



Incidence of *Erionota thrax* (Hübner) (Lepidoptera: Hesperiiidae) as a pest of banana in Kerala

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ABSTRACT: The Palm Redeye *Erionota thrax* (Hübner) (Lepidoptera: Hesperiiidae) is reported for the first time as a pest of plantain in Kerala. Of the various cultivars of plantain, it shows preference to the Njalipooan variety. The life cycle takes about 40 days for completion. Severe incidence of this pest has been noticed in plantain plantations at Palghat, Nilambur and Peechi. Incidence of an unidentified Tachinid parasite infesting the pupal stages of this skipper has been noticed at Peechi. © 2013 Association for Advancement of Entomology

KEYWORDS: Palm Redeye, *Erionota thrax* (Hübner), Banana Skipper, Kerala, India.

The Palm Redeye *Erionota thrax* (Hübner) (Lepidoptera: Hesperiiidae), also known as Banana Skipper is a serious defoliator of plantains throughout the South East Asia and Papua New Guinea. In India, it has been reported from Calcutta, Assam and Kolar (Wynter Blyth, 1957); Palani Hills (Ghorpade and Kunte, 2010) and Chattisgarh and Madhya Pradesh (Tipple and Ghorpade, 2012). Occurrence of this pest was reported from Madurai, Theni, Coimbatore and Erode Districts of Tamil Nadu and Chamrajnagar District of Karnataka (Padmanaban, 2014). During September - October 2013, epidemic build up of this pest was noticed in banana plantations at several places in Kerala viz., Peechi, Palghat and Nilambur. Of the various cultivars of banana, it showed preference to the Njalipooan variety of plantain causing severe damage. The larvae characteristically feed within rolls of leaves which they make by cutting the leaf sheath transversely. The larvae are voracious feeders and consume the entire foliage leaving only the mid rib (Pl. I, Figs. 1- 4). As the larva grows, the size of roll also

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Fig. 1. Plantain infested by *E. thrax*



Fig. 2. An infested leaf showing rolls made by caterpillars of *E. thrax*



Fig. 3. A close-up of leaf rolls made by caterpillars of *E. thrax*



Fig. 4. Close-up of a leaf roll showing excretory pellets of *E. thrax*

Plate I (Figs. 1-4) Plantain leaf showing infestation by *Erionota thrax*

changes so as to accommodate the growing larva. This is the first record of this skipper as a pest from Kerala.

The adults of *E. thrax* are pale brownish in colour measuring 70-76 mm in wing expanse (Pl. II, Fig. 5). Upper side of the wings is pale brownish. There are three yellowish orange spots in the centre of the upper side of the forewing of which two are more or less equal in size while the other is relatively small. The hind wing does not have any spot. In general colour and wing pattern it bears a close resemblance to the Giant Red eye *Gangara thyrsis* (Fb.) except that in



Fig. 1. Eggs of *E. thrax*



Fig. 2. Young larva of *E. thrax*



Fig. 3. Full grown larva of *E. thrax*



Fig. 4. Pupa of *E. thrax*



Fig. 4. Parasitised pupa of *E. thrax*



Fig. 5. Adult of *E. thrax*

Plate II (Figs. 1- 5) Different stages of *E. thrax*

the latter, there are three large quadrate, semi transparent yellow spots across cell on the fore wing while in the former, of the three yellowish orange spots in the centre of the upper side of the forewing, two are more or less equal in size and the other is relatively small. The apical spots on the forewing and the spots in the middle of the wing are more or less of the same size.

The adults are generally active during the dusk and lay their eggs in groups under the leaf. As many as 25 eggs are laid at a time (Pl. II, Fig. 1). The eggs are round, hyaline, pale reddish, and measures 0.30 mm in size. The eggs hatch in 3 to 4 days and the larvae come out. The larva is white in colour bearing whitish fine bristles (Pl. II, Figs. 2 & 3) which in the case of *G. thyrsis* are feathery / puffy and are mainly seen on the upper surface of the body. Larva takes 20-25 days for attaining maturity. When full grown, the larva undergoes pupation within the leaf roll itself. The pupa is cylindrical in shape and pale yellow in colour. Its anterior end is slightly broad and the posterior end is narrow. Pupal period lasts for 8-10 days. On the whole, the life cycle takes about a month for completion. In banana plantations, because of the availability of optimum conditions, the generations are continuous and overlapping leading to severe epidemics.

During September, 2013, incidence of an unidentified Tachinid (Diptera: Tachinidae) parasite infesting the pupae was noticed at Peechi ((Pl. III, Figs. 1-2). Earlier, Intan Ahmad (2008) has reported eight primary parasitoids on this skipper which included a Tachinid – *Palexorista solensis*. The other parasitoids recorded on this skipper are the Hymenopterans – *Ooencyrtus erionotae* (Encyrtidae), *Pediobius erionotae* (Eulophidae), *Agiommatus sumatraensis* (Pteromalidae), *Cotesia (Apanteles) erionotae* (Braconidae), *Charops* sp. (Ichneumonidae), *Xanthopimpla gampsura* (Ichneumonidae) and *Brachymeria thraxis* (Chalcididae).



Fig. 1. Pupa of an unidentified Tachinid parasite reared from the pupa of *E. thrax*



Fig. 2. Adult of an unidentified Tachinid parasite reared from the pupa of *E. thrax*

Plate III (Figs. 1-2) Pupal parasite of *E. thrax*

Several studies have been made on the control of the insect using insecticides (Waterhouse and Norris, 1989; Waterhouse *et al.*, 1998) and by biological control agents such as *Ooencyrtus erionotae* (egg parasite) and *Apanteles erionotae* (Mau *et al.*, 1980; Sands *et al.*, 1993). Application of Nimbecidine has been recommended by the Department of Agriculture, Kerala to control the caterpillars.

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