

DISTRIBUTION OF FRESHWATER OSTRACODA (CRUSTACEA) COLLECTED FROM WELLS OF BENIN: A PRELIMINARY STUDY



Joseph Sourou HOTEKPO^{1,2,3}, Moïssou LAGNIKA³, Moudachirou IBIKOUNLE³, Patrick MARTIN⁴, Koen MARTENS^{1,5}, Isa SCHÖN^{1,2}

¹ Royal Belgian Institute of Natural Sciences, Natural Environments, Brussels, Belgium. ² University of Hasselt, Research group CMK, Diepenbeek, Belgium. ³ University of Abomey-Calavi, Tropical Infectious Diseases Research Center, Benin. 4 Royal Belgian Institute of Natural Sciences, Taxonomy and Phylogeny, Brussels, Belgium. 5Ghent University, Dept Biology, Gent, Belgium.

CONTEXT

Ostracods are small bivalved crustaceans that abound in almost all water bodies, marine and non-marine, surface waters both permanent and temporary and groundwater. They can be used as environmental tracers in several research domains through their response to different environmental conditions and anthropogenic impacts.

OBJECTIVE

To study the distribution of freshwater ostracods from wells across the catchment areas of Benin.

MATERIAL AND METHODS

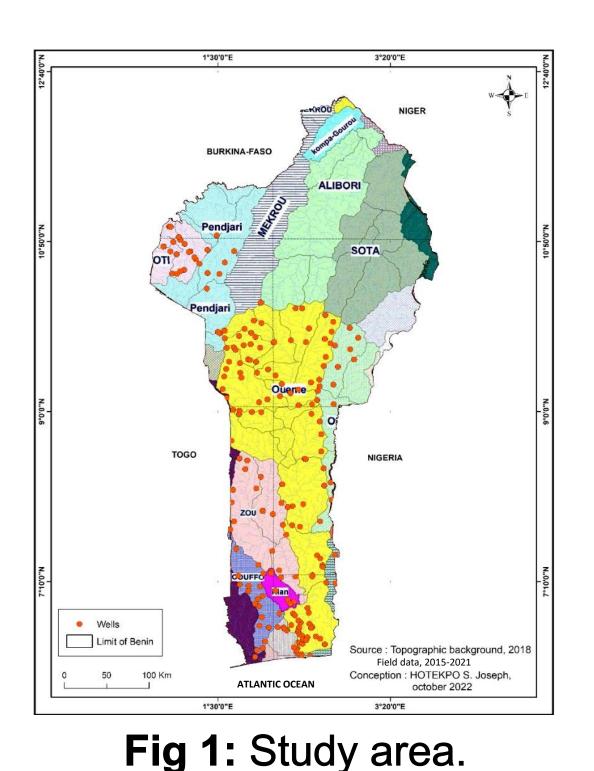




Fig 2: Sampling and conservation.

Fig 3: Laboratory treatment.

RESULTS AND DISCUSSION

- \checkmark Ostracod species are represented by two families: the Cyprididae (70%) and the Candonidae (11%).
- ✓ With about fifteen species, Cyprididae belong to several biogeographic categories: circumtropical, afrotropical and endemic to West Africa and represent all surface dwelling and mostly well-described taxa.

