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Interspecific biodiversity of common myna *Acridotheres tristis* Linnaeus, 1776 of district Larkana, Sindh, Pakistan

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Abstract
The common myna, *Acridotheres tristis* Linnaeus, 1776 belongs to the Class Aves; Order Passeriformes; Family Sturnidae and Genus *Acridotheres.* It is commonly found in South Asia ranging from Iran, Pakistan, India, Nepal, Bhutan, Bangladesh and Sri Lanka as well as Afghanistan, Uzbekistan, Tajikistan and Turkmen as reported by Ali, Salim, Ripley, S. Dillon, 2001 [2]. Common mynas were recorded from different localities of District Larkana which showed diversification in morphometric parameters mostly in all characters viz: weight of body; length of head; length of beak; length of body; length of hind leg; length of tail; patch /spot behind eyes; length of tarsus; and number of tail feathers correspondingly.

Keywords: Biodiversity, Common myna, *Acridotheres tristis* Linnaeus, 1776, District Larkana, Sindh, Pakistan

Introduction
Common myna is indigenous to South Asia and is commonly treated as dweller and resident species of India having occasional east-west movements. This bird holds wide range of warmer areas. They are often found along the outskirts, farmlands, deserts and forest but avoid vegetation as per Kannan and James, 2001 [3]. This well-known bird has distinctive brown chestnut color at dorsal side; glossy black head; brownish-black upper-wings and a white-tipped black tail. It has horny yellowish bill; scaly legs and having barren yellowish orange skin around the eyes and bristly feathers on the forehead forming short crown: Rasmussen, 2005 [4]. This large, stocky myna also contains contrasting white patches visible on both sides of wing cords near the shoulders during flight. They are endothermic, homiotherm, and bilateral symmetrical. Common myna may be helping as predators in reducing hazardous insects of economic and commercial values as well as population in agricultural areas. They are the source of pollination and dispersal of seeds of human economic and commercial values. Myna is often sold as pet bird for its intelligence and ability to mimic human voices. In 1883, common mynas were introduced into the sugar cane crops to combat insect pest such as plague locust and cane beetles: Kannan and James- 2001 [3]. Being omnivorous they not only help in controlling cutworms (*Spodoptera mauritia)* and act as host for various ecto-endoparasites such as nematodes, cestodes, trematodes, arthropods, and bird mites in areas wherever they were introduced but also feed on frogs, snails, birds' eggs, nestlings and other animal matter, as well as fruits and seeds: Ali, Salim, Ripley, *et al.*, 2001 [2]. They have negative impact upon native birds and sea birds as mynas feed on their eggs and nestling: Kannan and James, 2001 [3]. It forages on the ground and picks up insects of its interest especially the grasshoppers from where they get the generic name *Acridotheres*. However they feed on a wide range of insects prevailing in cultivated areas floodplains and grasslands of open countries but presently they are abundant in towns and cities, wherein they are often seen in parks, gardens and refuse dumps etc. Typically, they scavenge and plough on the grounds in refuses heaps of urban and rural areas to obtain their interested food.

They usually ride on the back of ovines and bovines to remove ticks and mites from them; Elliot and Sargatal *et al.* 2009 [5]. The range of the Common myna is increasing at such a rapid rate that in 2000 the IUCN Species Survival Commission declared it one of the world's most invasive species. M. Brown, S. Boudjelas and Poorter, 2000 [1]

Material method

Instruments used during the methodology

1. Measuring scale
2. Thread
3. Weight machine (Electronic compact sale SF-460)

In all, 72 common mynas *Acridotheres tristis* were collected from 3 localities of District Larkana viz; 24 from Bero chandio; 24 from Khairodero and 24 from Goth Ali Bux Kalhoro. The necessary measurements based on international morphometric parameters were recorded in the laboratory. The statistical data of the variable parameters were noted and necessary photographs were made with the help of digital camera.

