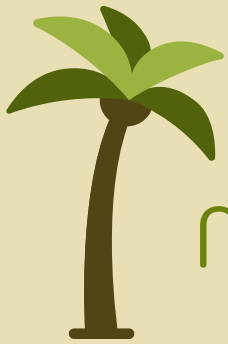




Where do macaronesian bryophytes come from?

Sébastien Mirolo, Alice Ledent, Flavien Collart, Patrick Mardulyn, Rosalina Gabriel, Juana Maria Gonzalez Mancebo, Alain Vanderpoorten, Jairo Patiño





Macaronesia

Azores

Madeira

Canary Islands

Cape Verde

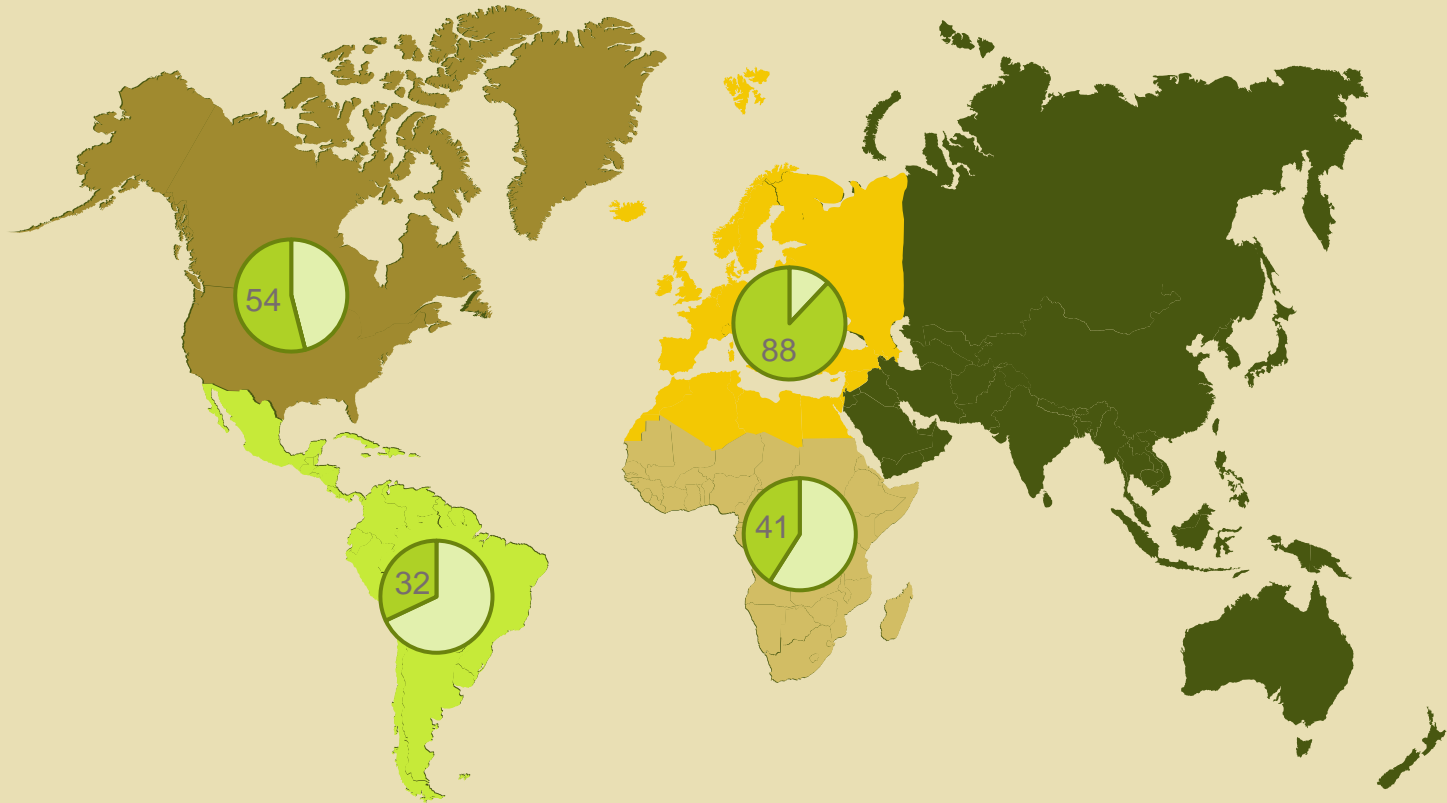
Europe

Africa





Macaronesian bryophytes



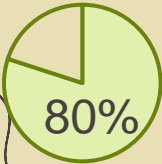
Macaronesian endemics



Endemic species

>40%

Mediterranean
affinities for
endemics



Endemic species

<10%

Tropical affinities
for endemics



Endemics from Europe?

