

Diversity and Abundance of Tuber Plant On Gunungkidul, Yogyakarta

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ABSTRACT

This research aims to know the species of tuber plant which is used to substitute rice that discovered in Desa Sumberwungu, Kecamatan Tepus, Kabupaten Gunungkidul, Yogyakarta. In addition, the other purposes of this research are to knowing the index of diversity (H') and abundance of tuber plant that has been discovered. The type of this research is field observation that determine the species, species abundance, and diversity of tuber plant species which is used as carbohydrate resource to substitute rice as the main resource. The Investigation of samples had been done in 19 villages in Sumberwungu. Data is taken on 5 fields for each villages which has criteria of 20 x 20 m² wide and has tuber plants, also focused on morphological identification of leaf, stem and tuber. The sample measurement has been done with considerations (judgement sampling) such as travel distance, representation of yard and wide area. The result of this research indicate the tuber plants that had been discovered in Sumberwungu consist of 12 species. These species are *Xanthosoma sagittifolium*, *Canna edulis*, *Maranta arundinacea*, *Alocasia macrorrhiza*, *Colocasia esculenta*, *Dioscorea alata*, *Xanthosoma violaceum*, *Dioscorea esculenta*, *Amorphophallus paeoniifolius*, *Dioscorea hispida*, *Dioscorea pentaphylla* and *Dioscorea bulbifera*. These specieses are from 4 Familias which are Dioscoreaceae, Cannaceae, Araceae, and Marantaceae with index of diversity 1,6904 in medium category. Whereas the value of abundance is 3.250/1.826,98 hektare on *Xanthosoma sagittifolium*.

Kata Kunci: *Tuber plant, Diversity, Abundance, Gunungkidul, Plant Ecology*