



Establishment of a fully documented reference sample collection for CITES-listed *Dalbergia* species and look-alikes thereof

CoP17 ITTO side event, Johannesburg, South Africa

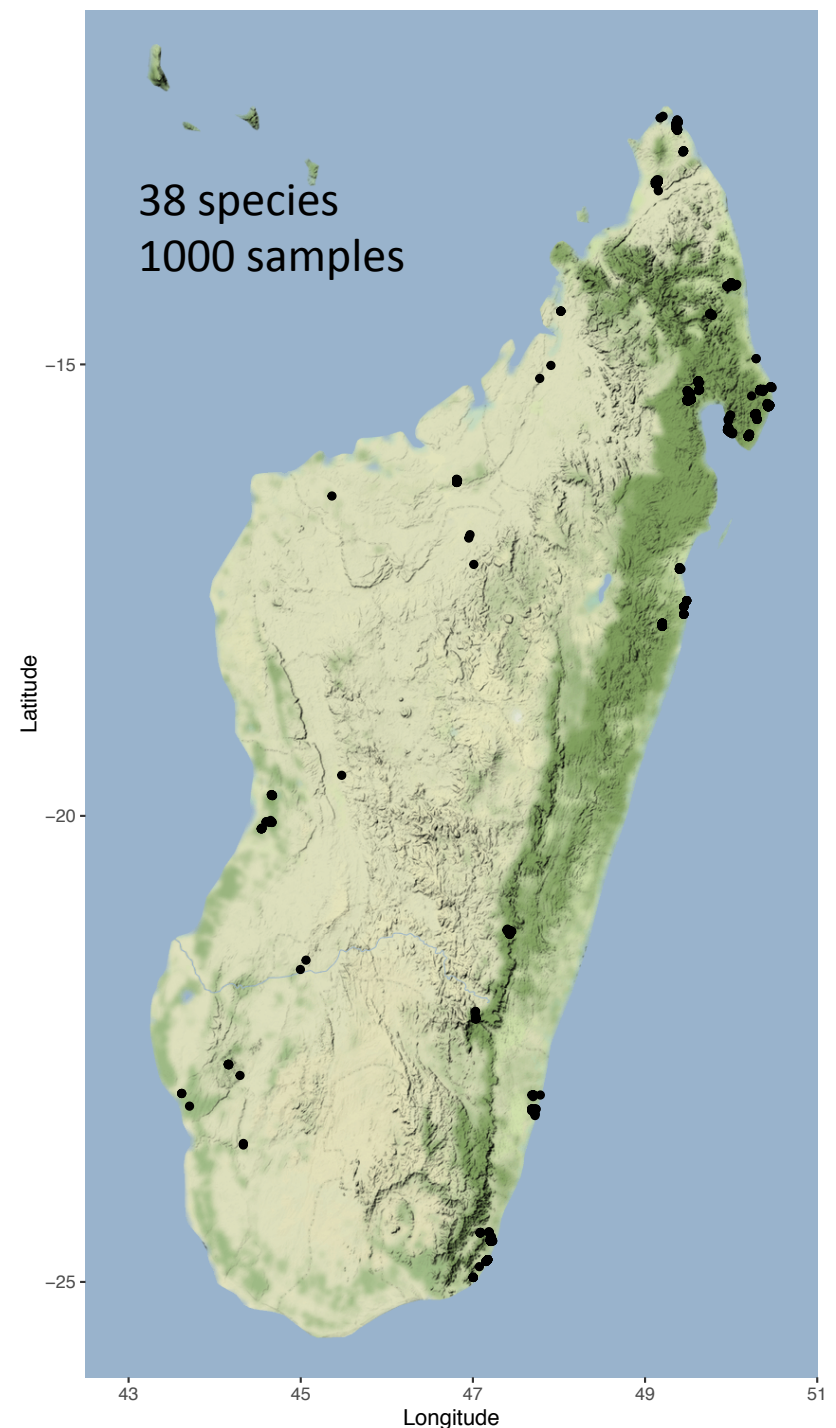
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Sampling strategy

- Fertile material (flowers and fruits)
- Herbarium specimen
- Samples: herbarium vouchers, silica-dried leaf samples, leafs, cores, trunk, branches and twigs
- Coordinates
- Unique labelling
- Recording type of vegetation
- Pictures