Macaronesia



Fst

0 → 1

Grimmia montana



Europe

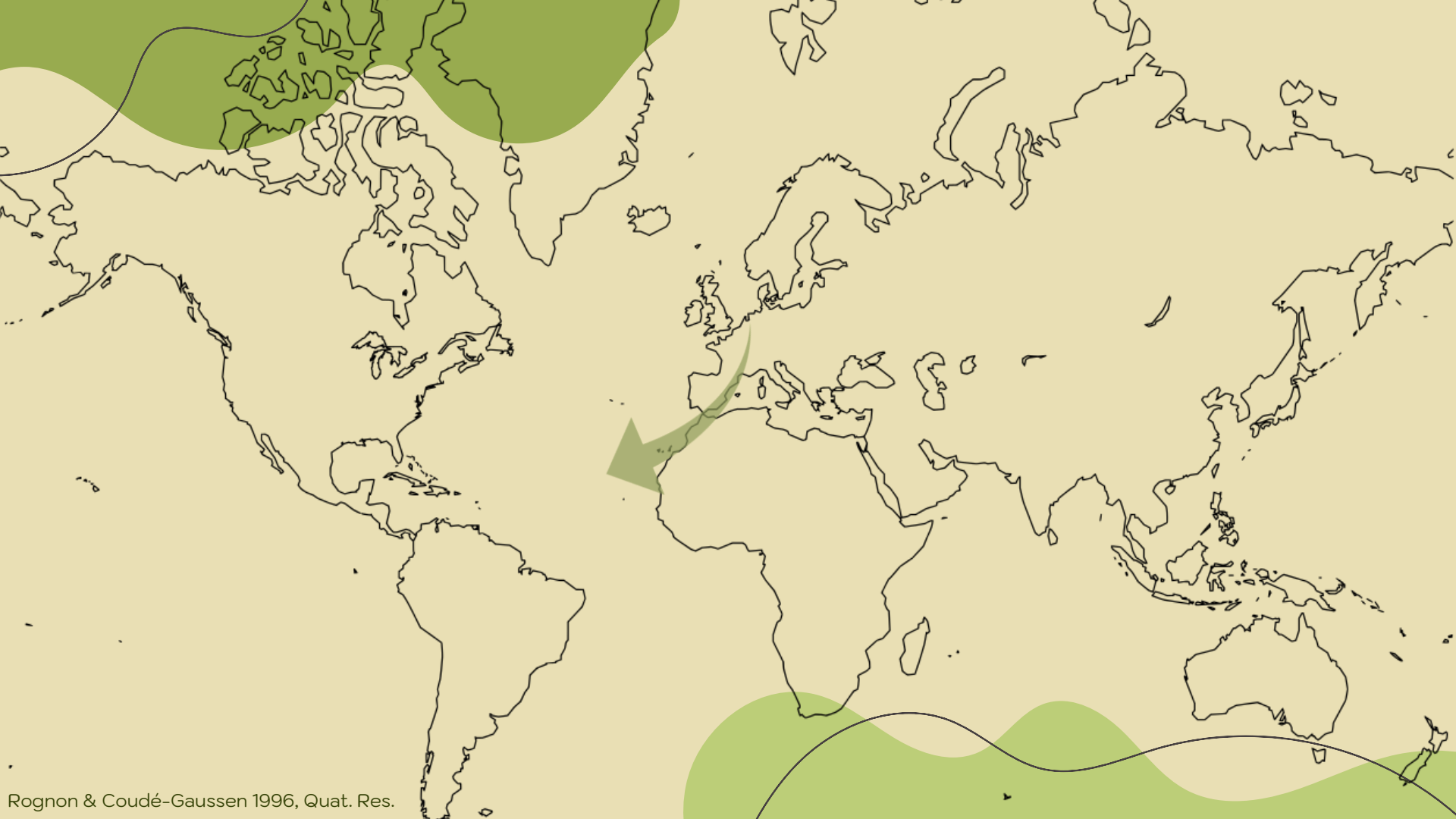


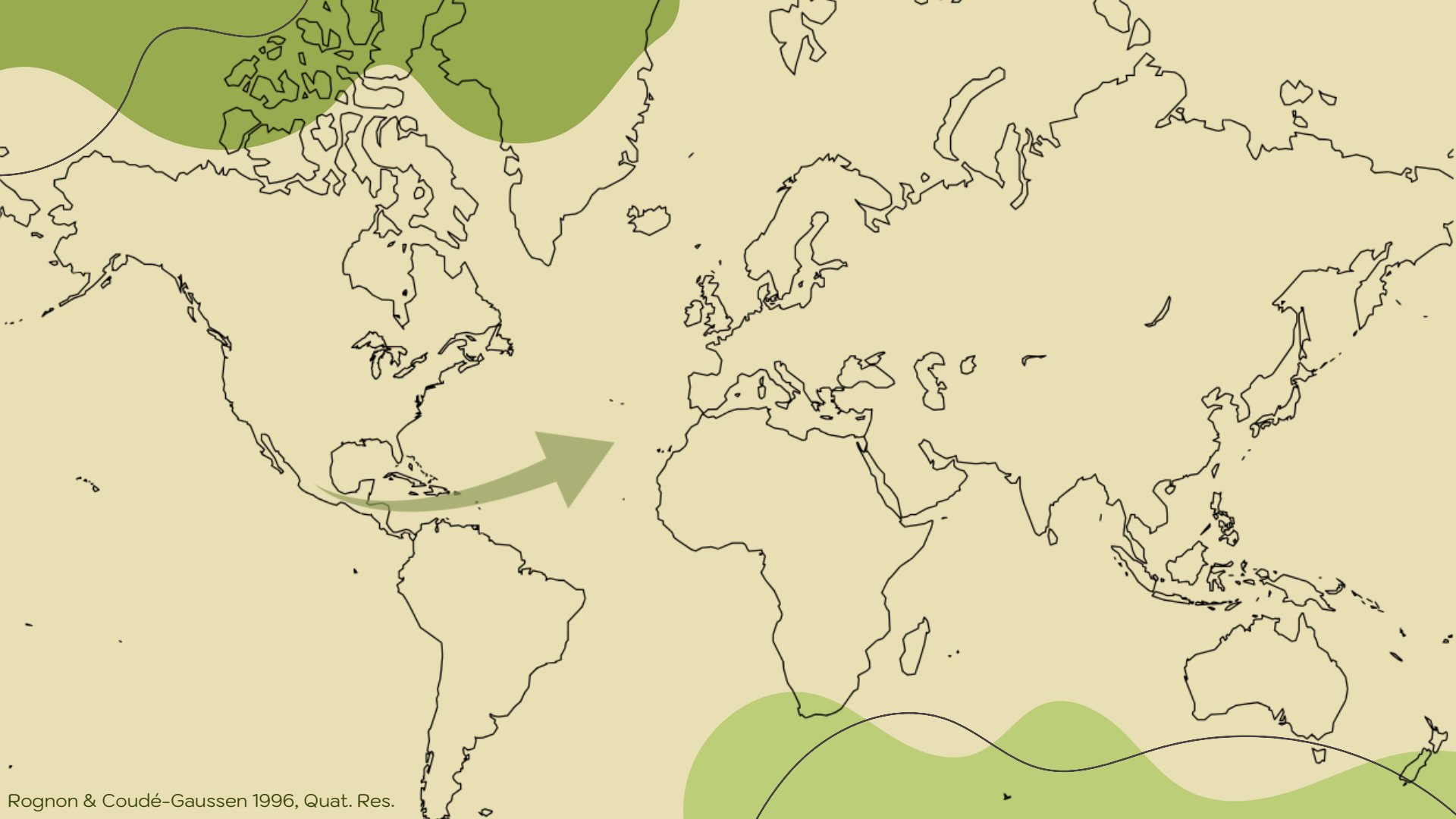


Hypothesis

The colonization source of Macaronesia depends on the main wind