

TRANSMISSION, HOST RANGE AND SYMPTOMATOLOGY STUDIES OF SOYBEAN YELLOW MOSAIC DISEASE THROUGH WHITEFLIES

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Abstract: Soybean (*Glycine max* (L.) Merrill) is one of the major oil seed crops in the world. The Yellow Mosaic Disease (YMD) of soybean is caused by Mungbean Yellow Mosaic India Virus (MYMIV). The transmission, host range and symptomatology studies were conducted at glasshouse facility of MPKV, Rahuri. For these studies whitefly (*Bemisia tabaci*) was used as vector of this viral disease. In transmission studies of virus indicated that, the 100% transmission rate was recorded, when 15 and 20 whiteflies were used per soybean plant. Mungbean, dolichos bean, black gram, cow pea, cluster bean and horsegram act as host of yellow mosaic disease. The host range studies indicate yellow mosaic of soybean was able to infect these crops through whiteflies under glasshouse condition. In symptomatology studies, soybean test plant, JS-335 developed typical yellow mosaic disease symptoms like irregular bright yellow and green diffused patches on leaves, extensive mosaic and mottling of leaves, chlorosis and reduction in leaf size.

Keywords: Soybean, Yellow mosaic disease, Virus transmission, Whitefly, Virus host range

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