

FIRST RECORD OF SOME CARRION FLIES (DIPTERA : CYCLORRHAPHA) FROM INDIA

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Three species of Muscidae, *Hydrotaea occulta*, *H. capensis* and *Atherigona savia*, and one of Sarcophagidae, *Sarcophaga princeps* have been recorded from India for the first time. These species were found to visit rabbit carcasses in different seasons of the year alongwith various other flies belonging to these families.

Flies feeding and breeding in carrion are responsible for quick degradation of animal remains. According to Payne (1965), pig carcasses left unconcealed and accessible to these flies lost 90% of their weight in one week as compared to screened carcasses that gradually dried out over a period of 100 days. So without the participation of those natural scavengers, our earth will be littered with animal remains all over. Immature stages of these flies can also be used as forensic indicators in homicide cases (Smith, 1986; Catts & Haskell, 1990; Byrd & Castner, 2000; Goff, 2000). Three species of Muscidae, *Hydrotaea occulta*, *H. capensis* and *Atherigona savia* and one species of Sarcophagidae, *Sarcophaga princeps* have been recorded from India for the first time while enlisting the fauna visiting decaying rabbit carcasses in different seasons.

Dead rabbits were left in the open at Punjabi University, Patiala campus during different seasons of the year. The flies that visited the carrion as decay proceeded were collected with the help of an aerial sweeping net. After identification the material was sent to the experts for confirmation.

Twenty-one species were collected from decaying rabbits out of which the following four are new records from India.

Sarcophaga princeps Wiedemann, 1830 : The species was so far known only from Sumatra Islands (Indonesia). It was found to visit and breed on carrion during the spring only. This observation may throw some light during forensic investigations regarding the place of death as well as time since death of a decomposing body.

Hydrotaea occulta (Meigen, 1826) : The species is widely distributed all over Europe, North Africa and North America. Van Emden (1965) reported a single male specimen from Myanmar (Burma). Adults are commonly found visiting flowers, foliage and decaying matter. Since this species has been collected during spring season only, its occurrence on a dead body may have some forensic connotations.

Hydrotaea capensis (Wiedemann, 1818) : This species has been collected from rabbit carcasses only during warmer season i.e. spring and summer and hence may have some forensic importance. Some congeners have already been used as forensic indicators in different parts of the world (Nuorteva, 1974 & 1977).

Atherigona savia (Pant & Magpayo, 1995) : This species was so far known from Philippine Islands and has been recorded from India for the first time. Adults were collected only during rainy season and that too during late bloating stage.

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