Emergence of Bihar hairy caterpillar (*Spilosoma obliqua* Walker) in greengram in long-term conservation agriculture system

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The conservation agriculture (CA) production system is a realistic and sustainable solution for restoring soil health in maize–mustard–greengram-based cropping system without compromising the production and productivity. However, the incidence and infestation of the few insect pests like cutworms and mealybugs in rice are getting altered due to CA practices. Therefore a study was carried out on incidence and infestation of Bihar hairy caterpillar, *Spilosoma obliqua*, in Zaid greengram crop in a 14-year-old maize–mustard–greengram-based CA system. A significant ($P < 0.05\%$) incidence and infestation of *S. obliqua* were recorded as 19.47 larvae/plant and 23.33% respectively, in the greengram crop with maize and mustard residues at 52 days after sowing (DAS) as compared to 6.6 larvae/plant and 13.3% respectively, in the greengram without residues. Crop residue retention in the field possibly promoted the continued existence and proliferation of *S. obliqua* in greengram. Sustainable CA-based agricultural systems must also examine how maize and mustard residues influence the emergence of *S. obliqua*. In conclusion, this is the report on *S. obliqua* emergence in CA-based summer greengram.

Keywords: Conservation agriculture, greengram, incidence, *Spilosoma obliqua*, zero tillage.