

**A TAXONOMICAL, ECOLOGICAL, PHYTOGEOGRAPHICAL  
AND ETHNOBOTANICAL STUDY OF THE *ARECACEAE* FROM  
THE DEMOCRATIC REPUBLIC OF CONGO**

**Report on the field work  
in the Province of SANKURU.  
*A work carried out with the partial financial support of the IAPT.***

*By*

**Mrs. Pélagie MBANDU LUZOLAWO**

First of all I would like to thank the **IAPT** for the grant awarded in order to support field work in the Province of SANKURU, in the Democratic Republic of Congo (DRC). Our field mission was also possible through additional funding granted by the Higher Education Institute of Gombe (HEIG), Kinshasa.

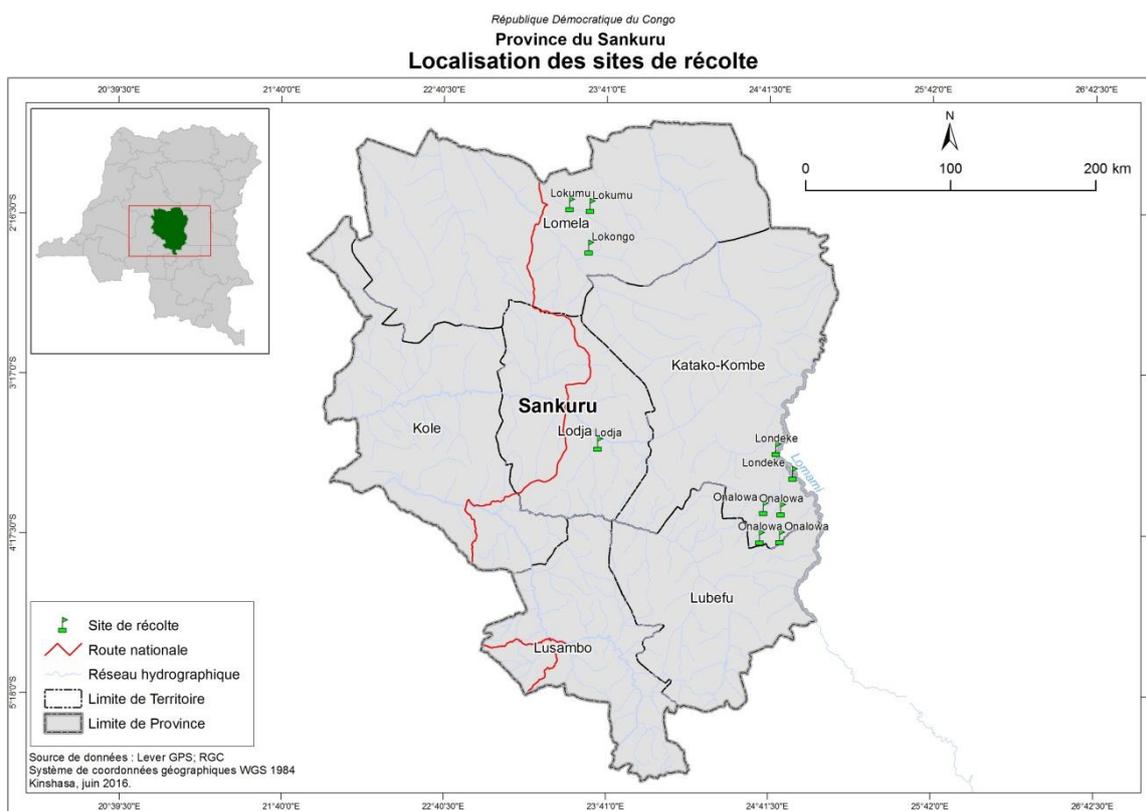
The awarded IAPT grant, along with additional financial aids, represented a priceless support for the field work aiming to collect palm samples in the targeted areas. Our mission has thus been planned in the regions of KATAKOKOMBE, LODJA and LOMELA, all of them corresponding with three territories of the Province of SANKURU (Figure 1), from March, 26<sup>th</sup>, to April, 8<sup>th</sup>, 2016.

