

Sucking Insect-pest Complex in different Summer Green Gram, *Vigna radiata* (L.) Wilczek Varieties in West Bengal

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Abstract—A field experiment was conducted at farmers' field of Jirangaccha and Puturia village of Barasat II Block, North 24 Parganas during summer, 2016 with four green gram, *Vigna radiata* (L.) varieties viz. Sonali, Samrat, SML 668 and Meha which were sown thrice, early, normal and late. The investigation was conducted to find out the resistant varieties of green gram and actual sowing time to escape sucking insect-pest attack.

An estimated 200 insect pests are known to infest green gram of which the sap feeding insects, white flies, *Bemisia tabaci* Gennadius and thrips belonging to genus *Megalurothrips* and *Caliothrips indicus* Bagnall are more common as well as important insects of summer crop. White fly is a potential vector to transmit Mungbean Yellow Mosaic Virus (MYMV) which can cause losses ranging from 30–70 per cent.

Green gram was sown in three different dates starting from March 2nd, 4th and April 2nd week in randomised block design with five replications. The insect population was recorded from ten randomly selected plants in each plot at seven days intervals starting from fifteen days after sowing. Population of whiteflies (adults and nymph) was estimated by the visual count technique during early hours of the day from requisite plants per replication. Thrips population was recorded from five twigs of each plant by shaking over a piece of wet white coloured cloth.

The experiment revealed that in case of white fly, Samrat showed resistance followed by Meha, SML 668 and Sonali and incidence was lowest in late sown crops whereas Meha recorded resistance in case of Thrips followed by Sonali, Samrat and SML 668 and incidence was lowest in early sown crops. The highest yield was obtained from SML 668 in case of late sown crops.

Keywords: Green gram, White fly, Thrips, Date of sowing, Resistant variety.