

# Determination of the geographical origin of tropical timber by using an innovative traceability tool "PCR-DGGE"

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DNA extraction from fungi. We created a new protocol which takes into account the efficiency of this protocol is suitable to extract the genomic DNA using purification kits and it is performed on a large scale. The enzymatic step of the protocol and the subsequent extraction and purification step. For the first time a universal primer for DGGE using a Bio-Rad Dcode™ system was described by El Sheikh et al.

Efficiency of the new protocol for the extraction of fungi DNA from tropical timber, of the DNA concentration and the quality of the DNA extracted.

Verification of the PCR amplification of the extracted DNA, fungal DNA using novel PCR primers. All of the bands were clearly observed (Fig 2).

DGGE pattern, the observed bands had sufficient intensities to analyze DNA extracted from tropical timber from various geographical areas (Fig 3).

Clusters and factorial correspondence analysis, we can observe clearly that geographical locations were clearly distinguished from each other.

Polynesia Limbali 5473	Central A. Rep. Limbali 18865	Cameroon Teck 34090	Ivory Coast Teck 16476
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Figure 1.  
Total DNA.

Polynesia Limbali 5473	Central A. Rep. Limbali 18865	Cameroon Teck 34090	Ivory Coast Teck 16476
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Figure 2.  
PCR.

Figure 3. PCR-DGGE Profile.

Ref.	Polynesia Limbali 5473	Central A. Rep. Limbali 18865	Cameroon Teck 34090	Ivory Coast Teck 16476	Ref.
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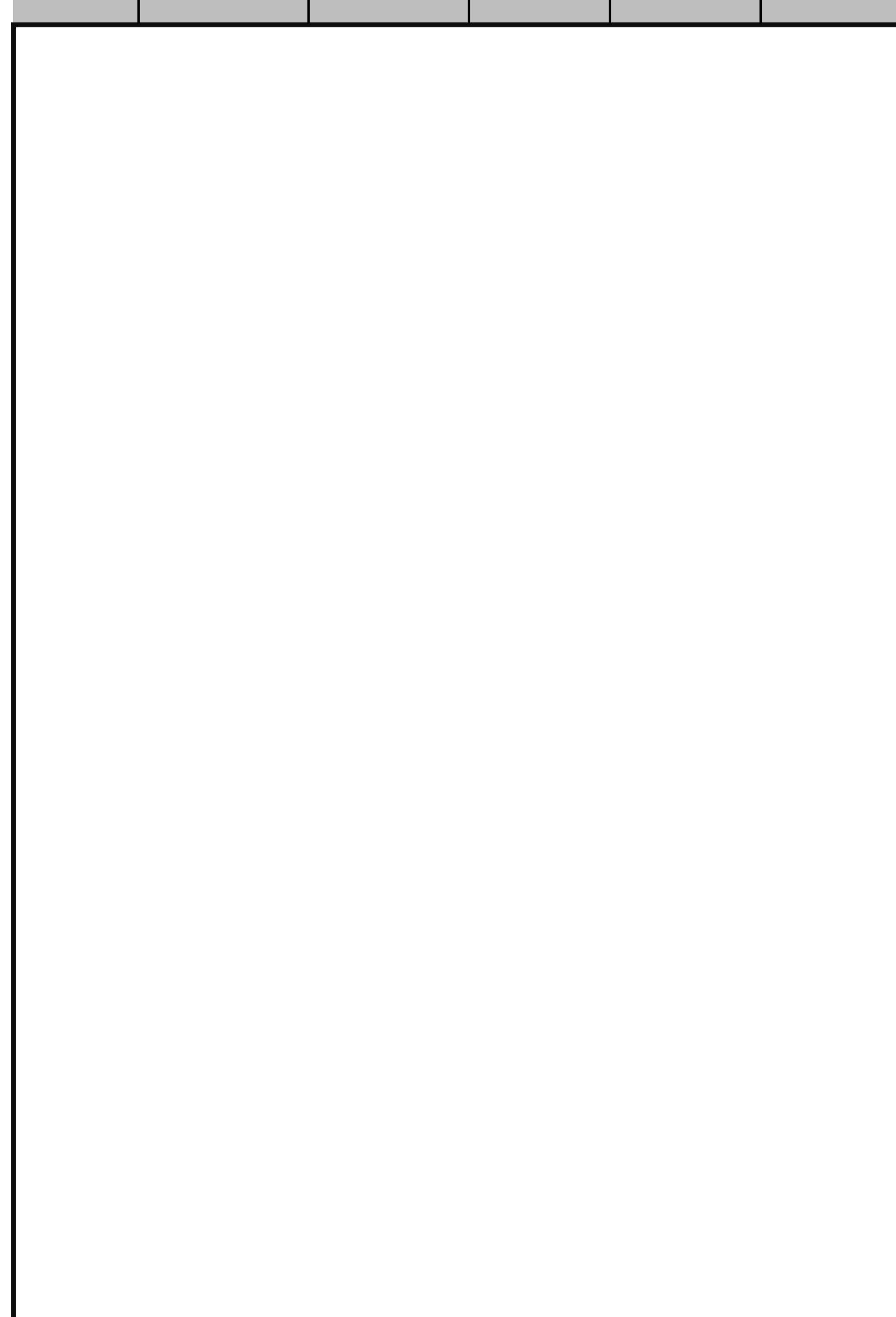


