



Integrated Pest Management Strategies for Sustainable Transgenic Cotton Pest Management in Punjab

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Abstract: Integrated pest management (IPM) strategies for the management of sucking insect pests were disseminated in 12 villages of three districts of Punjab during 2010. Three non-IPM villages adjoining to IPM villages were kept as check for comparing the impact. The impact of adoption of IPM strategies led to reduction in the population of mealybug in IPM villages as compared to non-IPM villages. The mean population of jassid per three leaves varied from 0.21 to 1.23 in IPM villages and 0.91 to 2.35 in non-IPM villages. Whitefly population per three leaves varied from 0.38 to 3.05 in IPM villages and 1.58 to 7.30 in non-IPM villages. Population of natural enemies including spiders, predatory bugs, ladybird beetle varied from 0.11 to 1.61 per plant in IPM villages. The impact of dissemination of IPM strategies resulted in the reduction in number of spray in IPM villages (39.73%) over non-IPM villages. The reduction in cost of spray in IPM villages was 32.98 per cent over non-IPM. The average cost of cultivation was Rs. 26112 ha⁻¹ in IPM villages, which was comparatively low as compared to non-IPM villages. Average seed cotton yield in IPM villages was 2241 kg ha⁻¹ in comparison to non-IPM villages (1864 kg ha⁻¹). The average net return in IPM villages was Rs. 68005 ha⁻¹, which was Rs. 16697 more than non-IPM villages.

Key Words: Bt cotton, Sucking insect-pests, IPM, Non-IPM, Economics
