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RESEARCH ARTICLE

ANALYSIS OF NEST MATERIAL USED BY THREE SPECIES OF MYNA

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ABSTRACT

Mynas are found in throughout the India. It is the most common bird of our country Mynas are classified in family Sturnidae of order Passeriformes (Chris at al 1999). They are small size terrestrial bird; sturnidae is a Latin word for starling which is having strong and direct flight, strong feet and very gregarious (Scott 1911). The Indian subcontinent is believed to be the origin of mynas, it has capacity to co-exist commensally with human populations. Mynas are omnivorous they consume wide variety of food from indigenous species, they also reported to cause severe damage to the agricultural crops. The birds are highly intelligent and curious, it roost communally.

Three species of mynas are found in the Study area eg. Common myna (*Acridotheres tristis*), Bank myna (*Acridotheres ginginianus)* and Brahminy myna (*Sturnus pagodarum*). Total 08 nests were analyzed 04 nests of *Acridotheres tristis* 02 nests of *Acridotheres Ginginianus* and 02 nests of *Sturnus pagodarum.* Result clearly shows that myna sp. of the study area used nesting materials that is easily available near nesting site.

INTRODUCTION

Mynas are commonly found throughout the India. It is the most common bird of our country. Mynas are classified in family Sturnidae of order Passeriformes (Chris *et al*., 1999). They are of small size and they live terrestrial life. Sturnidae is a Latin word for starling which is having strong and direct flight, strong feet and very gregarious.

The Indian subcontinent is believed to be the origin of mynas. It has capacity to co-exist commensally with human populations. Mynas are omnivorous, they consume wide variety of food from indigenous species. They are also reported to cause severe damage to the agricultural crops. The birds are highly intelligent and curious, it roost communally.

Three species of mynas are found in the Bhavnagar city.

1. Common Myna *(Acridotheres tristis):* It is brownish with yellow orbital skin, white patch on wing and tail tip. Adult has glossy black on head and breast; rest part of the body is maroon brown.
2. Bank Myna *(Acridotheres ginginianus):* Bank myna having bluish-grey coloration, small frontal crest, orange-red orbital patch and orange yellow bill.
3. Brahminy Myna *(Sturnus pagodarum):* The adult has black crest and rufous-orange sides of head under parts. Bill is yellowish with blue base.

Study Area

The study was confined to Bhavnagar city in the Saurashtra area of Gujarat State (India). Bhavnagar (lat. 21°45’ N and long. 72 °08’E) is located in the south-eastern side of peninsular Saurashtra region of Gujarat. Bhavnagar is a District headquarters of Bhavnagar District. Bhavnagar has a tropical monsoon climate with three distinct seasons. i.e. winter, monsoon and summer.

MATERIALS AND METHODS

Data were collected and analyzed as per standard methodology. Nest materials were collected from disserted nest during August 2013 to June 2014. Nest material was identified with the help of reference book and subject experts. Pair of 8X40 Binoculars and Nikon 600 digital camera was used to scan the area and documentation.

Potential Nesting Site of Mynas in the city are Railway colony, Bhavnagar para, Ambawadi, Bortalav, New and old university

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campus, peel garden (Sardar baugh) and Fulsar (Opp. Marketing yard).

RESULT AND DISCUSSION

Total eight nests (four nests of *A. tristis*, two nests of *A. Ginginianus* and Two nest of *S. pagodarum)* were analyzed. Mean weight of *A. tristis* nest was 60.254 grams, weight of *A. Ginginianus* nest was 41.05 grams and weight of *S. pagodarum* nest was 76.87grams.

A. tristis used mainly *Azadirachta indica* leaves (70.60%), *A. Ginginianus* used Leaves of *Sorghum vulgare* (28.6%) and *S. pagodarum* used clay mostly (48.13%). Use of Plastic waste (15.27%) in the nest by *A. tristis* shows great adaptability of the bird. *Azadirachta indica* is a common tree found in the area both *A. tristis* and *A. Ginginianus* used leaves of them.