Figure 4.  
Factorial Analysis.

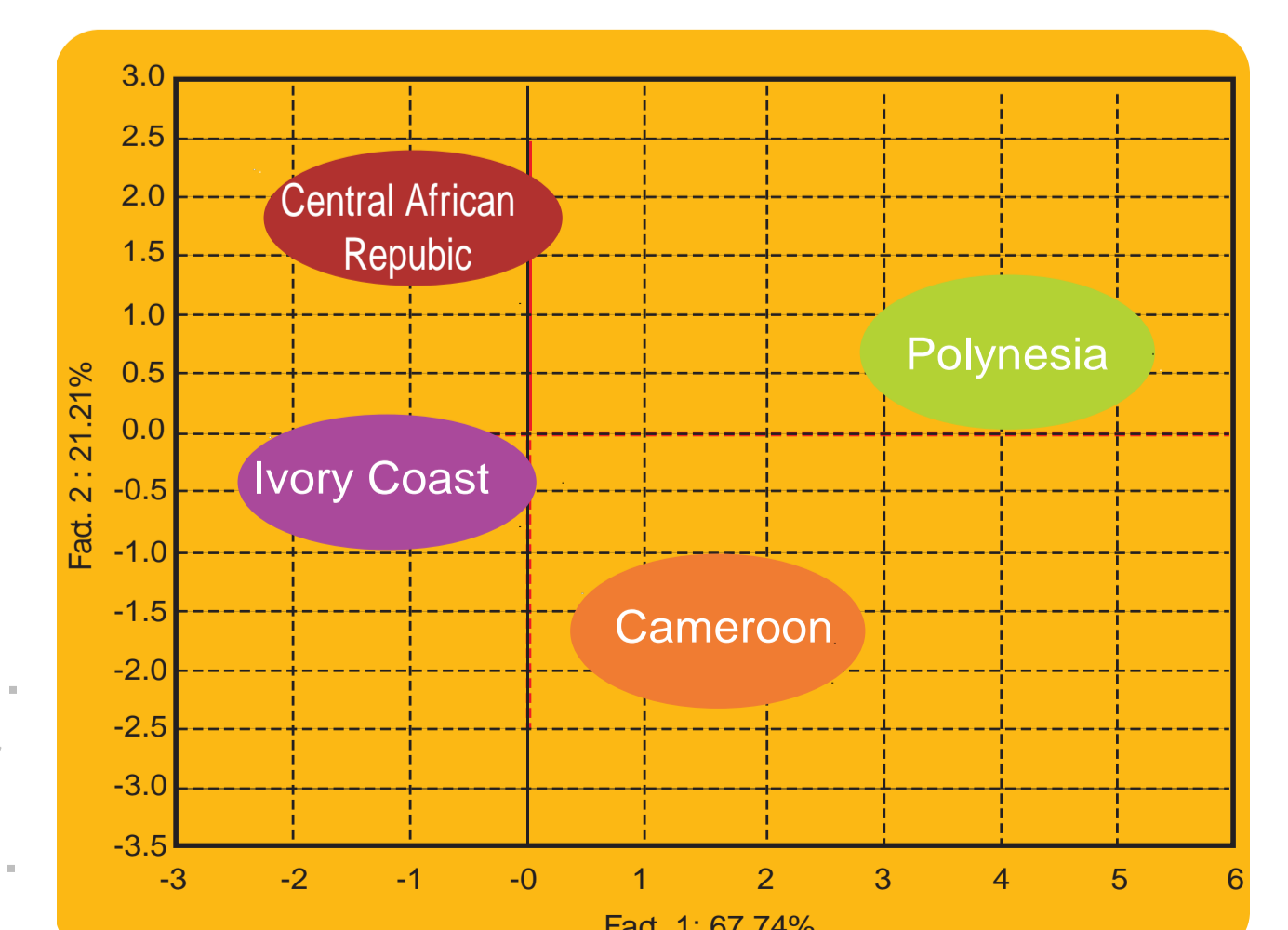
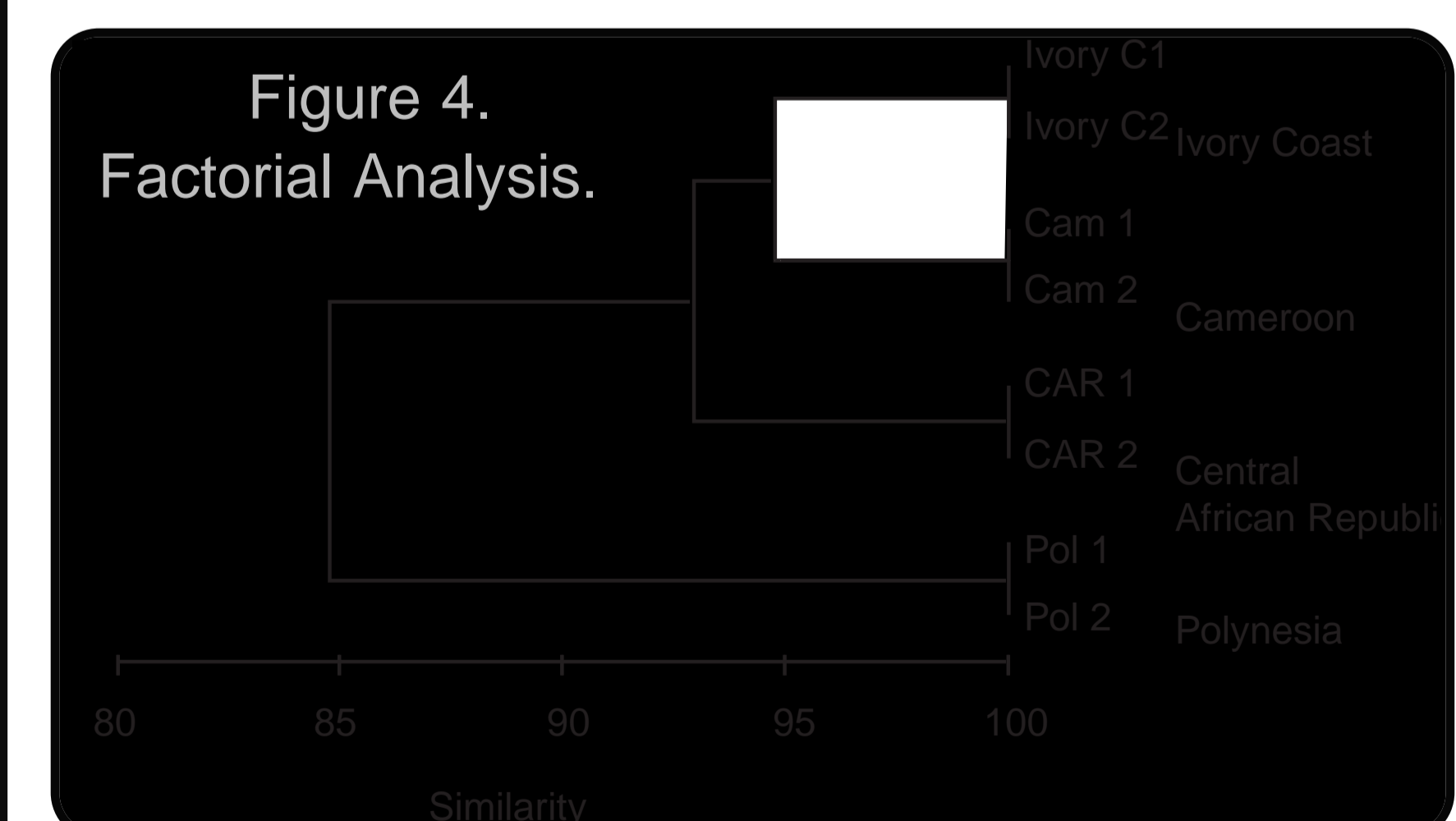


Figure 5.  
Cluster Analysis.

## Conclusion

We determined the geographical origin of tropical timber by using a novel PCR-DGGE protocol. The analysis of tropical timber DNA by using a novel PCR-DGGE protocol was applied to determine the geographical origin and to trace the timber from its local origin.

## References

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