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Productivité biologique des champignons du genre *Amanita* des forêts à Limbali de Makao et Thanry, département de la Likouala

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Biological productivity of mushrooms' genus *Amanita* from the Limbali forests of Makao and Thanry, Likouala Department

Abstract

A better sustainable management of natural resources in general and Non-Wood Forest Products in particular requires a good knowledge of these resources and of the parameters controlling their availability. Thus, in the context of mushrooms of the genus *Amanita* (Amanitaceae), botanical and mycological inventories were carried out in three plots of 50 m x 50 m each, corresponding to 7500 m² or $\frac{3}{4}$ ha, installed in the Limbali forests of Makao and Thanry in the Likouala Department. These plots were visited twice a week. The fruiting bodies of the amanitas were photographed, harvested, weighed and dried. A total of 242 tree individuals were inventoried, with the Leguminosae family being the most abundant with 64.46% and *Gilbertiodendron dewevrei* or Limbali the dominating tree species with 59.47%. For amanitas, 65 fruiting bodies were recorded corresponding to 10 species which are: *Amanita calopus*, *A. echinulata*, *A. goossensiae*, *A. lanulosa*, *A. virella*, *A. sp1*, *A. sp2*, *A. sp3*, *A. sp4* and *A. sp5*. The weighing carried out showed that these mushrooms weigh between 4.1 g and 16 g on average. On a total area of 7500 m² in the forest in Limbali, the biomass of amanitas found is 582.1 g or 0.58 kg. The estimated productivity for amanitas in a Limbali forest is reported at 0.77 kg/ha. Future research on large areas of forest is therefore needed to better assess the biological productivity of fungi and thus contribute to the sustainable management of forest ecosystems.

Key words : Biomass, inventory, NWFP, sustainable management of natural resources.