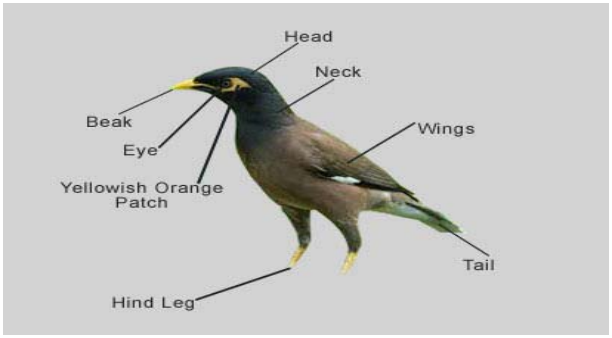


Fig 1: Common myna *Acridotheres tristis* Linnaeus, 1776

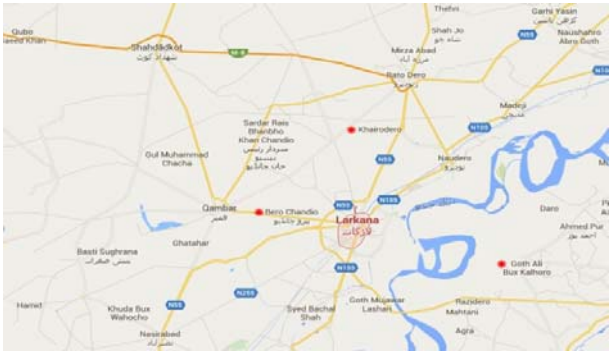


Fig1.1: Map of District Larkana, showing various studied areas focused by asterisk (*) areas *where* in collection of Common myna *Acridotheres tristis* Linnaeus 1766, was made.

Fig 1.2: Photographic view *Acridotheres tristis* Linnaeus, 1776, showing wing cord and tail feathers.

Table 1:showing no. of Common mynas Acridotheres tristis Linnaeus, 1776, recorded from the studied areas District Larkana

S. No	Study Area	No: of Birds	No: of male %	No: of female %
1.	Khairodero	24	2,8.3%	22,91.6%
2.	Goth Ali Bux Kalhoro	24	8,33.3%	16,66.6%
3.	Bero chandio	24	3,12.5%	21,87.5%

Table 1.1:showing variation in parameters of Common myna *Acridotheres tristis* Linnaeus, 1776, from Bero chandio

S. No	Parameters	Variation(mm)	Statistics
1.	Length of head	35-65	46.9
2.	Length of Beak	16-17	12.6
3.	Length of Body	110-140	117.4
4.	Length of wing	150-195	171.6
5.	Length of tail	90-100	78.08
6.	Length of hind leg	45-75	62
7.	Length of tarsal	15-17	15.8
8.	Weight of body	40-75.6	53.79
9.	No: of tail feather	7-11	9.2
10.	Wing cord	8-15	11.7

No: of birds examined: 24

Table 1.2: showing variation in parameters of Common myna *Acridotheres tristis* Linnaeus, 1776, from Goth Ali Bux Kalhoro

S. No	Parameters	Variation (mm)	Statistics
1.	Length of head	40-65	48.4
2.	Length of Beak	14-28	20.2
3.	Length of Body	100-155	126.9
4.	Length of wing	175-210	190.2
5.	Length of tail	85-110	97.7
6.	Length of hind leg	65-75	68.1
7.	Length of tarsal	16-18	17.2
8.	Weight of body	50-75.5	61.7
9.	No: of tail feather	7-11	9.2
10.	Wing cord	8-17	15.8

