
FOOD AND FEEDING HABITS OF MONA MONKEY *CERCOPITHECUS MONA* IN AYEDE/ISAN FOREST RESERVE, EKITI STATE

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ABSTRACT

The feeding habits of mona monkey *Cercopithecus mona* in Ayede/Isan forest reserve, Ayede, Ekiti State, Nigeria were studied for six months. Direct observation was used in the data collection. The study area was visited two days per week between 0600-1100hours and 1600-1800hours for the six months in the forest reserve stretching from dry season to wet season. Data collected on the plant species and the parts of the plant species the animal feed upon revealed that mona monkey feeds on wide varieties of plant species and the parts of the plant consumed most is the fruits. It was noted that mona monkey is a social animal that moves and feeds in group. The mona monkey feeds mainly on fresh leaves, fruits and seeds of different plant species. Some of the plant species preferred by the mona monkey include: oil palm tree *Elaeis guineensis*, bitter mango *Irvingia grandifoliola*, kola *Cola nitida*. Most of the plant food materials the monkey feed upon are seasonal while some such as palm tree *Elaeis guineensis* are available for the animal to feed on throughout the year.

INTRODUCTION

Mona monkey is a medium sized animal with short hair, dark brown on the head region and back, under part is dirty white. It possesses two black stripes in the head running from the eyes backward. It belongs to the Order: primates which are social animals that exhibit high sense of intelligence. It is known to be important in the ecosystem for its ecological niche. It plays important role in fruits and seeds dispersal by its mode of feeding. The animal makes use of its forelimb a lot in selecting food of its choice. Nutrition in animals is a combination of processes by which wild animals receive and utilize food materials necessary for the maintenance of its functions, growth and renewal of its body tissues (Olomu, 1979). Food is a very important requirement of animals, domestic or wild and must be present at a sustainable quantity and quality at all times (Adeyoju, 1988). For a habitat to sustain animal population on it in the wild necessary and

principal food materials of the animals must be available at all times. Food selection among primates has contributed greatly to the feeding pattern of different species within the order (Aremu, et al, 2002). Monkey depends mainly on plant food materials to meet its basic nutrient and energy requirements. Mona monkey is primarily arboreal though occasionally operate on the ground especially searching for drinking water, picking some food materials on the ground and playing in the forest. Monkey is accustomed to the locations of its food plant species at a particular season. It consumes less of fibrous part and more of succulent part of plants such as fruits, flowers and young leaves (Field and Blankenship, 1983). This study aimed at identifying plant food materials that mona monkey *Cercopithecus mona* feeds upon in the Ayede/Isan forest reserve Ayede, Ekiti State.

MATERIALS AND METHODS

This study was carried out in Ayede/Isan forest reserve, Ayede, Ekiti State, Nigeria. The reserve is located in Oye Local Government Area of Ekiti State, lays 25km south- east of Kwara State. It covers an area of 40,620km², it is between longitude 5° East and latitudes 5° and 5° 10' North. The topography of the area is slightly undulating lowland and is within 150-250m above the sea level. The annual rainfall in the area is between 2000 and 2100mm, well distributed within 8-9 months of the year. This study was carried out in six months, three months in dry season and three months in wet season of the year 2008. The dry season period of the study took place from January to March, 2008 while wet season period took place from April to June, 2008.

Direct observation method was used for the study. This involved observation of the mona monkey in the field with the aid of binocular using scanning and focal point technique.

Data on plant species and their parts eaten by the mona monkey were obtained and recorded. The plant species, the parts of the plant species eaten and the mode of obtaining the part of the plant species eaten by the animal were observed. The plant species eaten by the mona monkey were collected and identified in the laboratory of the Department of Forestry and Wood Technology, Federal University of Technology, Akure.

RESULTS

The results of the study shows that mona monkey *C. mona* in Ayede/Isan forest reserve feed upon various plant species

during the dry and wet seasons of the year as presented in Table 1. It was observed that mona monkey changes to the available food materials in its habitat due to changes in season as most of the food materials it fed on during the dry season differs from those it fed on during the wet season and it has more of the plant food material during the wet season. It was observed that the animal while feeding cuts most of the leaves and plucks fruits or seeds of the plant food materials with its forelimbs and occasionally smells the food material before feeding on it. It discards most plant materials found unfavorable immediately after smelling it, showing that mona monkey selects its food items (selective feeder) and that it makes good use of olfactory organ during feeding. During the study it was observed that mona monkey feed on some plant species such as oil palm tree's fruits and leaves *Elaeis guineensis*, mango fruits *Mangifera indica*, bitter mango fruits *Irvingia grandifoliola*, wild mango fruits *Irvingia gabonensis* as well as kola seed *Cola nitida* on both dry and wet season. From the results apart from *E. guineensis* fruits and leaves mentioned above mona monkey was observed to feed on the other plant fruits as from the month of February, 2008 ending to June, 2008 when the study was terminated. In the reserve mona monkey was observed to feed on African star apple *Chrysophyllum albidum* only during the dry period of the study (January February, 2008).

