

Occurrence of Colour Variants in *Helopeltis antonii* S. (Hemiptera: Miridae) on Cashew

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The tea mosquito *Helopeltis antonii* is one of the major enemies of cashew in south India. It causes more than 30% loss to the crop by shoot/panicle blight and immature nut fall. Tea, guava, cacao, mahogany, neem, cinchona, cotton, red gum, apple and grapes are also hosts of this pest.

The adult bug is reddish brown with a black head, red thorax and black and white abdomen. The dorsal knobbed thoracic process is a characteristic feature of the nymphs and adults of this bug. *H. antonii* appear as reddish brown and black individuals in the field. Reddish brown forms are more common. Red and blackish red bugs are also seen.

These colour forms were studied with a view to assessing their population and seasonal incidence. Ten cashew trees, selected in the farm of CPCRI, Regional Station, Vittal, were observed every month for a period of one year. Data on the population of the bugs based on their colour was recorded (Table 1). Red forms were observed to be more prevalent than black forms in the field. The percentage of red forms varied from 44-86% and black forms 14-56%. The ratio of red/reddish brown and black/blackish red bugs is 2.3:1.0. These colour variants are similar in their morphology, except for the colour of their thorax.

The newly emerged adult is orange coloured, but within 2-3 hours the colour changes to reddish brown. Many of these individuals remain as reddish brown forms. Some, after 2-3 days of emergence, change their colour to reddish black and finally black. This colour change was noted in

15% of the bugs. These black individuals remain as black individuals. These different forms mate each other and the mated females laid eggs, nymphs hatched and the adults emerged. The progenies were reddish brown individuals.

Three physiological and structurally identical varieties of *H. antonii* was observed on tea and cacao (Green, 1901). Four colour forms of *H. orophila* (Ghesquiere, 1939); two colour forms of *H. sanguineus* (Golding, 1945) and four colour variants of *H. bergrothii* (Schmitz 1968) were the other examples recorded.

Table 1. Seasonal incidence and ratio of colour variants of *H. antonii* on cashew.

Month	Red forms	Black forms	Total
January	55	9	64
February	92	31	123
March	394	91	485
April	67	30	97
May	60	19	79
June	48	25	73
July	15	8	23
August	62	80	142
September	72	42	114
October	109	70	179
November	94	52	146
December	41	28	69

Ratio Red: Black = 2.3 : 1.0

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