

# Field Screening of Mungbean (*Vigna radiata*) and Urdbean (*Vigna mungo*) Genotypes Against Spotted POD Borer (*Maruca vitrata* Fabricius) in the Lower Gangetic Plains of West Bengal, India

A. Banerjee, R. Das<sup>1</sup>, S. Maji and R. Nath<sup>2</sup>

AICRP on MULLaRP Directorate of Research, Bidhan Chandra Krishi Viswavidyalaya  
Kalyani-741235, Nadia, West Bengal

<sup>1</sup>Regional Research Sub-Station (Red & Laterite Zone), BCKV, Sekhampur, Birbhum

<sup>2</sup>Deptt. of Agronomy, Faculty of Agriculture, BCKV, Mohanpur, Nadia

---

**Abstract**—Field screening for spotted pod borer (*Maruca vitrata* Fabricius) resistance in mungbean and urdbean cultivars was carried out at the District Seed Farm (AB Block), Bidhan Chandra Krishi Viswavidyalaya, Kalyani, Nadia during the kharif season in the year 2015. Twenty four different cultivars of mungbean and twenty six cultivars of urdbean were screened in the field to find the resistance potentials of the cultivars when exposed to the pod borer population in the area. The experiment was carried out using randomized complete block design in three replications. The results showed that fourteen entries of mungbean gave moderately resistant reaction against the pest. Among these moderately resistant cultivars, only one cultivar (ML 2410) exhibited a yield (1332 kg/ ha) higher than the state average (1175 kg/ ha). Eight entries were moderately susceptible and two entries viz. IPM 312-20 and IPM 2-3 were found susceptible to the pest. The percent decline in the yield of these two cultivars were 17.77 (IPM 312-20) and 13.56 (IPM 2-3) than the best performing cultivar. In case of urdbean, two cultivars (COBG 11-03 and NIRB 003) were resistant, seventeen entries were moderately resistant and five entries were moderately susceptible to the pest. All the cultivars of urdbean except VBG 11-053 (615.9 kg/ ha) and KU PU 10-16 (638.9 kg/ ha) recorded a yield above the state average (697 kg/ ha). The former cultivar was susceptible whereas the latter was moderately susceptible to the spotted pod borer. The cultivars recording higher yields (above 2000 kg/ ha) viz. MU 46 and RUG 59 showed moderately resistant and moderately susceptible reactions, respectively. It is evident from the experiment that it is not always necessary for these crops to have resistant reactions against the pest to exhibit higher yield potential in this region.

**Keywords:** Mungbean, urdbean, spotted pod borer, *Maruca vitrata*, screening.