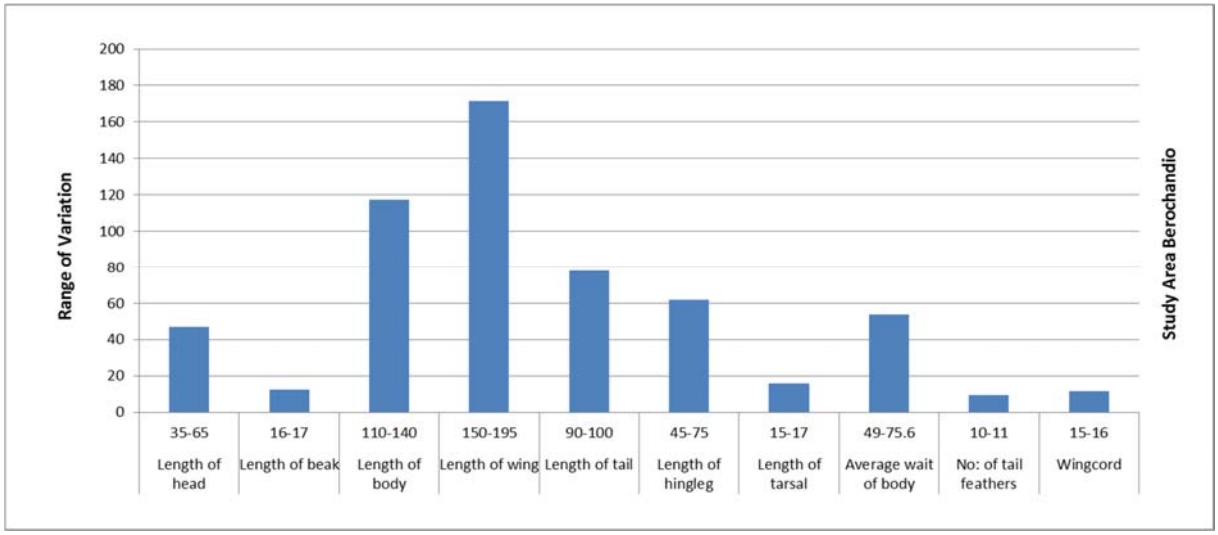
No: of birds examined: 24

Table 1.3: showing variation in parameters of Common myna *Acridotheres tristis* Linnaeus, 1776, from Khairodero

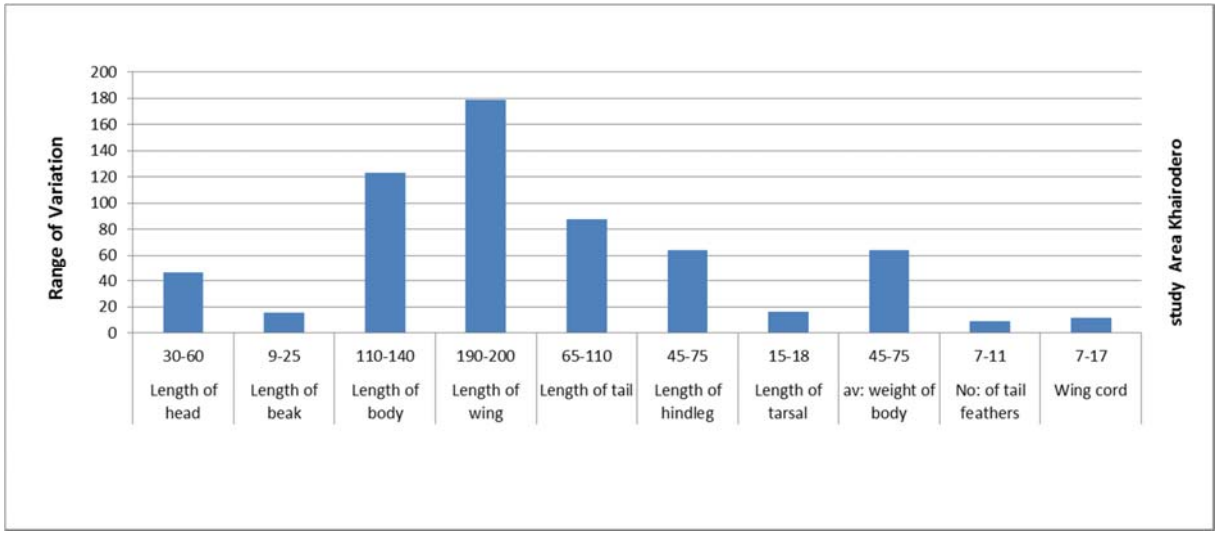
S. No	Parameters	Variation (mm)	Statistics
1.	Length of head	30-60	46.1
2.	Length of Beak	9-25	15.6
3.	Length of Body	110-140	123.3
4.	Length of wing	190-200	178.7
5.	Length of tail	65-110	88.04
6.	Length of hind leg	45-75	63.9
7.	Length of tarsal	15-18	16.4
8.	Weight of body	45-75	63.9
9.	No: of tail feather	7-11	9.2
10.	Wing cord	7-17	11.7

