

Assessment of sticky trap parameters viz., colour, height, direction and combination with azadirachtin against cotton leafhopper

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ABSTRACT : In the present investigation relative trapping efficiency of various colour sticky traps at four heights; alone and in combination with azadirachtin 10000 ppm @ 2ml/lit. was assessed against cotton leafhopper. Data on trap height revealed superiority of sticky trap erected 15 cm below crop canopy in terms of significantly higher adult leafhopper trapping (716.67/trap) and was comparable with trap along the crop canopy (634.78/trap). These superior treatments were followed by trap installed at 30 cm and 60 cm above the crop canopy with 517.50 and 192.47 leafhoppers /trap, respectively. Use of yellow colour trap was most efficacious with respect to trapping of adult leafhoppers (736.56 leafhoppers/trap) and was followed by combination of yellow and blue colour (498.48 leafhoppers/trap), whereas, least population was trapped on blue colour traps with 315.10 leafhoppers/trap. Significantly higher catches of leafhopper on trap were evident when used in combination with azadirachtin sprays on crop (353.14/trap) over traps without azadirachtin sprays (274.38/trap). Interaction effect of trap height, colour and azadirachtin on total catches of leafhoppers indicated superiority of yellow sticky trap erected at 15 cm height below crop canopy in combination with azadirachtin spray and was in turn statistically at par with the yellow sticky trap along crop canopy in combination with azadirachtin spray and yellow sticky trap at 15 cm height below crop canopy without azadirachtin spray. Higher efficacy of trap colour and height combination was evident in combination with azadirachtin 10000ppm @ 2ml/lit. spray on crop with yellow sticky trap at 15cm below crop canopy as the most effective in recording minimum population of leafhoppers (2.40 and 3.32 leafhoppers/leaf) over 5.42 and 6.45 leafhoppers/leaf in untreated control at 7 and 14 days after application of azadirachtin. Irrespective of trap colour, height and combination with azadirachtin significantly maximum catches of leafhopper population was recorded on trap in North East direction as compared to South West direction.

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