

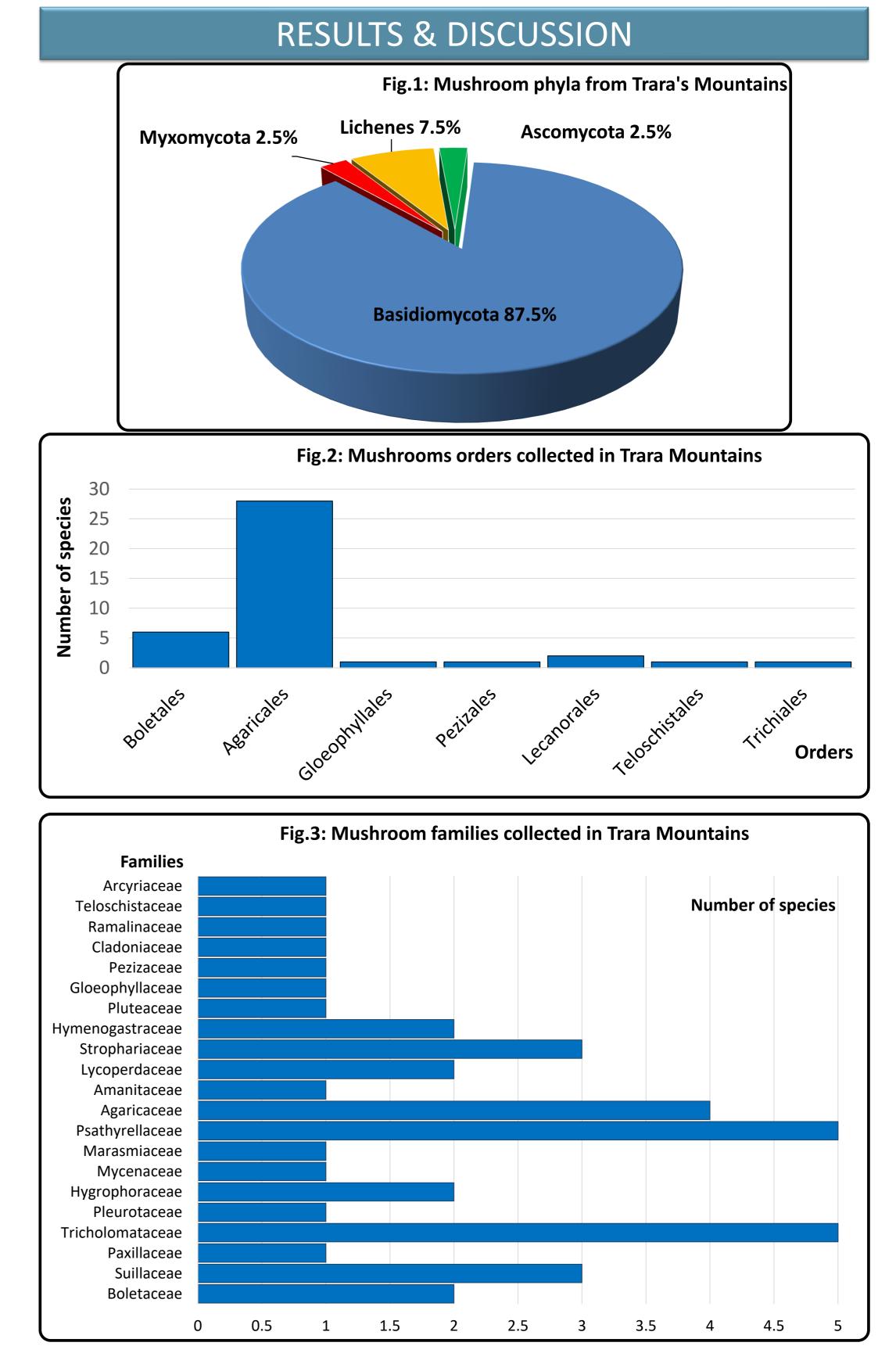
The 3rd International Electronic Conference on Diversity

15-17 October 2024 | Online

Mushrooms biodiversity inventories of the Trara Mountains in northwest Algeria Mimoune SOUNA ^{1,*}, Tarik Mohammed Chaouche ¹, Choukri TEFIANI ¹, Rachid Azzi ¹, Salim Habi ¹ 1 Faculty of Natural and Life Sciences, Earth and Universe Sciences, University of Abou Bekr Belkaïd, Tlemcen 13000, Algeria. * Correspondence: <u>mimoun.souna@univ-tlemcen.dz</u>

INTRODUCTION & AIM

Biodiversity, usually defined as the variety of life in its various forms, covers the array of genes, species and ecosystems that exist on earth, together with their supporting natural processes. This notion is important to understand, and even more so to inventory and document. Wild mushrooms are a valuable source of natural non-timber forest products, as well as a promising source of bioactive biomolecules with ecological utility in the proper functioning of ecosystems. The aim of this work is to acquire a knowledge base on the diversity of mushrooms in their natural biotopes, to understand their ecology and identification, in order to make a contribution to their inventory in the study area. The Trara massif is a coastal mountains range in the western extension of the Tellian Atlas, located on the north-western coast of Algeria. The massif's vegetation consists mainly of pines and cypresses. The Mediterranean climate is characterized by seasonal rainfall and a dry period. Few data are available on macromycetes in Algeria, in this context we thought it would be useful to carry out a preliminary inventory of higher fungi in this region.



METHOD

The mycological surveys were carried out from 2021 to 2023. Recognition of harvested macromycetes was based on a series of apparent macroscopic characteristics and microscopic observation in the fresh state or with Lugol's and Melzer's reagents, and measurement of spores and fungal structures. Macro-chemical reactions of the various parts can also be useful. The nomenclature adopted in this research is that of the Index Fungorum.

RESULTS & DISCUSSION

Fig. 1 shows the distribution of fungal flora according to the mycological phyla identified in the present study. 35 species

belong to the phylum Basidiomycota with a proportion of (87.5%) and one species (2.5%) to Ascomycota. As an indication, 03 species of lichens and one species of Myxogastrea (a taxonomic class of the phylum Amoebozoa) were observed. The Basidiomycota phylum is the most species-diverse, with 3 orders (**Fig. 2**). The order with the richest collection of species is the Agaricales, containing 28 species (**Fig. 2**).

This study revealed 36 species divided into 04 orders, divided into 26 genera belonging to 17 families (**Fig, 3**): Boletaceae, Suillaceae, Paxillaceae, Tricholomataceae, Pleurotaceae, Hygrophoraceae, Mycenaceae, Marasmiaceae, Psathyrellaceae, Agaricaceae, Amanitaceae, Lycoperdaceae, Strophariaceae, Hymenogastraceae, Pluteaceae, Gloeophyllaceae and Pezizaceae.

CONCLUSION

Access to trustworthy information on the state, and location of ecological communities makes biodiversity conservation and sustainable management in forested landscapes much easier.

FUTURE WORK / REFERENCES

Allen, J. L., & Lendemer, J. C. (2021). Urban lichens: a field guide for northeastern North America. Yale University Press.

Burgaz, A. R., Ahti, T., & Pino-Bodas, R. (2020). Mediterranean Cladoniaceae. Spanish Lichen Society.

Eyssartier, G., & Roux, P. (2017). Le guide des champignons France et Europe 3100 espèces 1500 photos (4th ed.). Belin.

Redeuilh, G., Eyssartier, G., Masson-Deblaize, I., & Joly, P. (2015). Larousse des champignons 400espèces de France et d'Europe.

IECD2024.sciforum.net