Collection



Used methods

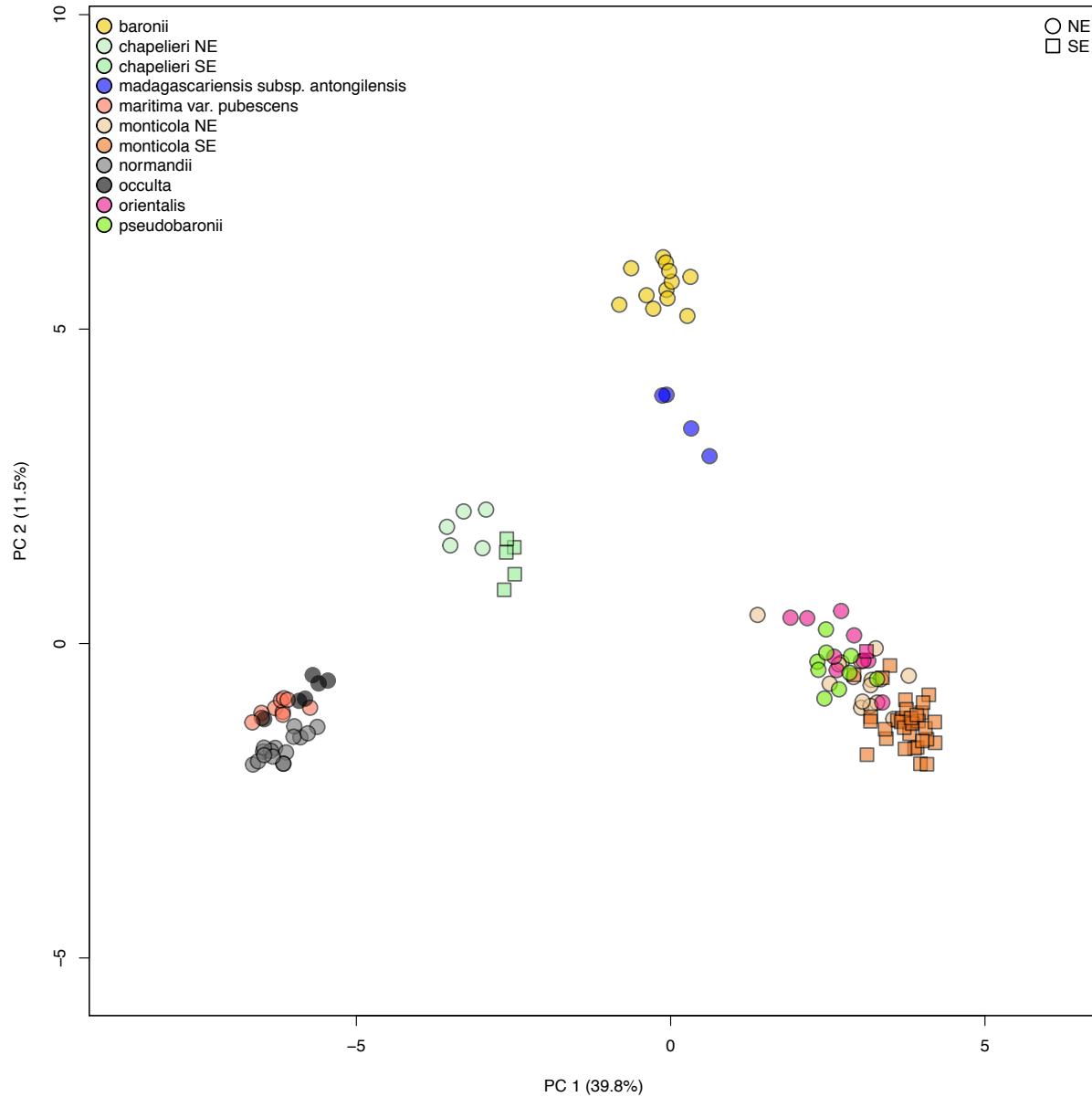
individual population subspecies species species group genus family

Barcoding

SSRs

Approach	Development	Application	Costs	Versatility	Analysis
Barcoding	+	+	+	+	+
	(easy)	(easy)	(low)	(limited)	(easy)
SSRs	++	++	++	++	++

Data visualisation



Lessons learnt

- DNA-based identification of *Dalbergia* is possible
- Look-alikes are very different to *Dalbergia* spp.
- Reference database is key
 - must be based on vouchered and reliably identified samples
 - stored in well-curated herbaria
 - Standardized sampling protocol for comparisons of different techniques
 - Hierarchical approach needed → team up with wood anatomists and wood chemists
- Next steps:
 - Comprehensive dataset, interdisciplinary collaborations
 - improve DNA isolation from wood
 - apply DNA analysis to (confiscated) logs



Thanks for your attention!

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