

# Reconnoitring Annual Landings and Biochemical Profiling of Deep-Sea Driftfishes (*Cubiceps*: Nomeidae): A Promising Food Source

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## Introduction

- The deep-sea ecosystem is the **largest habitat** on the earth's surface and is a **major reservoir** of global biodiversity.
- The deep-sea fishery is majorly focuses on edible and commercially important **deep-sea shrimp resources**.
- Only a few of the deep-sea fin fishes are presently commercially important and are mostly used for producing **fish meal and manure**.
- The rising demand and declining conventional fishery practices have brought deep-sea finfish into focus as a promising new protein source.
- Cubiceps whiteleggii* (Waite, 1894) and *Cubiceps baxteri* McCulloch, 1923 included under the family Nomeidae (Driftfishes) is gaining recent importance in the commercial markets.

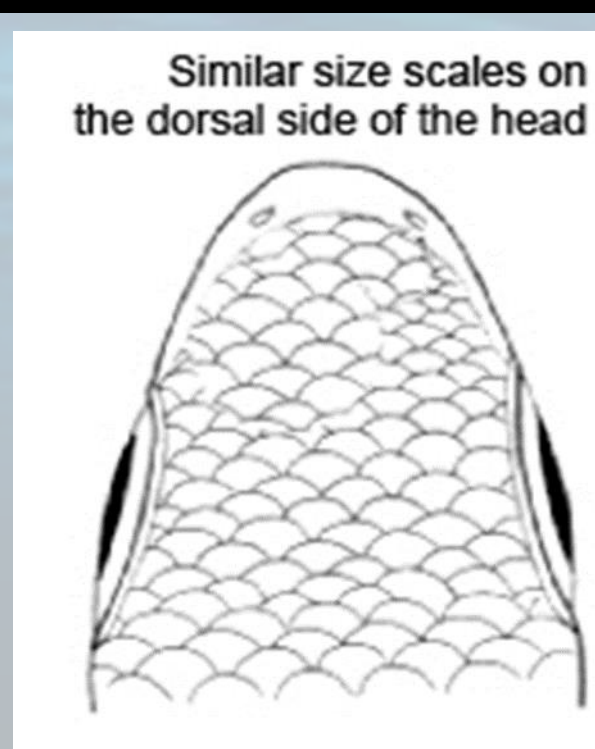


Fig 1: *Cubiceps baxteri* (Black fathead)

