SMALL MAMMAL AND UNDERSTOREY BIRD SPECIES DIVERSITY ALONG ELEVATIONAL GRADIENTS IN MOUNT MAKILING, PHILIPPINES

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ABSTRACT

Under-storey bird and small mammal species diversity of mid-montane forest (760-899 masl), mossy forest (900-1100 masl), secondary lowland evergreen forest (442-665 masl), mixed grassland and agro-forest areas (261-442 masl) and secondary growth with built-up areas (148 - 261masl) of Mt. Makiling were investigated from May 2009 – May 2010. A combination of netting and transect line method was done to record bird species. For the small mammals, a combination of cage traps and snap traps were used. A total of 63 understorey bird species was recorded for all sampling sites. Majority of birds recorded were common but endemic species. There was no particular pattern for the computed species diversity indices (H') along the various elevational gradients. However, bird species richness from ~200 masl decreased with

elevation. Seven species of small non-volant mammals consisting of four endemic species and three introduced commensal species were recorded. Two of the endemic species are new records for Mt. Makiling with one possible new species (*Apomys sp*.). Species richness for small non-volant mammals from ~200 masl also decreased with elevation. Therefore, the species richness of understorey birds and small non-volant mammals decreases with elevation in these five elevational gradients of Mt. Makiling.

Key words: species richness, mossy forest, montane forest, low mountain, Luzon Island, endemic, commensal, Muridae

INTRODUCTION

Mount Makiling is one of the first protected areas established in the Philippines, recognized for its exceptional diversity of fauna and flora (Sajise et al. 1997). One of its unique features is the occurrence of mossy forests at its comparatively low peak of 1100 masl, thus forming different forest types along altitudinal gradients. It serves as a model study area for ecological research on lowland and montane forest plants and animals. Lowland evergreen forests have multi-strata structures, while montane and mossy forests comprise a single stratum. Despite numerous studies (Taylor 1922; Custodio 1986; Mendoza 1985; Miranda 1987; Ingle 1992; Dans et al. 1995; Gonzalez and Dans 1994 & 1997; Alcala et al. 1997; Sedlock 2001, 2002; Gonzalez et al.