direction, which varies over time.







Method: Endemic Species

¿ Endemics origin ?

- Published available phylogenies

- Standardisation
BEAST1

I_1	=	CAGATCCCAA	...	TATGAGCCAT
I_2	=	ACGACGAAAG	...	CATGAGACAG
.				
.				
.				
I_n	=	CCAAACGATC	...	ATGTGCGTGC
		<i>locus 1</i>	...	<i>locus z</i>

14 published phylogenies

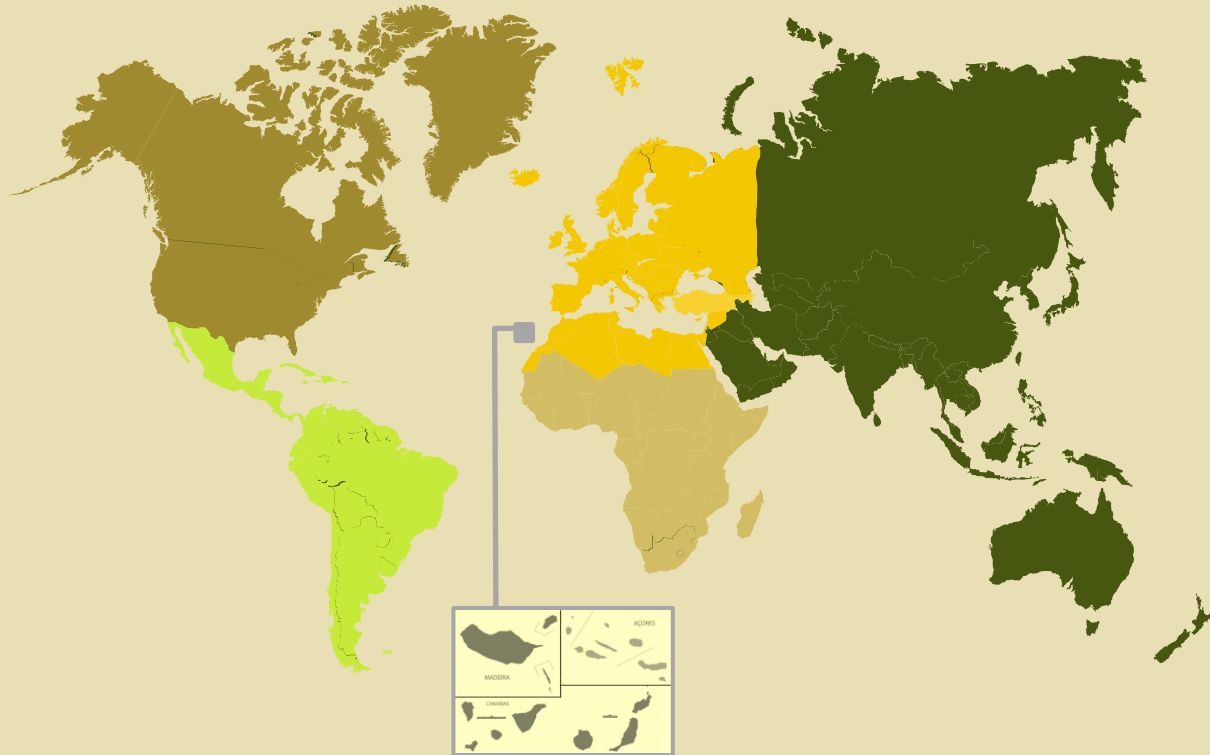
8 analyzed

Method: Endemic Species

¿ Endemics origin ?