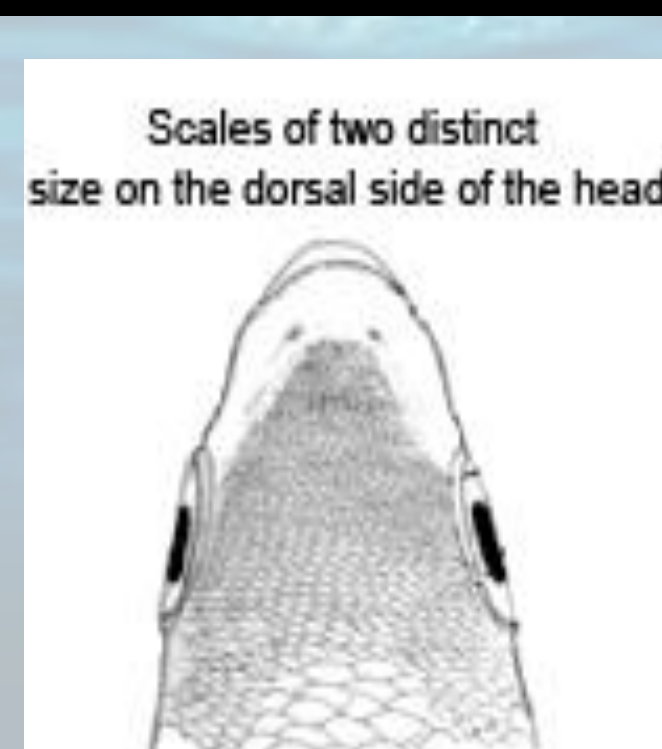
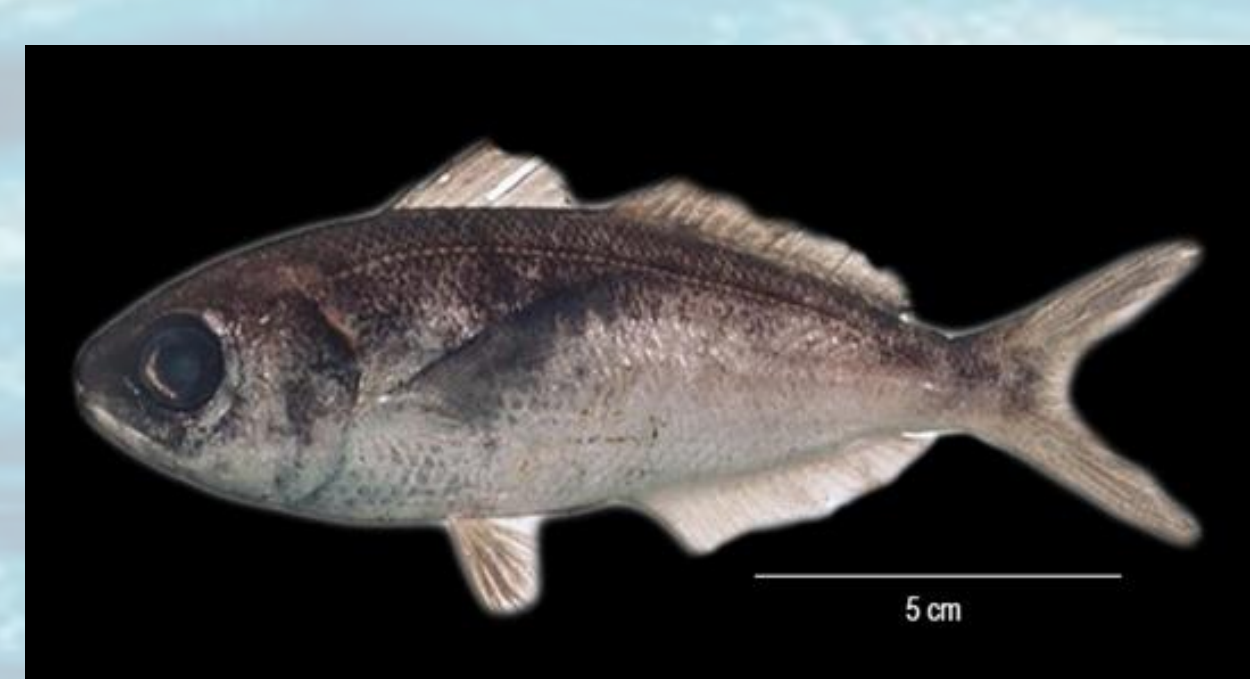
