

Incidences of White-rumped Munia occupying the nest of Baya Weaver in Villupuram District, Tamil Nadu

White-rumped Munia *Lonchura striata* (Linnaeus, 1766) (Aves: Passeriformes: Estrildidae) is a small gregarious bird that usually occurs in agricultural lands, woodlands, grasslands, and scrublands (Ali & Ripley 1983). This species is native to tropical continental Asia and distributed in southern India, Sri Lanka, Andaman & Nicobar Islands, Thailand, southern China, Japan, Malay Peninsula, Indonesia, Nepal, and Myanmar. The IUCN Red List of Threatened Species classifies White-rumped Munia as 'Least Concern' (BirdLife International 2016).

Instances of the White-throated Munia *Euodice malabarica* L. using the abandoned nests of Baya Weaver *Ploceus philippinus* for breeding were reported in Maharashtra (Ali 1931), Rajasthan (Mishra 2001), and Tamil Nadu (Regupathy & Davis 1984). This communication reports behavioural interaction



Image 1. Competition between *Lonchura striata* and *Ploceus philippinus*: a—a pair of *L. striata* roosting on power cable | b—two pairs of *L. striata* roosting in *Borassus flabellifer* tree | c—*L. striata* occupied and guarding nest | d—male *P. philippinus* cuts stalk of the nest | e—torn out stalk | f—fallen nest. © M. Pandian.

between Baya Weaver and White-rumped Munia in an agricultural landscape of Chendur Village (12.113403 N, 79.8270 E), Villupuram District, Tamil Nadu, India.

The total area of Chendur Village is c. 22km² with a human population of c.

440,000. The maximum and minimum temperatures are 36°C and 20°C, respectively, and the average annual rainfall is 1,060mm (Villupuram 2020). Agriculture is the principal occupation of the local people. The present observations were made between 06.00h and 18.00h

during May to July 2020, without disturbing the inhabiting birds and their nests using Super Zenith 20 x 50 field binoculars. Total count method (Bibby et al. 2000) was used to enumerate the birds. The plant materials used by White-rumped Munia (WRM) in the egg chamber of the nest of Baya Weaver (BW) were identified using Nair & Henry (1989). Photography and videography were made using Nikon P1000 digital camera.

On 11 June 2020, one flock containing 70 Baya Weavers and 18 White-rumped Munia individuals was seen foraging in Pearl Millet *Pennisetum glaucum* crop fields in Chendur. Continuous monitoring of the flock of BW and WRM between 10 and 17 June revealed that the flock foraged on Pearl Millet crops every day between 06.00 and 11.00 h and between 15.30 and 16.00 h. BWs returned to the nest-bearing Asian Palmyra Palm *Borassus flabellifer* after foraging, whereas the WRM roosted on power cables and trees of Jujube *Ziziphus jujuba*, Mesquite *Prosopis juliflora*, and in the adjacent sugarcane fields (Image. 1a). During the 80 hours of observation, these two species were seen gleaning grains and moved as a single flock.

Two pairs of WRM were seen on 18 June 2020 roosting on nesting tree Palmyrah Palm on which BWs had already constructed nests. These two pairs of WRM visited the nests of BW the same day especially when the latter were away from the nest colony. On their return, however, the male BW were observed chasing the two pairs of visiting WRM and this effort by BW persisted until

26 June. After foraging in the morning and evening, the two pairs of WRM continued roosting on the palm tree (Image 1b). A total of 46 nests of BW in various developmental stages (helmet stage-21, egg-chamber closed stage-14 and complete nests-11) occurred on the observed palm. On 27 June (14.00h) one pair of WRM occupied one of the newly constructed complete nests of BW especially when the pair of BW was away from the tree crown (Image 1c). After few hours (at 16.20h) the invaded WRM fought with the male BW and occupied the nest. From 28 June, the pair of WRM occupying the nest of BW started bringing plant materials such as dry leaves, grass blades, and inflorescences; they brought dry plant materials in 7–11 trips per day and these activities continued until 2 July. On 3 July, one male BW fought with the WRM. Later the male BW perched on the stalk of the nest tip attached to the palm frond, whereas the invading WRM pair was roosting on the adjacent palm frond. Using its beak, the male BW lacerated the stalk by biting and pulling the fibres used in making the nest.

This process continued until the nest was felled by 14.20h (Image 1d–f). The fallen nest contained dried plant materials added by the WRM pair at the floor of the egg chamber, which included the Australian Pine Tree *Casuarina equisetifolia*, Orangeberry *Glycosmis mauritiana*, Marvel Grass *Dicanthium annulatum*, the inflorescences of Wire Grass *Aristida funiculata*, and Purple Rhodes Grass *Chloris inflata*. Because the nest was felled by the male BW, the invading

WRM pair was seen roosting on adjacent fronds of the same palm. From 4 July, the WRM pair abandoned the tree.

Another pair of WRM, which was found roosting on palm fronds and visiting nests of BW randomly between 18 and 24 June but did not occupy any nest. Possibly this pair abandoned the effort to occupy a nest of BW because of resistance from the latter and was not sighted after 25 June morning.

Ali (1931) had observed that a pair of White-throated Munia had occupied a vacated nest of BW in Kolaba. Mishra (2001) stated that he collected abandoned nests of BW hung on a Crimson Bottlebrush *Melaleuca citrina* in his private garden in Bharatpur. Shortly after the pair of White-throated Munia occupied the BW nest, made alterations by adding some dry plant materials and commenced breeding. Regupathy & Davis (1984) observed the deserted nests of ploceine species offered shelter and breeding space for White-throated Munia. In all these studies individuals of White-throated Munia used the vacated nests of BW.

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