No: of birds examined: 24

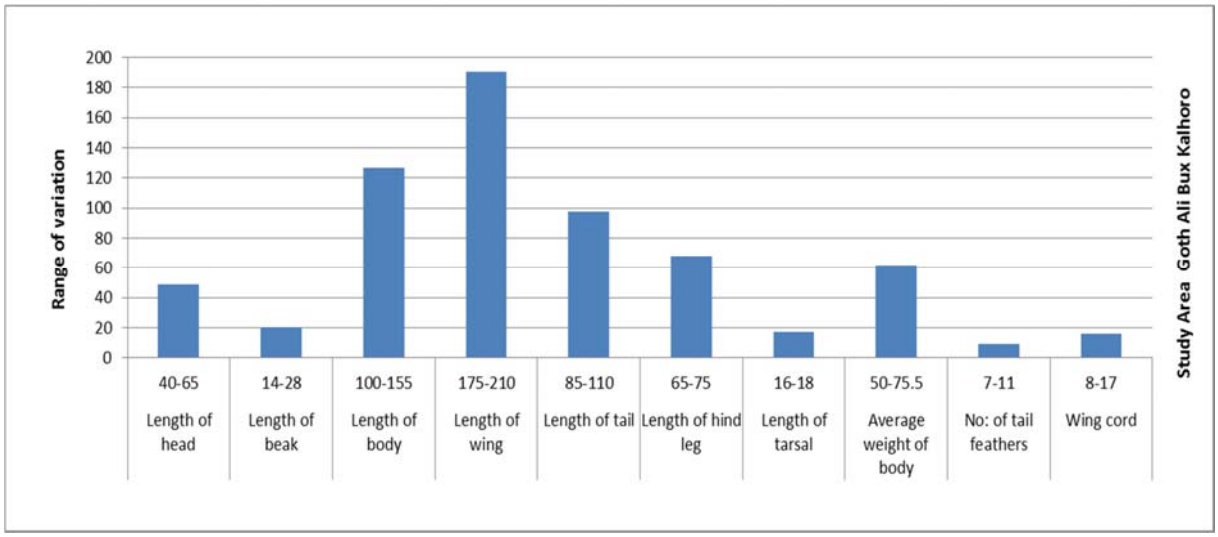
Graph showing morphometric variation in parameters of Common myna *Acridotheres tristis* Linnaeus, 1776, recorded in Bero chandio District Larkana Table no: 1.1.



Graph showing morphometric variation in parameters of Common myna Acridotheres tristis Linnaeus, 1776, recorded in Khairodero District Larkana Table no: 1.2.



Graph showing morphometric variation in parameters of Common myna Acridotheres tristis Linnaeus, 1776, recorded in Goth Ali Bux Kalhoro in District Larkana Table no: 1.3.



Description

Determination of myna is based on the following characters

1. Yellow colored beak
2. Dorsally brown chestnut color
3. Glossy black head
4. Brownish black upper wings myna also
5. Contrasting white patches on both sides of wing cords near the shoulders
6. White tipped black tail
7. Scaly skin on legs
8. Bright yellowish orange barren skin around eyes
9. Bristle feathers forming short crown on head

Discussion

During the present study interspecific morphometric variations in *Acridotheres tristis* (Linnaeus, 1776) were recorded from the different localities of District Larkana, which include Goth Ali Bux Kalhoro (Table no: 1.1), Berochandio (Table no: 1.2), Khairodero (Table no: 1.3)

