

Field evaluation of Soybean varieties for resistance to Yellow mosaic virus (YMV) in the lower gangetic plains of West Bengal, India

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The study was conducted with the objective to assess the resistance source against Yellow Mosaic Virus (YMV) in soybean at Regional Research Station (RRS), Gayespur, Bidhan Chandra Krishi Viswavidyalaya, (BCKV), West Bengal, India during *kharif*, 2016 and *kharif*, 2017. Yellow mosaic virus (YMV) is a major viral disease of soybean, which can cause up to 80% yield loss in severe cases. Twenty six varieties including one susceptible check were screened against YMV under natural condition. Percent Disease Index was worked out and it varied from 0.00 % to 33.33 %. Only three varieties viz. PS 19, JS 9752 and PK 564 were found immune (Disease severity 0%). Thirteen varieties i.e., RKS 18, Kalitur, RAUS 5, PK 1042, Shilajeet, PS 1241, MAUS 71, PK 1024, PK 416, Alankar, Bragg, Ankur and PK 262 were observed to be resistant (Disease severity 1% to 10%). Seven varieties (NRC 37, PK 472, PK 1092, Indira Soya 9, PS 1029, NRC 37, and PS 1347) were categorized as moderately resistant (Disease severity 10% to 20%) and two varieties (PK 327 and JS 20-29) were showed under moderately susceptible (Disease severity 20% to 30%). Only one variety i.e. JS 335 was found susceptible (Disease severity 30% to 50%). None of the varieties was observed highly susceptible (Disease severity above 50.1%). These Immune and resistant varieties can be used as good donor for evolving resistant varieties against Yellow Mosaic Virus in soybean.

Key words: Soybean, yellow mosaic virus, field evaluation, resistance