

MONITORING OF POPULATION DYNAMICS OF BLACK APHID, *TOXOPTERA AURANTII* INFESTING COCOA, *THEOBROMA CACAO*, L. USING STICKY LIGHT TRAPS IN TAMIL NADU

S. SRINIVASNAIK¹, M. SUGANTHY², S. MOHAN KUMAR³ & V. JEGADEESWARI⁴

^{1,2}Department of Agricultural Entomology, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India

³Centre for Plant Molecular Biology and Biotechnology (CPMB&B),
Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India

⁴Department of Spices and Plantation Crops, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India

ABSTRACT

Field experiment was conducted in the farmer's holding at Sethumadai, Pollachi for a period of 7 months from October, 2014 to April, 2015 to monitor the population dynamics of black aphid, *Toxoptera aurantii* by installing coloured sticky light traps. Results revealed that the maximum number of aphids was trapped on yellow sticky light trap with the mean trap catches of 15.21 aphids per trap per week followed by 12.71 aphids per trap per week in blue sticky light trap. The mean trap catches of 9.93 and 7.78 aphids per trap per week were recorded in green and white sticky light traps, respectively. Red sticky light traps recorded the lowest mean trap catches of 5.52 per trap per week. In yellow and blue sticky light traps, the maximum trap catches of 22.25 and 16.75 aphids per trap were observed during fortieth and fifteenth standard weeks respectively, followed by 21.00 and 16.50 aphids per trap during fifty first and fortieth standard weeks, respectively. The trap catches were recorded to be the lowest during first standard week, irrespective of the colours. Aphids were more responsive towards yellow and blue colours compared to green, white and red. Yellow sticky light traps can be used for the integrated pest management programme as one of component for attraction and mass trapping.

KEYWORDS: Seasonal Abundance, *Toxoptera aurantii*, Sticky Light Traps

Received: Nov 12, 2015; **Accepted:** Nov 19, 2015; **Published:** Nov 22, 2015; **Paper Id.:** IJASRDEC201532