

LICE INFESTATION IN A BRAHMINY KITE (*Haliastur indus*: ACCIPITRIFORMES)

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ABSTRACT

Occurrence of lice infestation is not uncommon in wild and exotic birds. The present report deals with occurrence of lice in a Brahminy kite, Haliastur indus belonging to Accipitriformes. External examination of free range Brahminy kite from Vandaloor zoo, Tamil Nadu revealed presence of large sized louse in the feathers and was identified as Laemobothrion maximum on the basis of morphology and morphometry. The present report is found to be first of its kind from Tamil Nadu.

Key words: Brahminy kite, *Haliastur indus*, *Laemobothrion maximum*

The Brahminy kite, *Haliaster indus* is one of the medium sized raptors with reddish brown body plumage contrasting white head and breast which make them easy to distinguish from other birds of prey. They are distributed throughout Indian subcontinent and are found to feed offal, fish, frogs, land crabs, small snakes, bats etc., (Ali, 2002). Among the diseases, various kinds of parasites can affect the health status of birds of prey belonging to Family Accipitridae (Krone and Cooper, 2002). The present communication dealt with lice infestation caused by a large sized

Laemobothrion maximum in a free range brahminy kite in Chennai.

An injured brahminy kite from Vandaloor zoo was examined in the Dept. of wild life science, revealed attachment of lice in the breast feathers and shafts (Fig.1) The lice specimens were collected in a sterile glass container and brought to the Department of Veterinary Parasitology for identification. The specimens were processed by routine parasitological method. The lice were boiled in 10% NaOH for 5 minutes, washed in water, dehydrated in ascending grades of alcohol and cleared in carboic acid (Lakshminarayana, 1970). The specimens were mounted in Canada balsam and examined under stereozoom microscope for morphology and morphometry to ascertain its specific identity.

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Fig.1. Two female *Laemobothrion maximum* attached with breast feathers of Brahminy kite

A total of two adult lice specimens were collected from the bird and processed for identification. The lice were identified as female *Laemobothrion maximum* based on the keys given in earlier reports (Nelson and Price, 1965; Lakshminarayana, 1970). Briefly, largest known bird lice with 10.5 mm length and 3.5 mm width at abdomen. The adult lice of *Laemobothrion maximum* grows up to the length of 11mm with prominent lateral swellings in front of both eyes. Presence of pigmented areas along the median line of abdominal tergites (Fig. 2). Post vulvar area is without pigmentation and has two long and three short setae. Sitophore sclerite of hypopharynx is a large U-shaped structure with two large holes. Antennal capsule bulbous and opens ventrally. Temples sculptured with inter rows of peg like projections. Oral opening very large and extends backwards to the antennal base (Fig.3). They belong to the suborder Amblycera, Family Laemobothridae and are very agile and feed on both blood and feathers. These large sized lice are not only haematophagous but also affect the vitality and productivity. *L. maximum* is reported

to be occur cosmopolitan in 16 genera of wild birds belonging to Gruiformes, Falconiformes (Nelson and Price, 1965), Accipitriformes (Nelson and Price, 1965) Ciconiformes, Galliformes (Clay and Hopkins, 1954) and Cuculiformes (Jeyathilakan et al., 2012). Reports of *L. maximum* in wild birds in India are from Black kite, *Milvus migrans* (Sen, 1942; Saxena, 2017; Athira et al., 2019), Greater coucal, *Centropus sinensis* (Jeyathilakan et al., 2012) and Long billed vulture, *Gyps indicus* (Kushwaha, 2015). Nelson and Price (1965) identified *L. maximum* from the lice specimens of Western marsh harrier (*Circus aeruginosus*) Long legged buzzards (*Buteo rufinus*), Brahminy kite (*Haliastur Indus*), Shikra (*Accipitar badius*) and white eyed buzzard (*Butastur teesa*) received from Zoological survey of India, Calcutta. However, the present report revealed the occurrence of *L. maximum* in brahminy kite of Vandaloor zoo of Chennai for the first time.



Fig.2. Dorsal view of *Laemobothrion maximum* showing pigmented tergal sclerites of all abdominal segments



Fig.3. Ventral view of female *Laemobothrion maximum* showing very large Oral opening extends backwards to the antennal base (←⇒) and female reproductive system (←→)

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