24 Common myna *Acridotheres tristis* (Linnaeus, 1776) were captured from Goth Ali Bux Kalhoro which showed variation in parameters viz; length of head varies from 36-65 with 46.9%; length of beak 16-17 with 12.6%; length of body 110-140 with 117.4%; length of wing 150-195 with 171.6%; length of tail 90-100 with 78.08%; length of hind leg 45-75 with 62%; length of tarsal 15-17 with 15.8%, average wait of the body 40-75.5 with 53.79%; no: of tail feathers 7-11 with 9.2%; length of wing cord 8-15 with 11.7%

24 Common myna *Acridotheres tristis* (Linnaeus, 1776) were captured from Bero chandio showing variation in parameters viz; length of head varies from 40-65 with 48.4%, length of beak 14-28 with 20.2%; length of body 100-155 with 126.9%; length of wing 175-210 with 190.2%; length oftail 85-110 with 97.7%; length of hind leg 65-75 with 68.1%; length of tarsal 16-18 with 172.2, average of weight of body 50-75.5 with 61.7%, no: of tail feathers 7-11 with 10.9%; length of wing chord 8-17%.

24 Common myna *Acridotheres tristis* (Linnaeus, 1776) were captured from Khairodero which showed variation in parameters viz; length of head varies from 30-60 with 46.1%; length of beak 9-25 with 15.6%; length o body 110-140 with 123.3%; length of wing 190-200 with 178.7%; length of tail 65-110 with 88.04%; length of hind leg 45-75 with 63.9%; length of tarsal 15-18 with 16.4%; average weight of body 45-75 with 63.9%; no of tail feathers 7-11 with 12.7%, length of wing cord 7-17 with 11.7%.

Conclusion

In all, the length of head shows variation in Common myna *Acridotheres tristis* (Linnaeus, 1776), recorded from Goth Ali Bux Kalhoro > Berochandio > Khairodero, 48.4; 46.9; 46.1; length of beak shows variation recorded from Goth Ali Bux Kalhoro > Khairodero > Berochandio, 20.2; 15.6; 12.6; length of body shows variation recorded from Berochandio > Goth Ali Bux Kalhoro > Khairodero 117.4; 126.9; 123.3; length of wing shows variation recorded from Goth Ali Bux Kalhoro >Khairodero > Berochandio 190.2; 178.7; 171; length of tail shows variation recorded from Goth Ali Bux Kalhoro > Khairodero > Berochandio 97.7; 88.04; 78.04; length of hind leg shows variation recorded from Khairodero > Goth Ali Bux Kalhoro > Berochandio 178.7; 68.1; 62; length of tarsal shows variation recorded from Goth Ali Bux Kalhoro > Khairodero > Berochandio 17.2; 16.4; 15.8; average wait of body shows variation recorded from Khairodero > Goth Ali Bux Kalhoro > Berochandio 63.9; 61.7; 53.79; no: of tail feathers shows similarity in all cases9.2; 9.2; 9.2; length of wing chord shows variation recorded from Berochandio > Goth Ali Bux Kalhoro > Khairodero 11.7; 15.8; 11.7 respectively.

References cited

1. Brown M, BoudjelasS, De Poorter M. 100 of the world's worst invasive alien species. A selection from the global invasive species. Aselection from the global invasive species data base. The invasive species specialist group (ISSG), a specialist group of the species survival commission (SSC) of the world conservation union (IUCN), Auckland, 2000
2. Ali Salim, Ripley, dillon S. Handbook of the birds of India and Pakistan, Oxford University press, 2001; 5:278.
3. Kannan RD, James. The Birds of north America online, 2001
4. Rasmussen PC, Anderton JC. Birds of south Asia. The Ripley Guide, 2005; 2:584.
5. Del Hoyo, Elliot J, Sargatal J. Hand book of Birds of the world. Brush-shrikes to old worldsparrows. Lynx Edicions, Barcelona, 2009, 14.