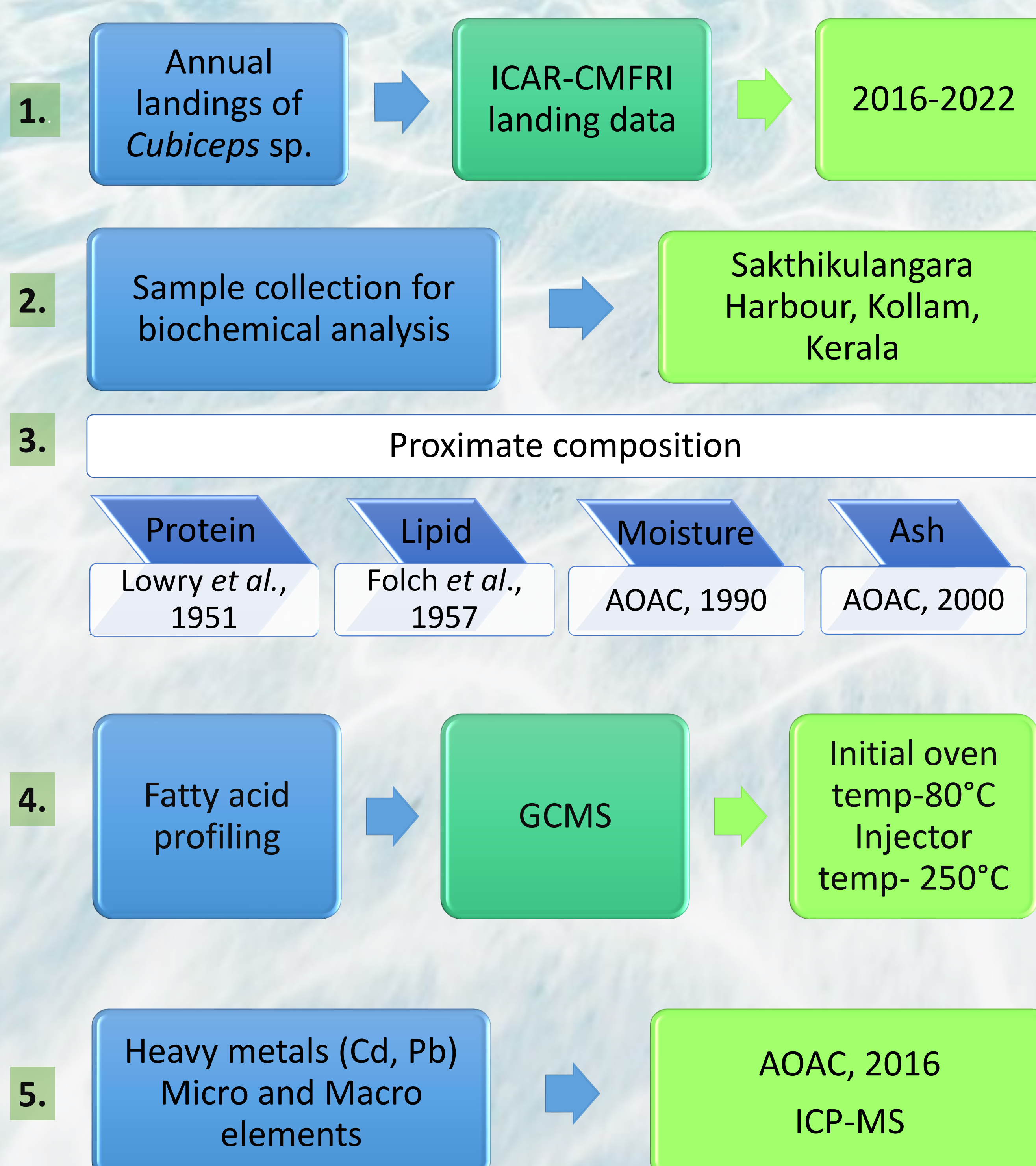


