

## FRESHWATER CILIATES IN THE IBERÁ WETLANDS (ARGENTINA): ECOLOGICAL IMPORTANCE AND DIVERSITY PATTERNS

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### INTRODUCTION & AIM

**Ciliates** are fundamental and diverse components of freshwater ecosystems. Despite their ecological importance, freshwater ciliates have been understudied in **Argentina**.

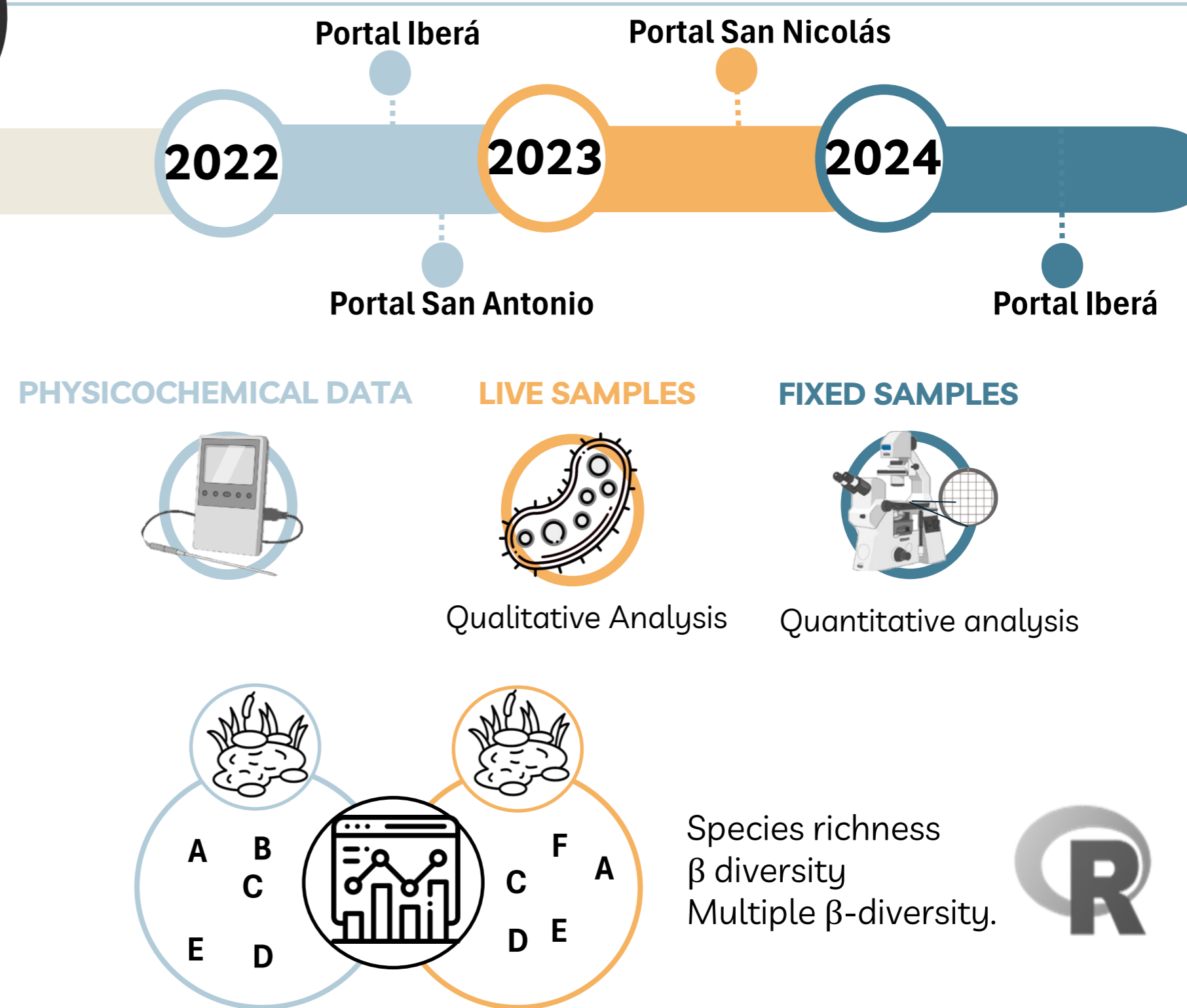


Our investigation was conducted in **Iberá** (Corrientes, Argentina), one of the **most significant subtropical wetlands** characterized by its vast extension and unique biodiversity.

