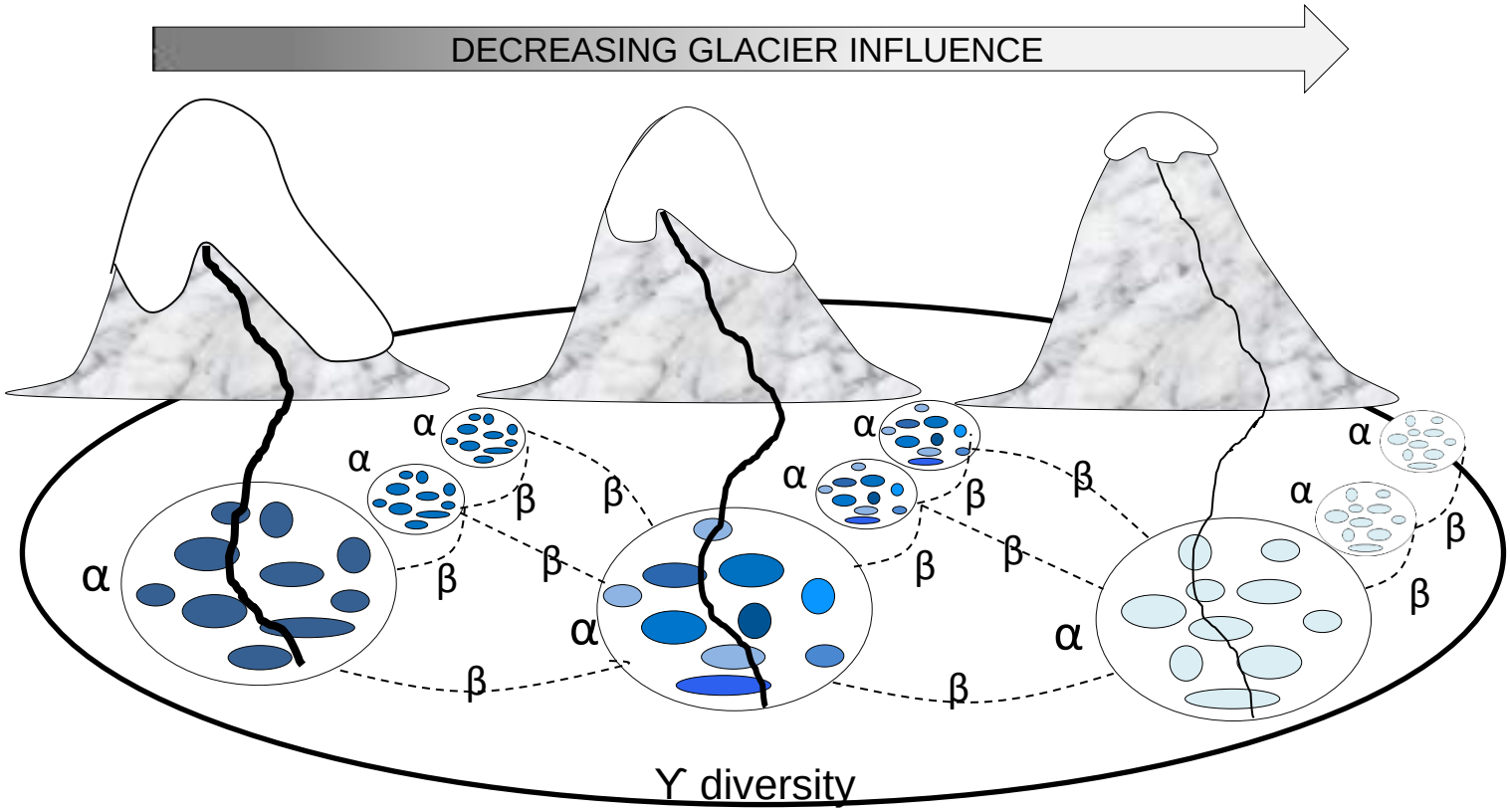
Glacier influence on aquatic biodiversity in high Andean peatlands

