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# Hábitos alimentares de *Hydromedusa maximiliani* (Mikan, 1820) (Testudinata, Chelidae) da Reserva Biológica Municipal Santa Cândida, Juiz de Fora, Minas Gerais

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**Abstract. Alimentar habits of *Hydromedusa maximiliani* (Mikan, 1820) (Testudinata, Chelidae) of Reserva Biológica Municipal Santa Cândida, Juiz de Fora, MG.** The turtle *Hydromedusa maximiliani*, known as Maximilian's snake-necked turtle, is an Atlantic Forest endemic species of mountainous areas. Its diet includes tadpoles, insects that live in the water-air interface, larvae and adult invertebrates. The feeding behavior of some captive turtles follows a sequence of five stages until the ingestion of the food itself: foraging, persecution or approach, smell recognition, apprehension and ingestion. This work aimed to study the feeding behavior of *H. maximiliani* in the Reserva Biológica Municipal Santa Cândida (RBMSC) in Juiz de Fora, Minas Gerais. Parameters like the feeding behavior itself as well as the relationship among food readiness, item-prey, and size of the ingested prey and of the predator were evaluated. Seven trips were accomplished in field, one per month in October and in December 2004, and monthly from January to May 2005. The animals were transported to the Laboratório Avançado de Zoologia (LAZ) in UFJF, where they were marked, measured and submitted to stomach wash in order to be later observed for feeding behavior. The capture of prey in land was accomplished with the aid of pit-fall traps, and for the capture of aquatic invertebrates a collecting net was used in the tank of primary sedimentation of the RBMSC. A total of 32 individual captures were accomplished. The correlation between the variables carapace maximum length and body mass for males, females and youths remained high. Through the 16 samples of stomach contents it was possible to identify 15 item-prey categories, which included mainly aquatic insects larvae, crabs and terrestrial invertebrates. It was observed a maximum selectivity for Lepidoptera, Baetidae and Diplopoda, followed by Trichodactylidae, Ephemeridae, Leptoceridae, Coleoptera, Araneae, Chironomidae and Odonata. The feeding behavior could be divided into four steps: forage, approach, apprehension and ingestion of food. When the biometric measures were compared among the individuals, it was observed that the males showed larger dimensions than the females for all the measures. Other authors also observed sexual dimorphism. The most representative group in the diet was Insecta, especially those in aquatic larval phase, which agrees with other authors. The steps of feeding behavior displayed by *H. maximiliani* were similar to other diagram of behavioral sequence elaborated for other species of the same family, however, the laceration stage was not observed in this study probably due to the size of the offered prey. Data concerning this species diet may contribute to its preservation when one take into account the predator's foraging behavior. This attitude may greatly avoid erroneous inference regarding the diversity and abundance of the available fauna in the environment.

**Keywords:** Maximilian's snake-necked turtle, morfometric, diet, arthropods, , feeding behavior.