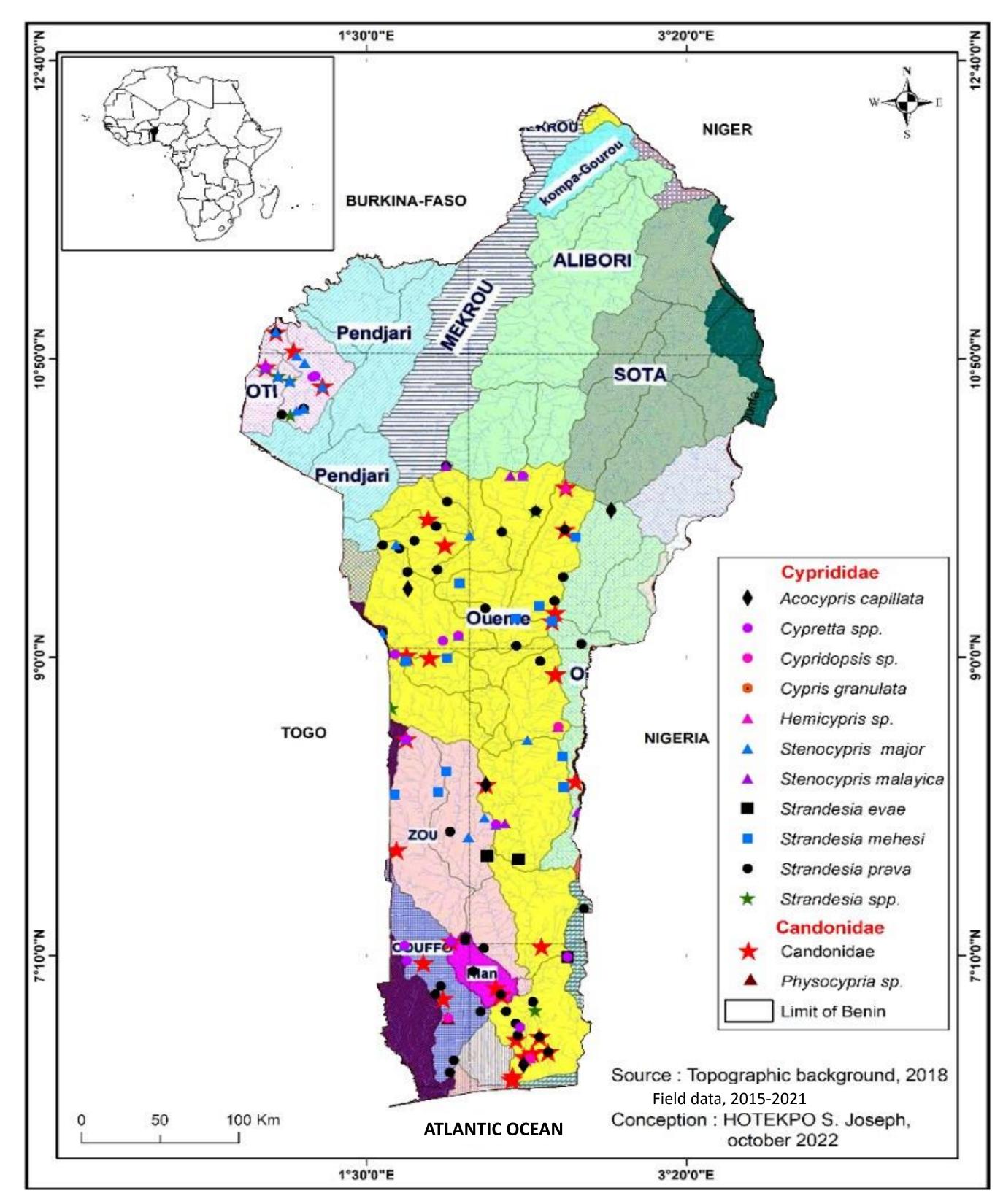


Fig 5: Distribution of Cyprididae and Candonidae across the catchment areas of Benin.

✓ Candonidae represented by more than twenty-five potentially new species excepted the genus *Physocypria*. This reveals an exceptional diversity with a very high rate of endemism: each well harbors its own species and some wells contain up to three distinct species.

