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## SEASONAL FLUCTUATIONS OF FOOD ITEMS OF COMMON MYNA (*ACRIDOTHERES TRISTIS*)

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**Abstract:** Common Myna is omnivorous scavengers especially ground feeder. Regular observations were made in each study area to note the food of the Common Myna during the different season. The Common Myna was encountered during foraging. Food items were listed that have been identified in Urban and Rural area during foraging by the visual observation. Insects were the staple food of the Common Myna which is found to be all around the year. Seasonal variation in food is compared in Urban and Rural area.

**Keywords:** Common Myna, foraging, omnivorous, scavenger.

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**Introduction:** Common Myna originated in India between 1862 and 1872 [1]. Due to its insect eating behavior it is being introduced as biological control to crop bearing countries around the world where they firmly established themselves as harmful invasive pests. Common Myna is omnivorous scavengers [5] and especially ground feeder [8]. It forages on the ground among grass for insect, and especially for grasshoppers, from which it gets the generic name *Acridotheres*, "grasshopper hunter". At such times, Common Mynas can become agricultural pests [7], feeding on the ripening fruit and seeds of plants such as figs, papaya, dates, apple, pear, tomato, and cereal crops such as maize, wheat and rice. Mynas are egg predators [3], and are known to consume bird's eggs and chicks, as well as small reptiles. They also scavenge rubbish dumps, pastures, farmyards and roads for road kill. They are predominantly ground feeders, pecking prey from the surface in short pasture and grain stubble, but will opportunistically feed in flowering or fruiting trees and bushes [4].

However, seasonal fluctuation of food items of Common Myna has been reported which depends up on the availability of food.

**Materials and methods:** Study area: The study was conducted at Ahmedabad city of Gujarat state. Ahmedabad is located at 23.03°N 72.58°E. The study area is divided in Urban and Rural area. Urban area is very much congested and heavy traffic area. It comprises complicated landscape and Rural area has agro ecosystem with mixed vegetation and has cultivated as well as natural plants.

**Methodology:** The study was conducted from January, 2011 to December, 2012. As earlier discussed that study area was divided into Urban and Rural area. Regular observations were made in each study area to note the food items during different season and some other aspects on feeding of the Common Myna. The Common Myna was encountered during foraging. For this, direct field observation method is

applied, Common Myna is habituated to live in human presence and could be close to him so direct observation is most suitable and easier. Binocular (7x50) was used for this purpose.

The observations were taken in Urban and Rural area during the foraging by the visual observation.

**Results:** In Table: 1 the seasonal variation in food has been shown. Insects were the staple food of the Common Myna which is found to be all around the year. The amount of insect food is larger in pre monsoon and monsoon period. Insects and earthworms are principal food during monsoon. This is the time when Common Myna laying the eggs, rearing the nestlings and young once. It requires high amount of protein diet which is fulfilled by insect food.

Coincidentally, it is the period when Kharif cultivation is being practiced and fortunately, the Common Myna consumed a big amount of insect pests and protects agriculture from serious damage. During this season, it also seeks seeds, fruits and berries. From summer to post monsoon it has been observed to feed on it.

From the November, the soil becomes dry and it is the end of fruiting season, then it congregated in farm after harvesting of grain crops in winter and post winter and feed on Wheat, Sorghum and other grains.

During summer when food is scarce then it feed on miscellaneous items near human habitation. Sometimes feed on frog, rat, lizard, chicks of other birds and scavenging on dead animal are also a good source of food.

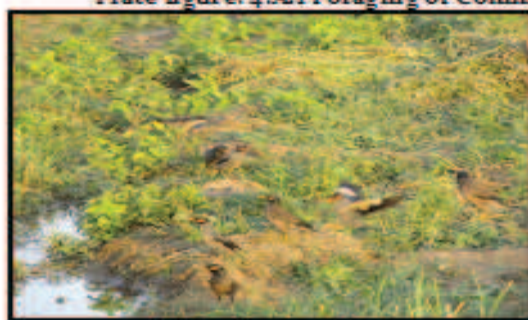
Seasonal variation in food is compared in Urban and Rural area. There was no any major change in it except some observations like earthworm intake was only recorded in Rural area and no such observation was found in Urban area, as well as frog intake was recorded only in Urban area; frequency of food items was changed in both the areas, as insects frequency was more in Rural than the Urban in most of the

seasons.

Food items	Winter		Early Summer		Late Summer		Pre Monsoon		Monsoon		Post Monsoon	
	U	R	U	R	U	R	U	R	U	R	U	R
Insects	24	30	27	31	17	15	52	76	84	93	48	38
Earthworm	--	--	--	--	--	--	--	1	--	5	--	1
Lizard	1	--	1	1	2	1	--	--	--	--	1	--
Frog	--	--	--	--	--	--	--	--	1	--	--	--
Rat	1	--	--	--	--	1	--	--	--	--	--	--
Chick of other birds	--	--	--	--	--	--	2	1	--	--	--	--
Grains	21	32	25	19	--	--	--	--	--	12	9	--
Fruits and Berries	--	--	2	1	15	13	21	16	29	17	11	3
Scavenge on dead animals	--	1	--	--	--	--	1	1	--	--	--	--
Miscellaneous items	11	2	1	--	7	2	13	7	5	--	8	1

**Abbreviations:** U: Urban and R: Rural

**Plate figure: 4.A.1 Foraging of Common Myna in different foraging ground.**



**(A) Agriculture land**



**(B) Grass land**



**(E) Dry pool in a garden**



**(F) On the dump of cow dung and garbage (Compost)**

**Discussion:** Food which is offered to the nestlings, evident that it depends upon the age of the parents and availability of food in the vicinity of the nest during the particular time. It includes animal matter and plant matter which consisted insects, vegetables, eggs and nestlings of other birds and miscellaneous food items. Common Mynas are highly adaptable to human habitations and local food resources. For example, they has been known to consume pet food [2] and forage on the Seashore for worms, mollusks,

crustaceans and other Seafood stranded on the mud flats [9]. The food of nestling of Indian Myna in New Zealand on single day observation [6]. Nestlings are fed for the first ten days exclusively on invertebrates, primarily insects. When insects are scarce, fruits and seeds make up a more important component of their diet [7].

**Conclusion:** The Common Myna is basically a ground feeding insectivorous bird. But due to its acclimatization towards the changing environmental

condition, availability of food in vicinity area and Urbanization. It has expanded its diet to include grains, kitchen waste, fruit, berries, garbage, and small animals such as rat, frog, lizards, scavenging

and artificial food like gathiya, chavana, mamra, bread also.

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