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Dieta de mão pelada *Procyon cancrivorus* (Carnivora, Procyonidae) em uma área de mangue e restinga no Espírito Santo, Brasil

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Resumo Verificou-se a dieta de *Procyon cancrivorus* a partir da analise de material fecal. Das 47 fezes analizadas, o item mais consumido foi Arthropoda, ocorrendo em 100% das fezes cletadas, seguido por *Allagoptera arenaria* (coqueiro-guriri) com 50.75%, e pequenos mamíferos e sementes NI (4,3 % cada). Dentre os arthropods, o mais frequente foi carangueijos (Ocypodidae), os quais foram encontrados em todas as amostras.

Palavras-chaves: dieta, Procyonidae, mão-pelada, mangue, restinga.

Abctract Diet of Procyon cancrivorus was analised from fecal material. From 47 analyzed fecal samples, the most consumed items were Arthropods, found in 100% of scats, followed by Allagoptera arenaria (guriri-coconut), in 50.8% of scats, and small vertebrates and seeds, found in 4.3% of scats each. Among the arthropods, the most frequent crab family was the Ocypodidae, found in all samples.

Keywords: diet, Procyonidae, raccoon, mangrove, restinga

Introduction

The crab-eating raccon, "mão-pelada" in portuguese, P*rocyon cancrivorus* (Cuvier, 1798) is a medium carnivorous (2,5-10,0 kg) widely distributed in the Neotropical region, usually found near rivers, marshes, swamps and mangroves (Emmons 1990). With nocturnal habits, individuals of this species are good swimmers and climbers (Emmons 1990, Nowak 1991, Cheida *et al.* 2006).

This species is considered a generalist and opportunistic one (Macdonald and Courtenay 1996, Gatti *et al.* 2006, Alexandrino *et al.* 2007), and it is classified as omnivorous. It is included in its diet items such as berries, invertebrates and small vertebrates (Nowak 1991, Emmons and Feer 1997, Gatti *et al*. 2006). Although *P. cancrivorus* is very common, studies about the biology of this species are limited (Santos and Hartz 1999, Morato 2004, Gatti *et al*. 2006).

This study aimed to evaluate the diet of *P. cancrivorus*, through qualitative and quantitative fecal samples analysis. Samples were obtained from a conservation unit located in the Atlantic Forest bioma, the Jacarenema Municipal Park, municipality of Vila Velha, state of Espirito Santo, Brazil.

Methods

The Jacarenema Municipal Park (20 25'14 S / 40 19' 23 O), located in Vila Velha, southern coast of the state of Espirito Santo, Brazil, has three typical coastal environments: sandbank, estuary of the Jucu River, and mangrove. This park is one of the few areas with considerable native sandbank vegetation in Vila Velha, and it has approximately 247.36 hectares (Teubner-Junior 2004).

Four visits to the Jacarenema Municipal Park were made between June 2008 and April 2009. Data were performed on three tracks used by local fishermen, taking into account the presence of the species footprints. Tracks were characterized as: (1) track located in a mangrove area, influenced by the Jucu River, flooded from time to time; (2) track located in an interposed area between mangrove and beach vegetation; (3) track near the beach, located in an area with high concentration of Allagoptera arenaria, a coconut palm tree called "guriri".

The fecal material was collected and packed in properly labeled paper bags, containing information about the date and place of collection. Once collected, the feces were washed in running water, with the help

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of a fine mesh sieve and, after, dried in a stove. In the laboratory, food items were properly identified with the aid of a magnifying glass.

Seeds found in the samples were identified by comparison with seeds collected in the study area. The importance of each food item was analyzed based on the occurrence percentage of these items in relation to its total.

Resulted and discussion

Arthropods occurs in all samples and they were the most abundant item found in the 47 analyzed fecal samples, followed by A. arenaria, with 50.75%, and small vertebrates. Among the arthropods, the most frequent crab family was the Ocypodidae, which were found in all samples (Table 1).

Table 1 Diet composition of *Procyon cancrivorus*, showing the absolute values of the found items (N) and relative frequency of occurrence (%) for each item in a mangrove and restinga area at Jacarenema Municipal Park, in state of Espirito Santo, Brazil.

Item	N	% scats	% itens
Fruits			
Allagoptera arenaria (Gomes) O. Kuntze (Arecaceae)	52	91,48	39,4
Seeds indet.	3	4,3	2,3
Arthropods			
Coleoptera	5	8,6	3,8
Ocypodidae	67	100	50,75
Mammals			
Cavia fulgida Wagler, 1831 (Caviidae)	1	4,3	0,75
Vertebrates indeterminates	4	8,51	3

There was no significant difference between diet of P. cancrivorus in the dry and wet season. Among the collection points, there was greater deposition of feces in the area nearest the river (track 1).

The high consumption of crabs (Ocypodidae) by the raccoon can be explained by the large supply of this item in the area and by its easy access in comparison to other items, confirming its direct association to water courses (Yanosky and Mercolli 1993). Gatti et al. (2006) reported high consumption of A. arenaria and small vertebrates by this carnivorous at Paulo Cesar Vinha State Park, also by feces samples analysis.

A study conducted by Santos and Hartz (1999) in the Lami Biological Reserve, southeastern Brazil, presented fruits as the primary item consumed by this species, followed by vertebrates, mainly birds and small mammals, and invertebrates. This data indicates that P. cancrivorus has a general-frugivorous diet and it participates in various ecological interactions, acting as primary and secondary consumer.

Furthermore, this species is a potential seed disperser, mainly of A. arenaria, which is an important plant to sandbanks regeneration. Data suggest that the diet of the crab-eating raccoon consists mainly on crabs, supplemented by fruits, insects and small vertebrates, being considered a carnivorous-omnivorous species. The most frequent item in the racoon's foraging area, for the assessed items, represents the most consumed ones.

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