The objective of our mission was to collect samples of palm species from the KASAI and CENTRAL FOREST phytogeographical districts in the framework of our doctoral research project entitled “A Taxonomical, Ecological, Phytogeographical and Ethnobotanical Study of the *Arecaceae* from DRC.

In our different missions on the field, our work was joined by :

- Mrs. Josée FONU ANAHENDO (Lecturer from the Higher Education Institute of WEMBONYAMA, Province of SANKURU) ;
- Mr. Paulin MUKOKA KUNIKUNA (Inspector at the Direction of Fishing, Farming and Agriculture in LOMELA) ; and
- Local guides, from which we have also obtained data on both vernacular names in the *otetela* dialect and uses of collected palm species.

We have collected palm samples in three territories of the Province of SANKURU (Figure 1, Table 1).



**Fig. 1. Localisation of the collection sites in the Province of Sankuru.**

We were in first instance in the territory of KATAKOKOMBE, where some samples have been precisely collected in the forest of LONDEKE and both in the LOMAMI River and in its LONTEMBO tributary (Figure 2).



**Fig. 2. *Eremospatha laurentii* in the LONTEMBO tributary.**

Then we were in ONALOWA, a village  $\pm$  7 km located far from WEMBONYAMA, where we collected some samples and in addition observed the *Raphia* stand of *Raphia laurentii* and *R. sese* (Figure 3) along the LONTEMBO River.



**Fig. 3. Raphiale of *Raphia sese* in ONALOWA.**

Other palm samples have been collected along the MONGO River in MONGO, about 26 km far from the centre of LODJA.

The last step of our mission on the field for collecting palm samples took place in the territory of LOMELA visiting as well the forest of LOKONGO at the surroundings of LOMELA River as that of LOKUMU, a village  $\pm$  17 km far from the LOMELA Centre (Figure 4).



**Fig. 4.** *Laccosperma robustum* in the forest of LOKUMU.

In 10 days, we have collected a total of 44 palm samples that represent 13 species (Table 1), among which 2 of the *Eremospatha* genus have been not collected in any of the previously visited sites in our current study. This is considered as a major result as the genus *Eremospatha* remains poorly known and some novelties may be discovered in the frame of our study.

**Table 1.** List of collected species in the field.

N°	Species
1.	<i>Eremospatha cabrae</i> (De Wild. & T. Durand) De Wild
2.	<i>E. haullevilleana</i> De Wild.
3.	<i>E. laurentii</i> De Wild.
4.	<i>E. sp.</i> (collected in ONALOWA)
5.	<i>E. sp.</i> (okongo kongo, dial. <i>otetela</i> )
6.	<i>Laccosperma robustum</i> (Burret) J. Dransf
7.	<i>L. secundiflorum</i> (P. Beauv.) Kuntze
8.	<i>Raphia gentiliana</i> De Wild
9.	<i>R. laurentii</i> De Wild
10.	<i>R. sese</i> Wild
11.	<i>Sclerosperma manni</i> H. Wendl.
12.	<i>S. walkeri</i> A. Chev.
13.	<i>Elaeis guineensis</i> Jacq.

In addition, and at the same opportunity, we have prepared samples of all these species for their respective DNA analyses. Most of this material will be shared with the research palm teams of Dr. Thomas COUVREUR (IRD, France) and Dr. Fred STAUFFER (Conservatory and Botanical Garden of Geneva). Otherwise, the samples gathered in the frame of our mission will largely contribute to our understanding of the palms native of RDC and should be regarded as fundamental for the on-going project dealing with the Palm Flora of this country.

The financial report here presented (Table 2) takes into account both the IAPT grant and the external contribution received for covering the different expenses during the mission in the Province of SANKURU. This table indicates the details of these expenses.