- Ancestral Area Reconstruction

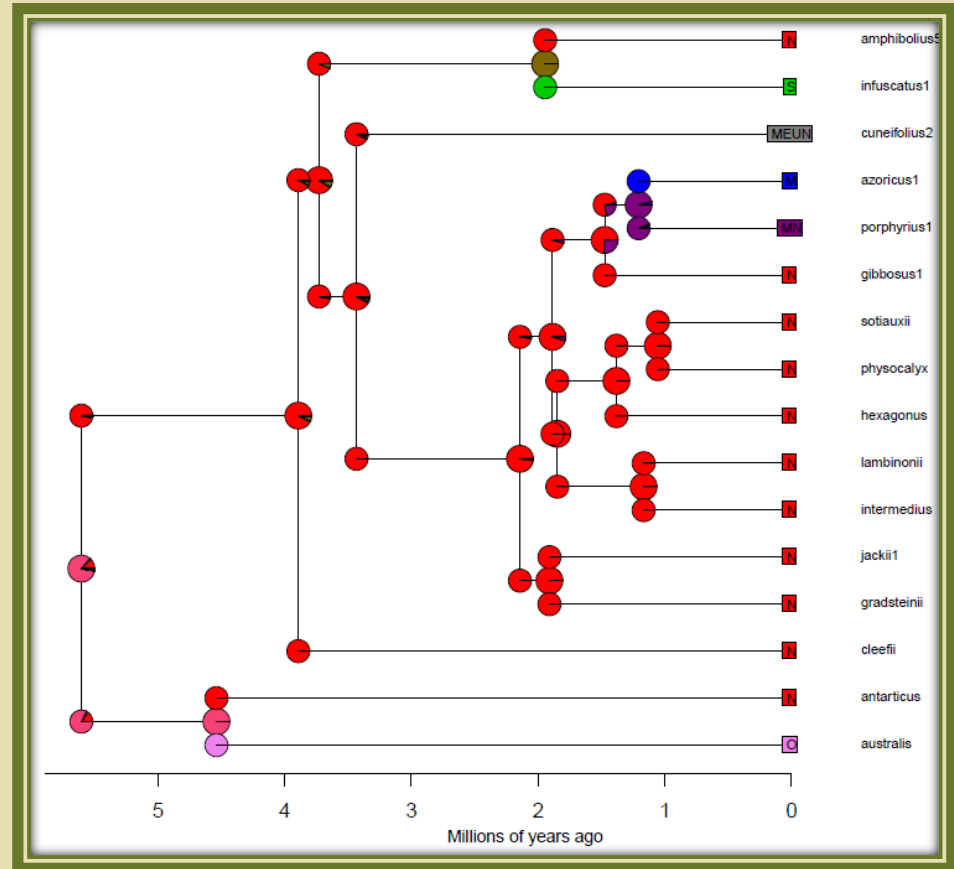
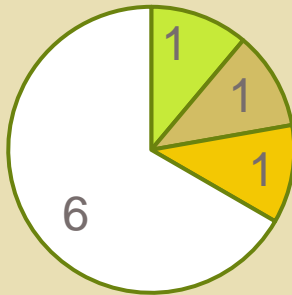
=> BioGeoBEARS