Fig 2: *Cubiceps whiteleggii* (Shadow driftfish)

## Objectives of the study

- To evaluate the spatio-temporal landings of *Cubiceps* species in the commercial landing centers of India.
- To estimate the biochemical profiling of two common Nomeidae species, *C. whiteleggii* and *C. baxteri*.

## Materials and methods



## Results and Discussion

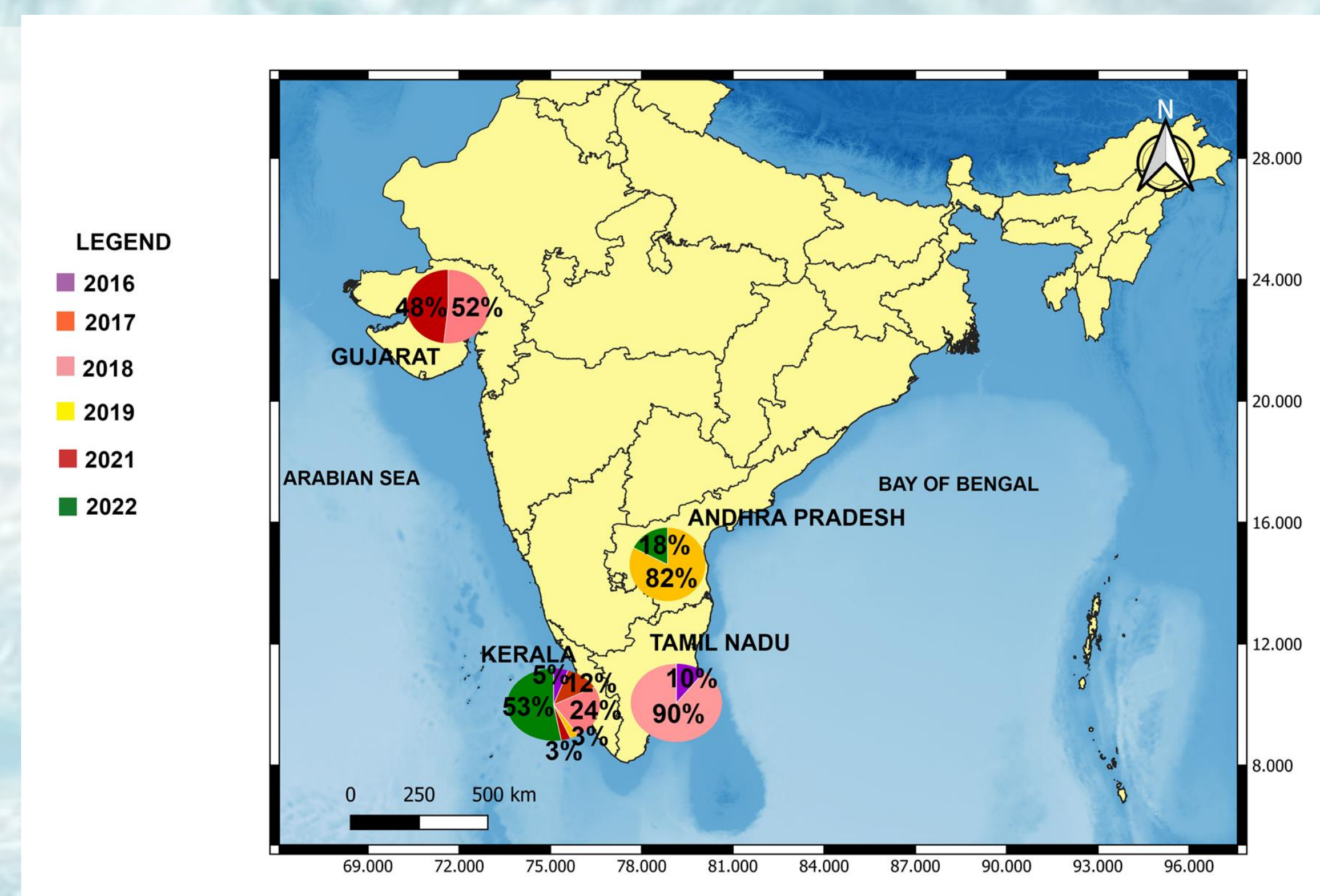


Fig.2: Spatio-temporal landings of *Cubiceps* sp.

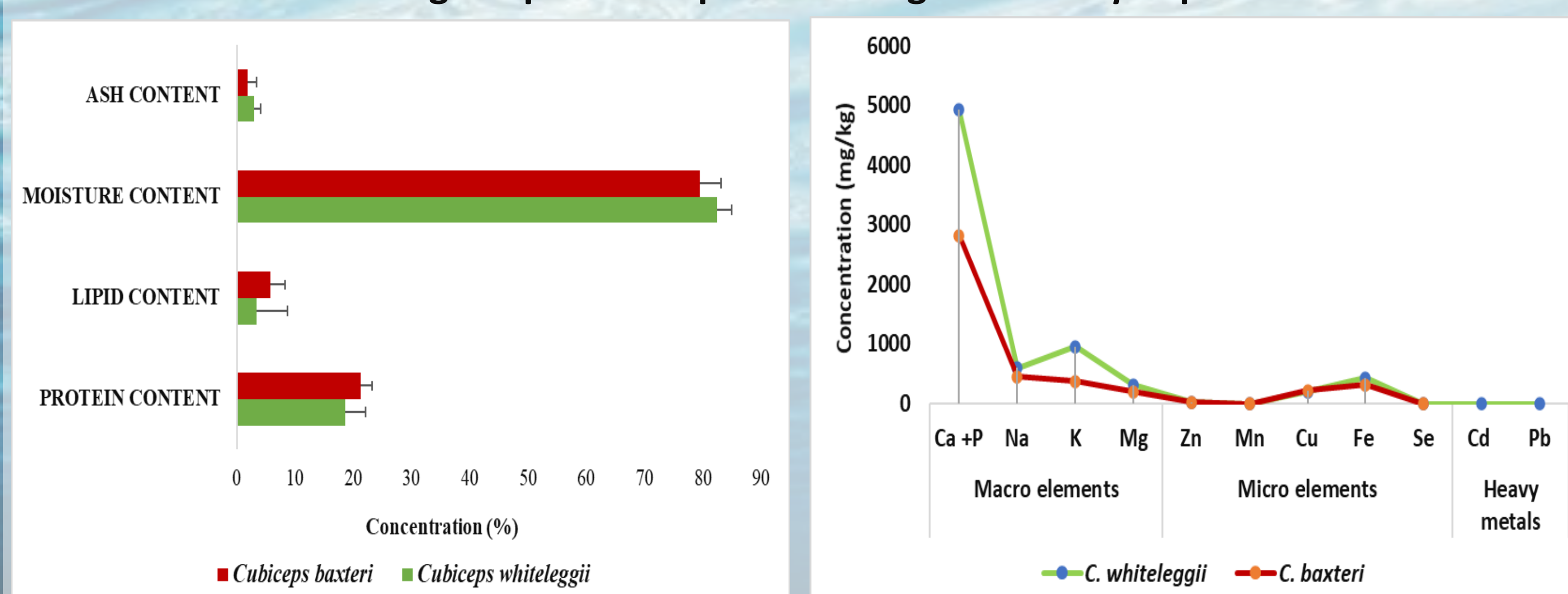


Fig.3: (a) Proximate composition and (b) Concentration of minerals and heavy metals in *Cubiceps* sp.

