance in some areas. Klerat (Brodifocum 0.005%) in the form of wax blocks is a novel Rodenticide available in the market which could be applied as 1 wax block/animal could be useful for control of rodents in orchards, godowns and paddy fields.

Dr. G. Jogi Naidu, Associate Director of Research, RARS, Maruteru in his concluding remarks informed all the ADA's that the problems regarding pests, diseases and broken grain were clarified by scientists. MTU 1318 will be produced upto 5000 quintals by the end of May and foundation seed will be available for *Kharif* 2022. The meeting ended with vote of thanks by Dr. V. Bhuvaneshwari, Senior Scientist (Plant Pathology), RARS, Maruteru.


ASSOCIATE DIRECTOR OF RESEARCH
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