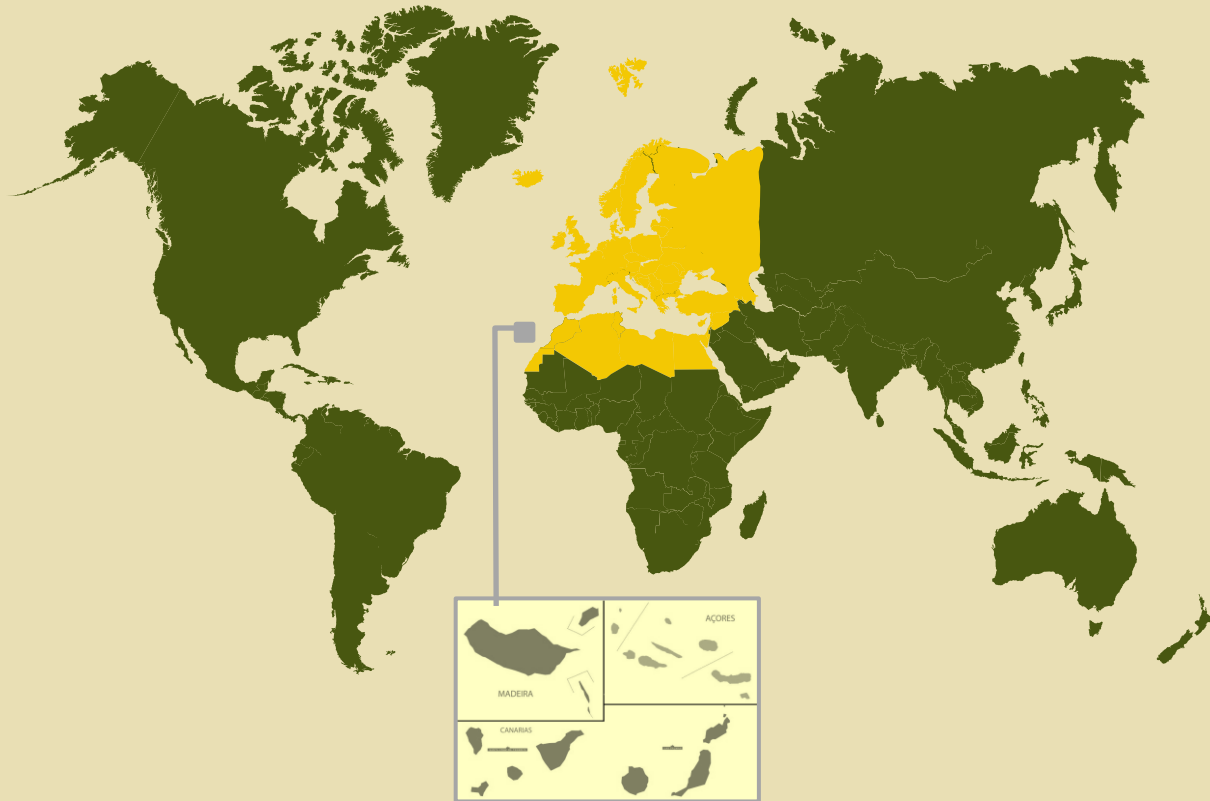
Method: Endemic Species

¿ Endemics origin ?

