



**MAKILING BIODIVERSITY INFORMATION SYSTEM (MakiBIS):  
DEVELOPMENT OF AN ONLINE SPECIES INFORMATION SYSTEM FOR  
MOUNT MAKILING**

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**ABSTRACT** – Mt. Makiling is a Philippine biodiversity hotspot listed as one of the 170 conservation priority areas established by the Philippine government. With the vast amount of ecological and biological information about the flora and fauna of Mt. Makiling, the Makiling Biodiversity Information System (MakiBIS) has been developed to serve as a repository for these data. Species information included in the MakiBIS are taxonomy, conservation status, habitat, general description and photo. Currently, MakiBIS contains information for 716 species.

MakiBIS is a web based database system using open source web tools such as PHP, jQuery, and MySQL. It is capable of sharing data using the Darwin Core format which is a standard for sharing biodiversity data used by international biodiversity systems such as the Global Biodiversity Information Facility (GBIF). MakiBIS has the core functionalities of a biodiversity information system. Researchers act as administrators and are the ones who encode species information to the system. Ordinary users are only allowed to view species information either through using the search function or browsing the Taxonomic Tree feature. The system can also export an XML dataset following the Darwin Core standard which can be imported by other biodiversity information systems that use the same format.

MakiBIS may serve as a prototype in the development of a national Biodiversity Information System (BIS) that will be useful in addressing the need to set national baseline, measurable targets and indicators to facilitate assessment of biodiversity progress and as well as basis for national and local decision-making.

*Keywords: Biodiversity Information System, Darwin Core, Mount Makiling*



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