



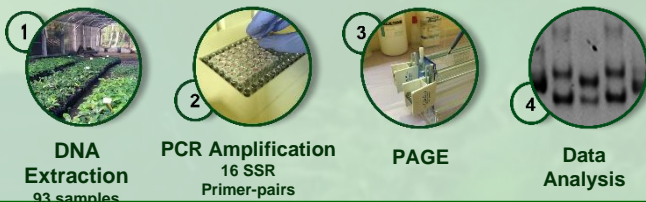
## INTRODUCTION

*C. liberica* popularly known as “Kapeng Barako”, with its two well-known varieties: *C. liberica* var *liberica* and *C. liberica* var *dewevrei*, plays considerable shares in the Philippine market.

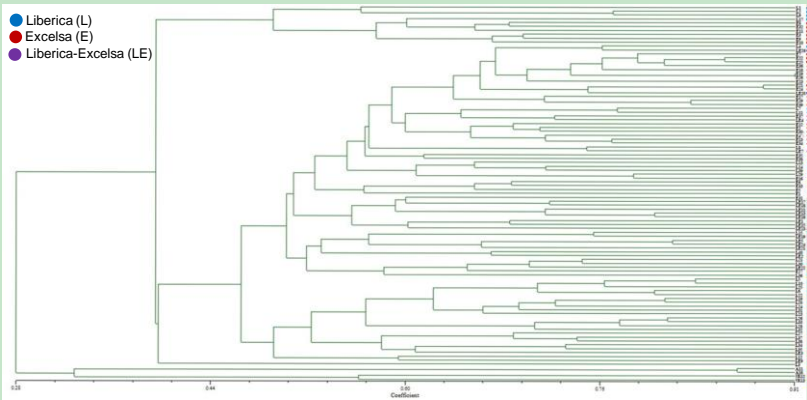
Typically, morphology-based characterization was the usual method for identification. There is no clear system to authenticate and classify these two varieties.

This is the first assessment of genetic characterization of *C. liberica* in the Philippines using a wide range of coffee accession.

## MATERIALS/METHODS



## RESULTS AND DISCUSSION



**Figure 1:** Dendrogram based on the Dice coefficient (SAHN clustering using UPGMA) illustrating the genetic relationship using 16 SSR primer between of *Coffea liberica* accessions

The average number of alleles per locus (4.25) and the polymorphism information content (PIC) (~ 0.404).

Cluster analysis showed two major clusters: Cluster I consisted of mixture accessions of Excelsa and Liberica. Cluster II was the biggest cluster divided by two subcluster/group. Subcluster 1 composed of 60 accessions. Subcluster 2 consisted of the majority (20) of the accessions of Liberica and 2 LE accessions

## CONCLUSION/PERSPECTIVES

- There was no distinct differentiation of *C. liberica* var. *dewevrei* (Excelsa) from *C. liberica* var. *liberica* (Liberica)
- The lack of molecular differentiation of the two groups is attributed to the seed propagation method used in *C. liberica* which led to their hybridization owing to its highly cross-pollinated nature.
- The findings of the study are contrary to the previous report that Excelsa and Liberica are differentiated botanical species or groups of *C. liberica*

## REFERENCES

N'Diaye, A., Poncet, V., Louarn, J., Hamon, S., & Noirot, M. (2005). Genetic differentiation between *Coffea liberica* var. *liberica* and *C. liberica* var. *dewevrei* and comparison with *C. canephora*. *Plant Systematics and Evolution*, 253(1-4), 95-104.  
 Davis AP, Tosh J, Ruch N, Fay M. (2011). Growing coffee: *Psilanthus* (Rubiaceae) subsumed on the basis of molecular and morphological data; implications for the size, morphology, distribution and evolutionary history of *Coffea*. *Botanical Journal of the Linnean Society*. 167:357-377