- Ancestral Area Reconstruction



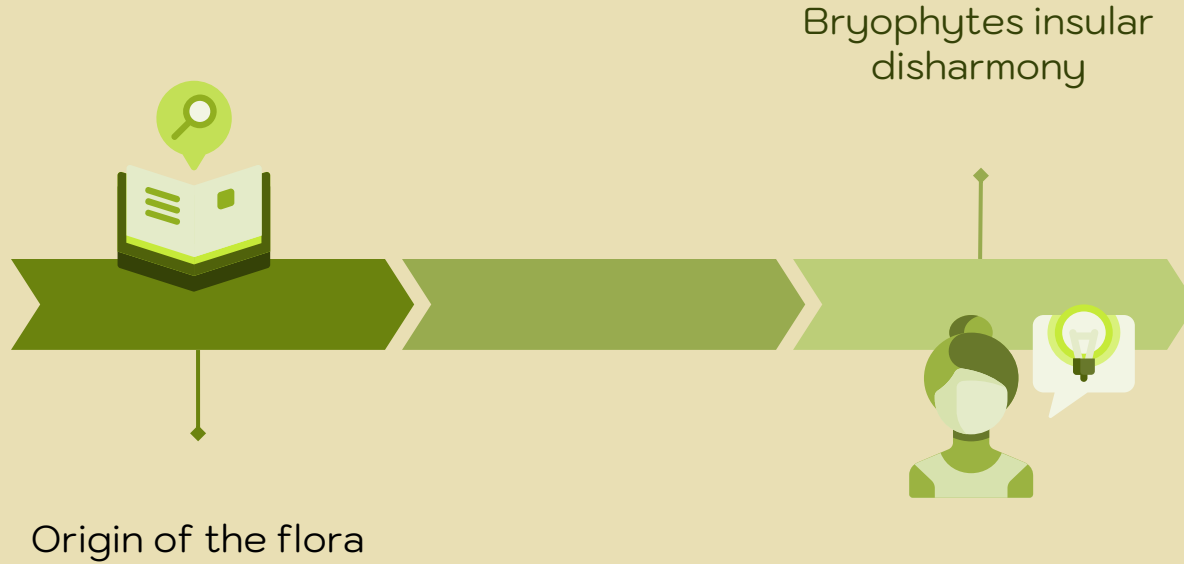
Method: Non-Endemic Species



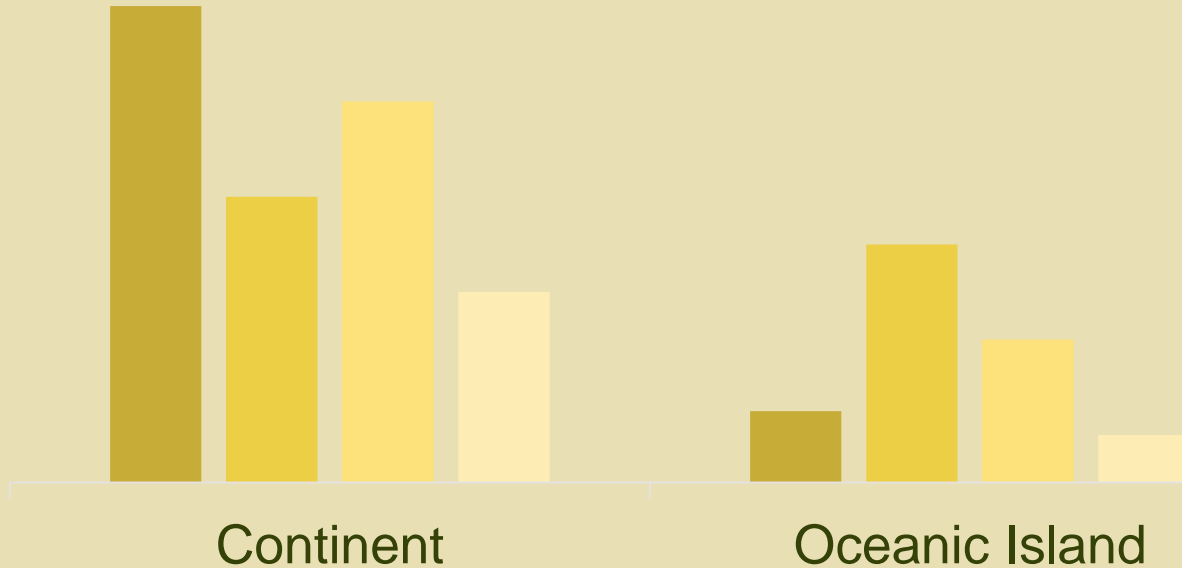
Coalescence
analyses

Simulations
3 origins
2 periods

Preliminary step



Insular disharmony





Thank you

Do you have any questions?

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CREDITS: This presentation template was created by **Slidesgo**, and includes icons by **Flaticon**, and infographics & images by **Freepik**

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