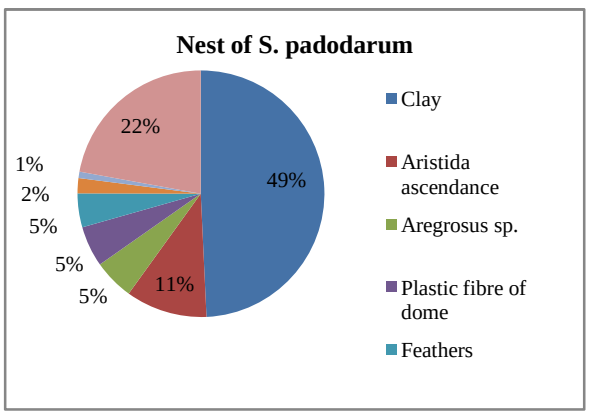
Result of the data analysis shows that the nest were not having any special design, shape was according to the space of the cavity in which they prepare the nest. *Acridotheres tristis* (Common myna) mainly used *Azadirachta* leaves and plastic waste. *Acridotheres Ginginianus* (Bank myna) nest contains leaves of Sorghum, unknown grass. *Cynodon dactylon* (durva), leaves of *Azadirachta indica* and clay. *Sturnus pagodarum* (Brahminy myna) nest having mainly clay, *Aristida ascendance*, *Aregrosus* species, plastic fiber and feathers. It was observed that all the materials were easily available near nesting site. Nest material analysis shows that myna sp. of the study area are not choosy about nest material selection.

Table 1 Mean weight of nest

Weight (in gram)	Species of Myna
60.245	*A. tristis*
41.05	*A. Ginginianus*
76.87	*S. pagodarum*

Table 2 Nest materials used by *A. tristis.*

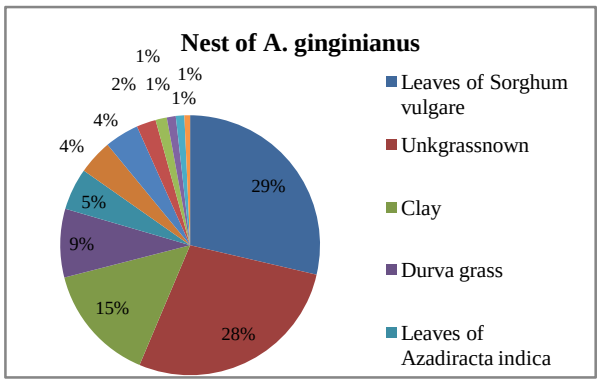
Sr. no.	Materials	Percentage (%)
1	*Azadirachta indica* leaves	70.60
2	Plastic waste	15.27
3	Feathers	04.25
4	Leaves of unidentified species	06.46
5	Clay	03.73
6	Bristle of broom	00.83
7	Leaves of Asopalav (*Polyalthia londifolia*), Aritha (*Sapindus emarginatus*) and *Eucalyptus* sp.	03.73
8	Jute thread	00.615



Graph 1 Nest materials used by *A. tristis.*

Table 3 Nest materials used by *A. ginginianus*.

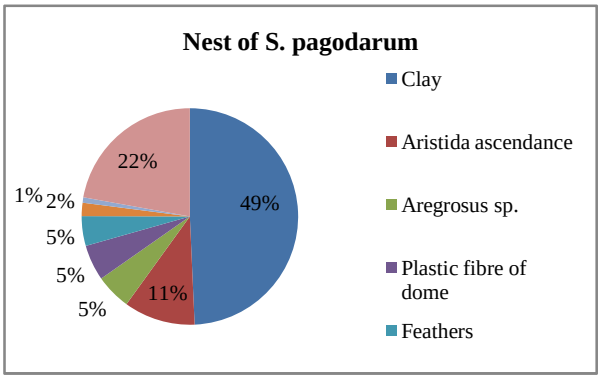
Sr. no.	Materials	Percentage (%)
1	*Sorghum vulgare* leaves	28.6
2	Unknown grass	27.65
3	Clay	14.62
4	Durva grass (*Cyanodon dactylon*)	08.52
5	*Azadirachta indica* leaves	05.19
6	Plastic waste	04.31
7	Zinjvo (*Dichanthium annulatum*)	04.24
8	*Zea mays* leaves	02.4
9	Safed zipti (*Triumfetta rhomboidea*)	01.41
10	Scaly leaves of *Alium sepa*	01.1
11	Feathers	01.07
12	Leaves of *Acasia* species	00.7



Graph 2: Nest materials used by *A. ginginianus.*

Table 4 Nest materials used by *S. pagodarum.*

Sr.no.	Materials	Percentage (%)
1	Clay	48.13
2	Aristida ascendance	10.41
3	Aregrosus species	5.2
4	Feathers	4.35
5	Cloris species	1.95
6	Bristle of brown	0.8
7	Unidentified plant	21.62



Graph 3 Materials used by *S. pagodarum*

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