#### AIM

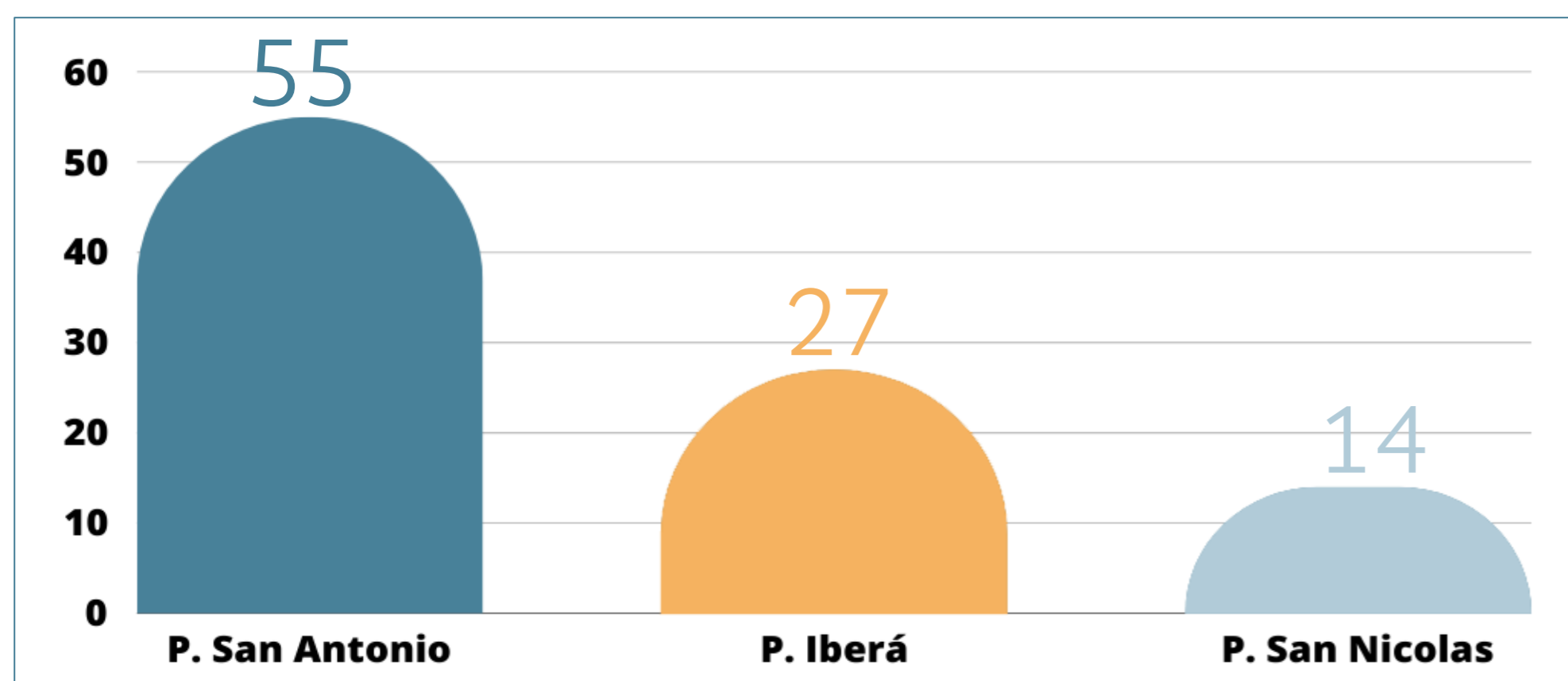
Study the diversity of planktonic ciliates (Protista) in the Iberá System.

### METHOD



### RESULTS & DISCUSSION

**69** Ciliate taxa new to Iberá



Species richness recorded in each of the Portals (Corrientes, Argentina). March 2022 to March 2024.

This demonstrates notable variability in species richness between different sites, suggesting **habitat heterogeneity**.

**βdiversity**  
Based on the Sørensen index

**65%**

This indicates that each portal has a **unique and distinct species composition**, highlighting a high degree of differentiation among the ciliate communities in the various Iberá portals

**Multiple β diversity**

**βSIM >50%**

Main contributor to β diversity was species turnover

### CONCLUSION

✦ The high beta diversity and the predominance of species turnover highlight the importance of conserving multiple sites within the Iberá region to preserve the total diversity of planktonic communities, such as ciliates.

✦ Each portal contributes a unique species composition, significantly contributing to regional biodiversity, thus emphasizing the uniqueness of planktonic ciliate communities in the Iberá region.

### FUTURE WORK

✦ Ongoing research focuses on expanding our understanding of planktonic ciliate communities in aquatic systems subject to varying degrees of anthropogenic impact, with an emphasis on their role as bioindicators. This work aims to generate valuable information for the preservation of wetlands.

✦ Comprehensive analyses of the seasonal and temporal dynamics will enhance our understanding of how environmental and human-induced fluctuations influence ecosystem biodiversity, providing a solid foundation for the development of conservation strategies and environmental monitoring programs.