OBSERVATIONS ON THE DIET AND MICROHABITAT USE BY

PLATYMANTIS DORSALIS A. DUMÉRIL, 1853 (ANURA: RANIDAE) AT

MOUNT MAKILING, LOS BANÓS, PHILIPPINES

Indranilei Das* and Joseph K. Charles

Department of Biology, Universiti Brunei Darussalam, Gadong, Bandar Seri Begawan 3186, Brunei Darussalam.

*Present address: Centre for Herpetology, Madras Crocodile Bank Trust, Post Bag 4, Mamallapuram, Tamil Nadu 603 104, India.

(with two text-figures)

ABSTRACT: Dietary and microhabitat data are presented for 17 examples (15 adult males, two juveniles) of Platymantis dorsalis, a ranid frog endemic to the Philippines, from Mount Makiling in Luzon. Spiders, insect larvae and termites are the dominant prey of the species at the site, other food items including ants, beetles, millipedes and centipedes. There appears to be no relationships between the size of the trophic apparatus (here head width) and prey size or the size of frog and number of prey items harvested. Frogs were taken from low vegetation, the substrate and from buttresses of Pandanus, at altitudes between 105-145 m above msl.

KEY WORDS: Platymantis dorsalis, diet, microhabitat, Luzon, Philippines.

INTRODUCTION

Mount Makiling (altitude 1,130 m above mean sea level) is a south-western Luzon, in the northern Philippines, lies between 145° 05-15° N and 121° 08-18° S, approximately 65 km from Metro Manila. In extent 4,244 ha, it is situated within the Los Banos campus of the University of the Philippines, sprawled over the provinces of Laguna and Batangas. A proclamation in 1910 made Mount Makiling the country’s first National Forest Reserve.

Perhumid climate prevails, with two distinct seasons, January to April being dry, while the rains come between May and December. Average annual rainfall in the area is about 2,200 mm, rainfall peaking between June and August. The soil of the region is of volcanic origin, with a pH range of 6.5-7.5 (alkaline). The altitudinal range of the Park is between 100 to over 1,000 m above sea level. Several streams originate from the hill ranges, including the Calo, Molawin, Pili and Dampalit. The floristic diversity of the area is remarkable: Mount Makiling contains more woody species than the entire United States of America (Myers, 1988).

The herpetofauna of the area is fairly well known. Taylor (1922) produced the first inventory of the area’s herpetofauna. Delos Santos (1992) reported on the amphibians found in the Mud Spring area, including Platymantis dorsalis and P. corrigae. The most recent checklist of the area’s herpetofauna includes 22 species of amphibians and 61 species of reptiles (Diesmos, 1993).

This communication presents observations made on the diet and microhabitat use by the ranid Platymantis dorsalis, which we studied at Mount Makiling. The species is widespread in the Philippines Archipelago, being recorded from all islands except Palawan (Alcala, 1986). Little is on record of its biology in the literature, and till Brown and Inger (1964) showed the valid name for the taxon, the species was listed in the older literature as Platymantis meyeri Günther, 1873 (see Inger, 1954; Alcala, 1962) and as Corinher laticeps in Taylor (1920).

MATERIAL AND METHODS

Investigations were conducted between September 16-20, 1993. We located most frogs from calls. Upon capture, we took detailed microhabitat description, including distance from substrate (to nearest 5 cm), altitude (to nearest 5 m), a general description of microhabitat type, date and time of