Valorisation of traditional Ecological knowledge on Wild Edible Fungi in the Republic of Congo

Rufford Project ID : 43319-B

Interim report (26th November 2024)

Context

This interim report is providing information on the implementation of the project ‘‘valorisation of traditional Ecological knowledge on Wild Edible Fungi in the Republic of Congo’’ for the period running from August to November 2024. The activities that will be reported in this report are activities 1, 2, 3 and 4 (partially) as mentioned in the approved project. Initially planed to start in June 2024 when we submitted the proposal, the project was approved by the Rufford Foundation in July 2024 and the activities started in August 2024. The activities were conducted in Brazzaville, Makao, Thanry and Bangui-Motaba. The figure 1 below shows the NGO team and the speed boat driver leaving Makao for Bangui-Motaba. The plots (1–3) are those in which the monitoring activity was conducted.

Figure 1 : The team travelling and detail of the study area

Implementation of the Project

Activity 1: Preparation of the posters and datasheets

The poster prepared (see file 1 attached) included 15 wild edible mushroom species all with local names in Mbenzele and Ngombe languages. Its also included the description of the habitat where the species can be harvested from and some ecological information linking the species to their habitat. A total of 10 posters were printed out and shared with Chief of the villages, Forestry authorities, Nouabalé-Ndoki authorities and Logging company (see files 2–7 attached).

Activity 2: Monitoring of biological productivity of macrofungi

This activity was only conducted in Makao and Thanry in the three plots (figure 1 above) that we established since 2016 in a *Gilbertidendron dewevrei* forest. In each plot of 50 × 50 m, subdivised in 5 columns of 10 × 50 m, photographs of the mushrooms were taken (figure 2), data recorded (column ID, taxon, number of fruiting bodies, local names) and the specimens collected, folded in an aluminium paper and placed into a basket.

Figure 2 : the team collecting a specimen and data in a plot established in *Gilbertiodendron* forest.

Once back in the village, the team processed the specimens column by column, grouping the same species together within a column and then weighing the mushroom (figure 3).

Figure 3: the team processing the collected specimens and weghing them.

The preliminary analyses show that mushrooms belonging to the genus *Gerronema* were the most abundant with just above 2600 fruiting bodies harvested (figure 4). That genus is represented by the species *Gerronema holochlorum* (shown on the weghing scale and figure 5) which is a delicious edible mushroom growing on dead wood. In total, 3,783 fruiting bodies were recorded and weighed 3,191.8 g (just above 3 Kg).

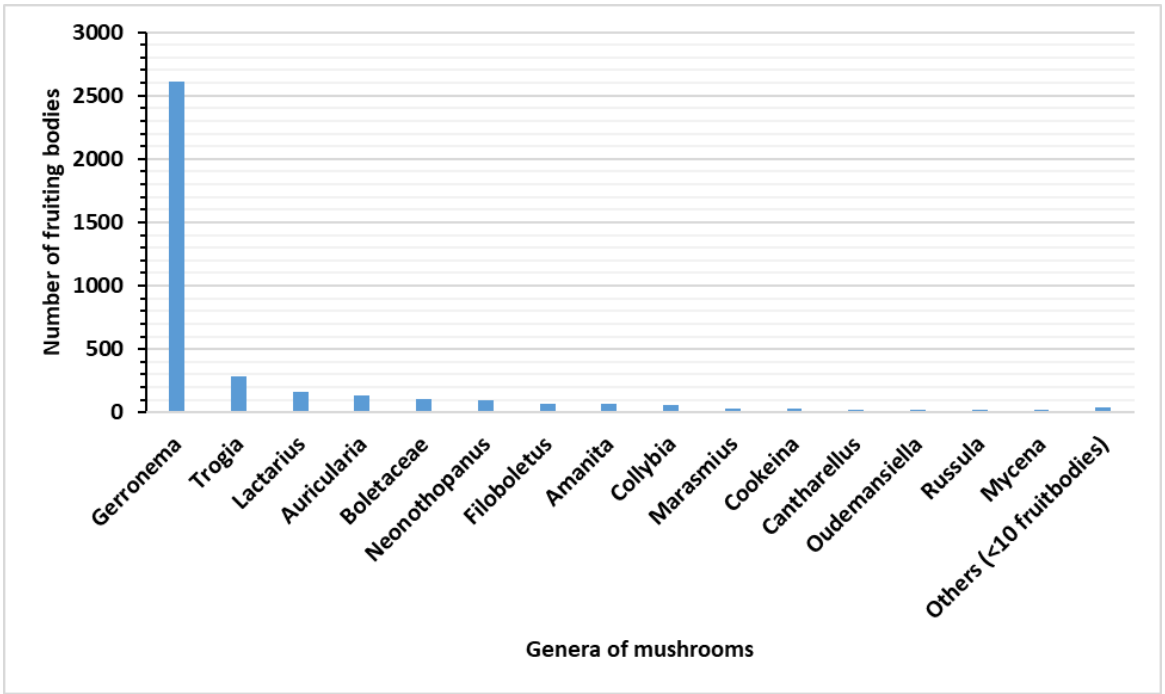

Figure 4: Diversity of the macrofungi genera and the number of fruiting bodies collected during the monitoring.

Figure 5: Fruiting bodies of *Geronnema holochlorum*

Activity 3 : Ethnomycological surveys

This activity was conducted as a focus group in Bangui-Motaba and during the fieldwork in Makao and Thanry. In Bangui-Motaba, we planed only to work with hunter-gatherers but, on the ground during our meeting with the General Secretary of the village, the village suggested us to conduct mixed focus groups including both hunter-gatherers and settle farmers (bantus), (files 8&9 attached). We accepted their suggestion to avoid creating tension between the two groups during or after our visit. Unexpectedly, we obtained local names of edible mushrooms from bantus women that we never heard before. The figure 6 below shows the two mixed focus groups in Bangui-Motaba.

Figure 6: Focus groups with men (left) and woman (right) in Bangui-Motaba

Activity 4 : Management and identification of the collected specimens

During the fieldwork in Bangui-Motaba, the team was introduced to the technique of general collecting which consists of walking in the forest and collect every mushroom seen (fig. 7). This enable us to collect 133 specimens distributed as follow as shown in the table 1.

Figure 7: the team collecting mushroom specimen in the field. From left to right : Ngampele-Tso (MSc student), Ikango (Research Assistant) and Ndolo Ebika (ICPC Coordinator).

Table 1: Number of specimens per collector

Collector	**Number of specimens**
Ikango, TS	42
Ndolo Ebika, ST	55
Ngampele-Tso, GN	36
Total	**133**

The collected specimens are being databased in BRAHMS software are processed in order to produce the labels. The identification of the specimens is also ongoing. The full lis twill be provided in the final report.

Field support from the local guides

In the three localities we conducted the fieldwork, we had a strong support from local people who took us through the forest to collect specimens and data. We are thinking the entire local team for their willingness shown during the fieldwork to take us through the forest and make

our work easier. Below are some images showing some local people who were involved in the fieldwork.


Fieldwork in Thanry (left) and Makao (right)


Fieldwork in Bangui-Motaba