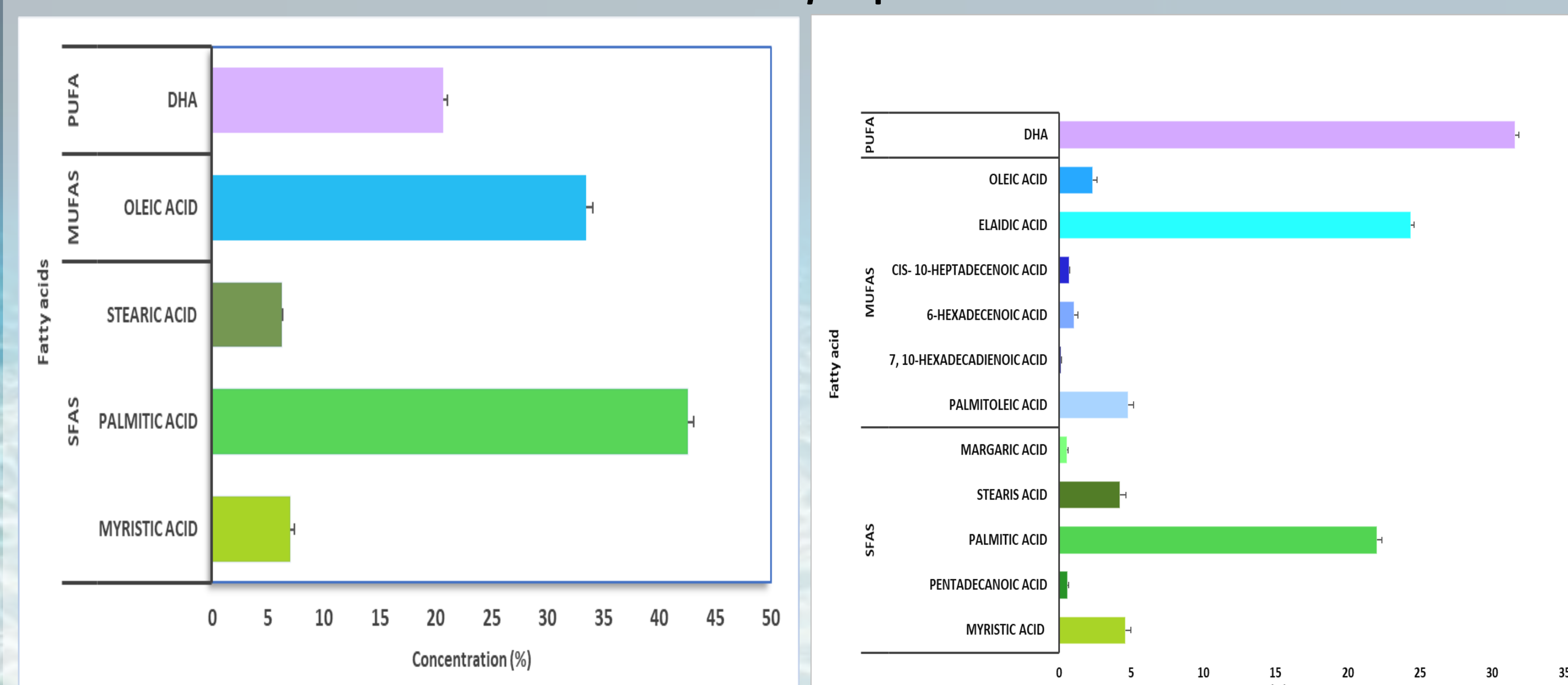


Fig.4: Fatty acid profiling of (a) *C. whiteleggii* (b) *C. baxteri*

- Highest concentration of **DHA** (C22:6n3), **Ca+P** and **Fe** also indicate the remarkable nutritive values of these species.
- Heavy metals (Pb, Cd) of these two species representing a **below permissible** concentrations prescribed by FSSAI (2011) and EU standards (2008).

## Conclusion

- The present observation revealed that the deep water origin fish could serve as efficient food sources.
- The above two species are a promising candidate in eliminate the complications of malnutrition and also can be included in the diet of Osteoporosis and Anaemic patients.
- To ensure a sustainable future for *Cubiceps* fisheries, meticulous studies in biology and fishery potential are crucial.

## References

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