Estefania Quenta Herrera PhD
Institue of Ecology
Mayor de San Adrés University

Glacier influence on environmental heterogeneity and diversity



Macroinvertebrates

Zooplankton

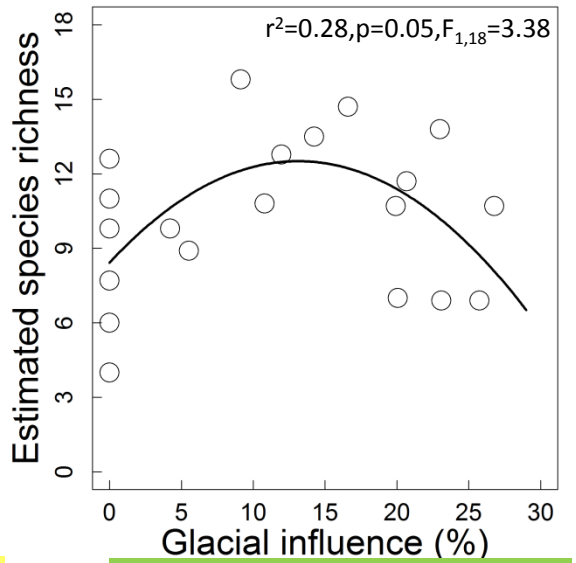
Macrophytes

Phytoplankton

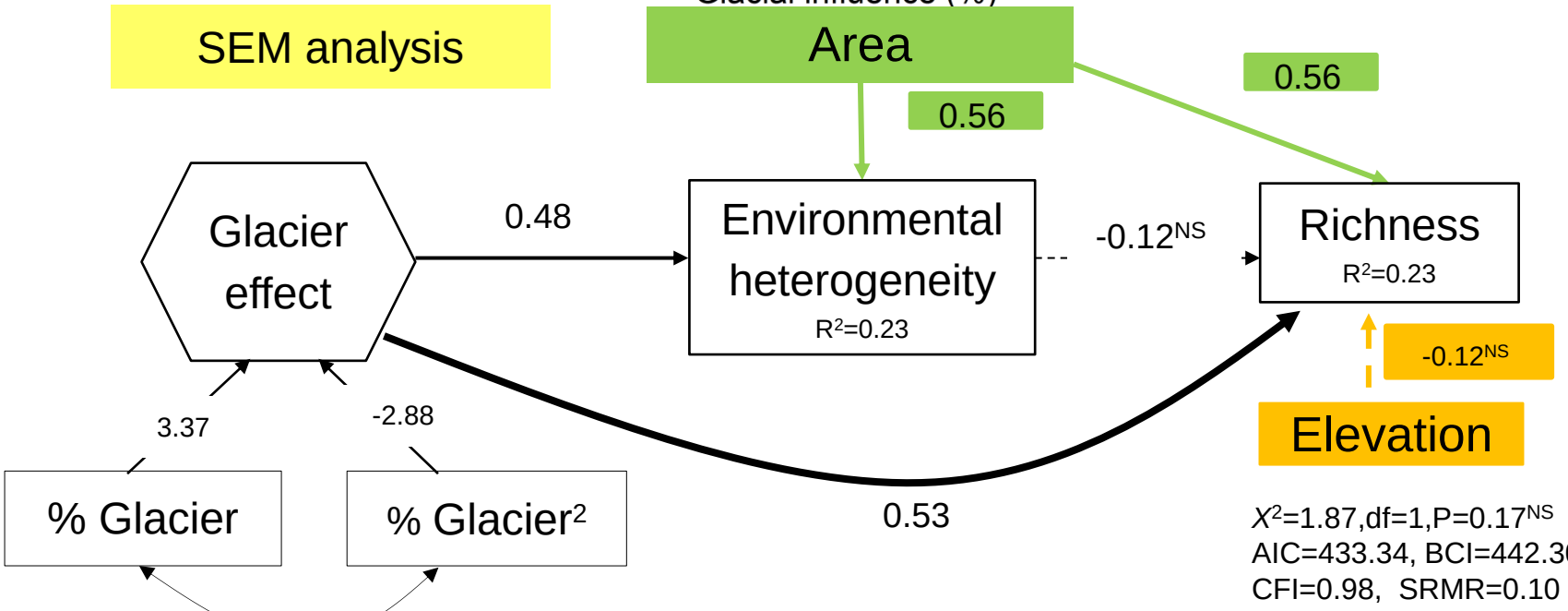
Results

1. High α-diversity at intermediate values of glacier influence

Pattern



SEM analysis



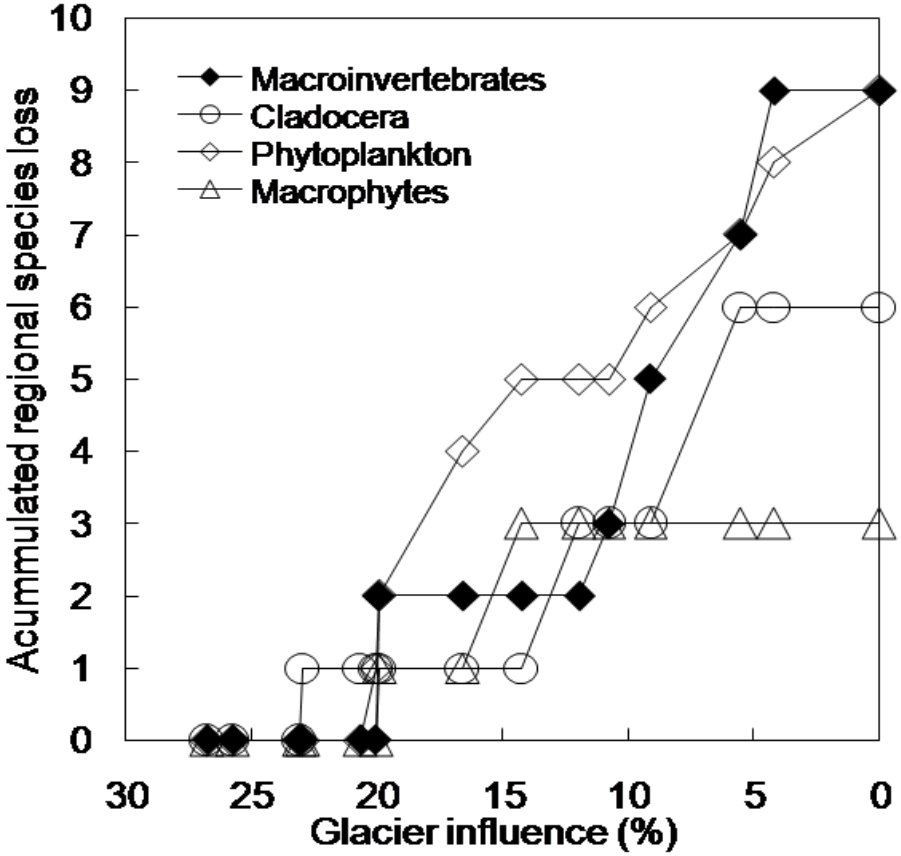
X^2=1.87,df=1,P=0.17^{NS}
AIC=433.34, BCI=442.30
CFI=0.98, SRMR=0.10

Results

2. β-diversity responds strongly to changes of glacier influence among peatlands

There were barely relationships between β-diversity and glacier influence

3. γ-diversity decreases with decreases in glacier influence, due to the loss of adapted species.



27 taxa
12.9% of the total number of species