

Phone: 0129-2413985 E-mail:-ppa@nic.in

F.No 3-6/2022-23/IPM/Advisory भारतसरकार/ Government of India

कृषि एवं किसानकल्याण मंत्रालय / Ministry of Agriculture & Farmers Welfare कृषि, एवं किसान कल्याण विभाग / Department of Agriculture & Farmers Welfare वनस्पतिसंरक्षण, संगरोधएवंसंग्रहनिदेशालय / Directorate of Plant Protection, Quarantine & Storage एनएच4, फरीदाबाद(हरियाणा) – 121 001/ NH-IV, Faridabad (Haryana) – 121 001

Dated: .08.2022

To

The Director of Agriculture Directorate of Agriculture, Krishi Bhavan, Lucknow Uttar Pradesh- 226001

Sub: Advisory on incidence of Maize Stem borer (*Chilo partellus*) on maize in Farrukhabad district of Uttar Pradesh-reg.

Sir.

I have the honor to bring to your kind notice that incidence of Maize Stem borer has been reported at Kamalganj block, Farrukhabad district of Uttar Pradesh as per the survey report on 22nd July 2022. The detailed surveillance carried out by RCIPMC Lucknow & the level of infestation was found Low to Moderate (Above ETL) in 95 ha of maize crop.

The larva feeds on the leaves by making a few "shot holes" and then boring downwards through the central whorl. It also cause internal tunnels by entering into the midribs and feeding on the internal tissues. The characteristic symptoms are "shot holes" during early stage and "dead heart" during severe attack. Severe damage will result in breaking of the stem, and stunted growth is reported. Larvae pupate inside the stem.

Following strategies are suggested to contain, suppress and eradicate the pest population:

- Collect and destruct the stubbles & deep summer ploughing could kill hibernating pupae
- ❖ Install light traps @ 5/acre during night time to trap and kill the adults
- Sowing of 3-4 rows of trap crops (e.g. Napier) around maize field and spray with 5% NSKE or Azadirachtin 1500 ppm as soon as the trap crop shows symptom of stem borer damage
- ❖ Inter-crop maize with cowpea in 2:1 ratio
- ❖ Erection of bird perches @ 10/acre during early stage of the crop (up to 30 days) as birds acts as good predator on lepidopteran larvae

.....To be continued in next page

- ❖ Application of Sand + lime in 9:1 ratio in whorls in first thirty days of sowing soon after the observation of stem borer incidence restricts larval feeding
- * Two releases of *Trichogramma chilonis* 8 çards/ha (1,50,000 parasitized eggs/ha)
- * Conserve larval parasitoid *Cotesia flavipes*, Pupal parasitoid *Tetrastichus howardii*, *Xanthopimla stemmator* and Predators such as *Chrysoperla carnea*, spider, ear wig, coccinellid, dragon fly, preying mantid, Pentatomid bug, reduviid bug, robber fly, rove beetles, wasp.
- ❖ Granular application of Carbofuran 3% CG @33.3kg/ha in whorls of infested plants or Dimethoate 30%EC @ 660 ml/ha in 500-1000 litre of water or Thiamethoxam 12.60 % + Lambda-cyhalothrin 09.50 % ZC @ 125 ml/ha in 500 litre of water (waiting period is 42 days) to control stem borer.
- Pesticide must be used as per label claim approval by the Registration Committee. Detailed information is available at Directorate website. http://ppqs.gov.in/divisions/cib-rc/major-uses-of-pesticides.

In view of the above, it is requested to monitor the maize crop on regular basis and if major incidence of stem borer is reported by the farmers, extension functionaries and through newspapers, etc., survey of the affected fields may be conducted immediately and the concerned officials at the district/ division/ block may be advised to take the suitable plant protection measures on priority. The detailed information may also be sent to the Directorate through email ppa@nic.in or appa.ipm-ppqs@gov.in urgently to apprise the same to Department of Agriculture & Farmers Welfare

Yours faithfully

(Dr. J.P.Singh)
Plant Protection Adviser

Encl: as above

Copy for information:

- 1. PPS to Joint Secretary(PP), DA & FW, Krishi Bhawan, New Delhi- 110001
- 2. The Directors of Agriculture of other maize growing states with the request to keep close watch on pest build up & take appropriate measures as indicated above
- 3. PPS to PPA for information
- 4. Officer In-charges, CIPMCs Lucknow, Agra & Gorakhpur with a direction to conduct regular survey in their areas to ascertain the pest incidence level and necessary follow-up with the state authorities.