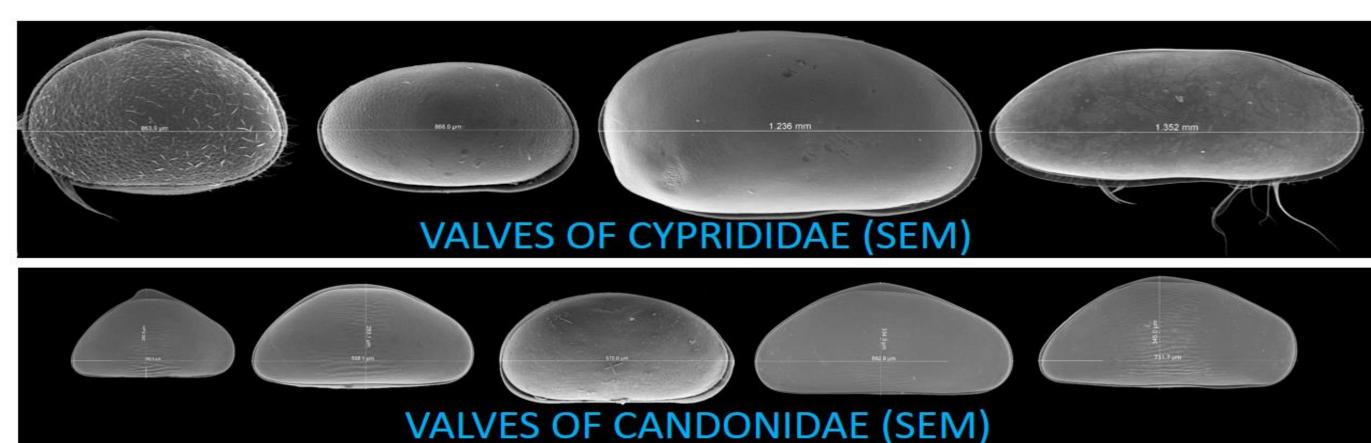


Fig 4: Some species selected from the two ostracodes families

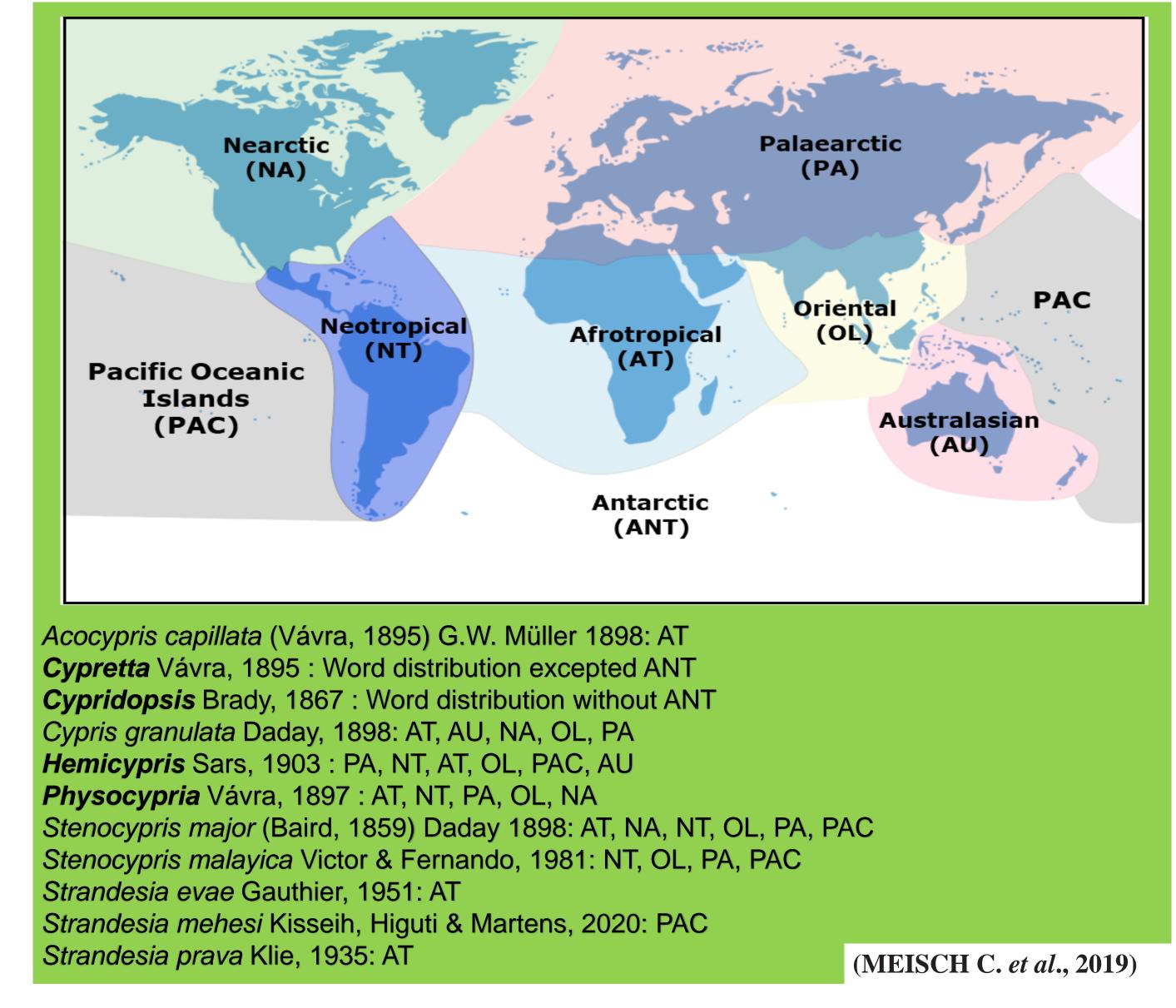


Fig 6: Global distribution of genus and species of ostracods collected from wells in Benin.

CONCLUSION AND PERSPECTIVE

This is the first time such a vast radiation of subterranean ostracods is reported from West Africa. Here is a preliminary study that will allow to establish the relationship between local diversity of ostracods and their distribution.

Acknowledgements



















