EFFECT OF STICKY TRAP COLORS ON PEST INSECT DIVERSITY TRAPPED IN SOYBEAN AGROECOSYSTEMS

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ABSTRACT

This research was carried out in Balung Lor village, Balung district of Jember country from July 2020 to October 2020. This research aimed to examine the effects of several colors sticky trap namely red, yellow and blue traps on pest insects types and amounts found in a soybean agroecosystem. Each three different colors of sticky traps was placed side by side on soybean field vertically using wooden sticks. Data was analyzed using Kruskal Wallis tests. The insects was identified taxonomically (order, family, genus, and species) including their number of species trapped. The study indicated that red, yellow, and blue traps showed no significant different. Yellow sticky trap ensnare 179 peanut flies, 35 black beetles, 1 bush cricket, 3 leafroller wasps, 2 kalung crickets, 729 soybean fleas, 1 pudak ant; red trap ensnare 261 peanut flies, 9 black beetles, 1 green ladybug, 156 soybean fleas; blue trap ensnare 238 peanut flies, 6 black beetles, 3 leafroller wasps, 1 leaf beetle, 1 leafminer wasp, 57 soybean fleas. Yellow color had 5 orders, 7 families, 7 genus, 7 species; red color had 2 orders, 4 families, 4 genus, 4 species; blue color had 4 orders, 6 families, 6 genus, 6 species. Shannon-Weiner diversity value (H') sticky trap of red is 0.76, yellow is 0.68, blue is 0.65. Simpson dominance value (C) of red is 0.51, yellow is 0.62, blue is 0.64 and the dominant pest insect are peanut flies and soybean fleas.

Keywords: Soybean, Pest Insect, Sticky Trap