DISCUSSION

From the results it was noted that more varieties of plant food materials were

available for the animal during the wet season. This fact is not surprising as it is known that plant flourishes more during the rainy season due to presence of water and availability of soluble nutrients in the soil. Moreover, most plant species produces flowers during the tail end of dry period and produce fruits during the rainy season period. As a result herbivorous animals in the wild do have abundant plant food materials at its disposal during the wet season of the year. This observation is in line with the statement of Field and Blankenship (1983) that monkey's feeding habit changes with changes in season and it adapts to the location of the plant species producing its favorite's food at a particular season. The results of the study indicated that mona monkey *C. mona* fed on wide varieties of plant species, it feeds mostly on plant fruits. The action of smelling the food material before feeding upon it that was observed on mona monkey proves the animal to have sense of smell and some degree of intelligence. This behavior confirms the report of Aremu et al (2002) that food selection within a given species contributes greatly to the feeding pattern of different species of primates. The differences in the food items fed upon by the animal on different seasons might probably be related to different period of flowering and fruiting of different plant species in the forest. However, some plant species: *E. guineensis*, *C. nitida*, *Managifera indica* were noted to be fed upon by *C. mona* on both dry and wet seasons of the year, the presence and existence of such plant food materials that the animal fed upon in both seasons in the reserve proves the area to be

suitable for providing plant food materials for the mona monkey round the year. It might also be deduced that the presence of these plant species in the reserve might prove the habitat suitable for the growth and multiplication of the population of the mona monkey in it, food being an important factor in animal growth and reproduction. However, population density of the mona monkey in the reserve need to be researched in to for accurate data findings and records.

It was noted that the active feeding period of *C. mona* in the reserve is mainly during the morning and evening period of the day and it searches for its food while in group. From the observations different mona monkey fed at different parts of the plant species at its feeding point in the reserve. The animal was found to be moving in groups, playing, jumping and grooming each other, this proves mona monkey to be social animal. It moves/jumps mostly at the middle layer of the trees in the reserve. This observation is in agreement with that of Haruna, (2004) that monkey moves in troops and the males that are always on topmost of the trees signals to the group once there is danger. Mona monkey stays mostly on top of trees canopies during the active period though it do stay on the ground while picking fruits that fell on the ground and also when searching for water, playing, glooming in the reserve . During the study the monkeys were noted to move in groups that comprised of mainly adults though juveniles were observed among the troops. From the study it could be deduced that mona monkey in Ayede/Isan forest reserve is always active during the period it searches for

food and it feeds mostly on plant fruits and leaves in the reserve.

Table 1 Plant species and their parts eaten by *Cercopithecus mona* in dry and wet seasons at Ayede/Isan forest reserve

Common name	Scientific name	Dry season	Wet season	Parts eaten
		(Jan-March)	(April-June)	
Bitter mango	<i>Irvingia grandiforiola</i>	X	X	fruit
Ethiopian pepper	<i>Xylopi aethiopica</i>	X	-	fruit
Kola	<i>Cola nitida</i>	X	X	fruit
Hog plum	<i>Spondia mombin</i>	X	-	fruit
African star apple	<i>Chrysophyllum africana</i>	X	-	fruit
mango	<i>Managifera indica</i>	X	X	fruit
Oil palm tree	<i>Elaeis guineensis</i>	X	X	fruit, leaves
Climbing black pepper	<i>Piper guineensis</i>	-	X	fruit
Wild mango	<i>Irvingia gabonensis</i>	X	X	fruit
Fallow tree	<i>Alblanblackia floribunda</i>	-	X	leaves
myriantus	<i>Myrianthus arboreus</i>	-	X	leaves
corkwood	<i>Musanga cercopiodes</i>	-	X	fruit
Bitter kola	<i>Garcina kola</i>	X	X	seed
Breadfruit tree	<i>Treculia africana</i>	-	X	seed
Native pear	<i>Dacryodes edulis</i>	-	X	fruit

X = Utilized, - Not utilized

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