

## Taxonomic paleodiversity of the Marizal Formation (Aptian), Tucano Basin (NE Brazil)

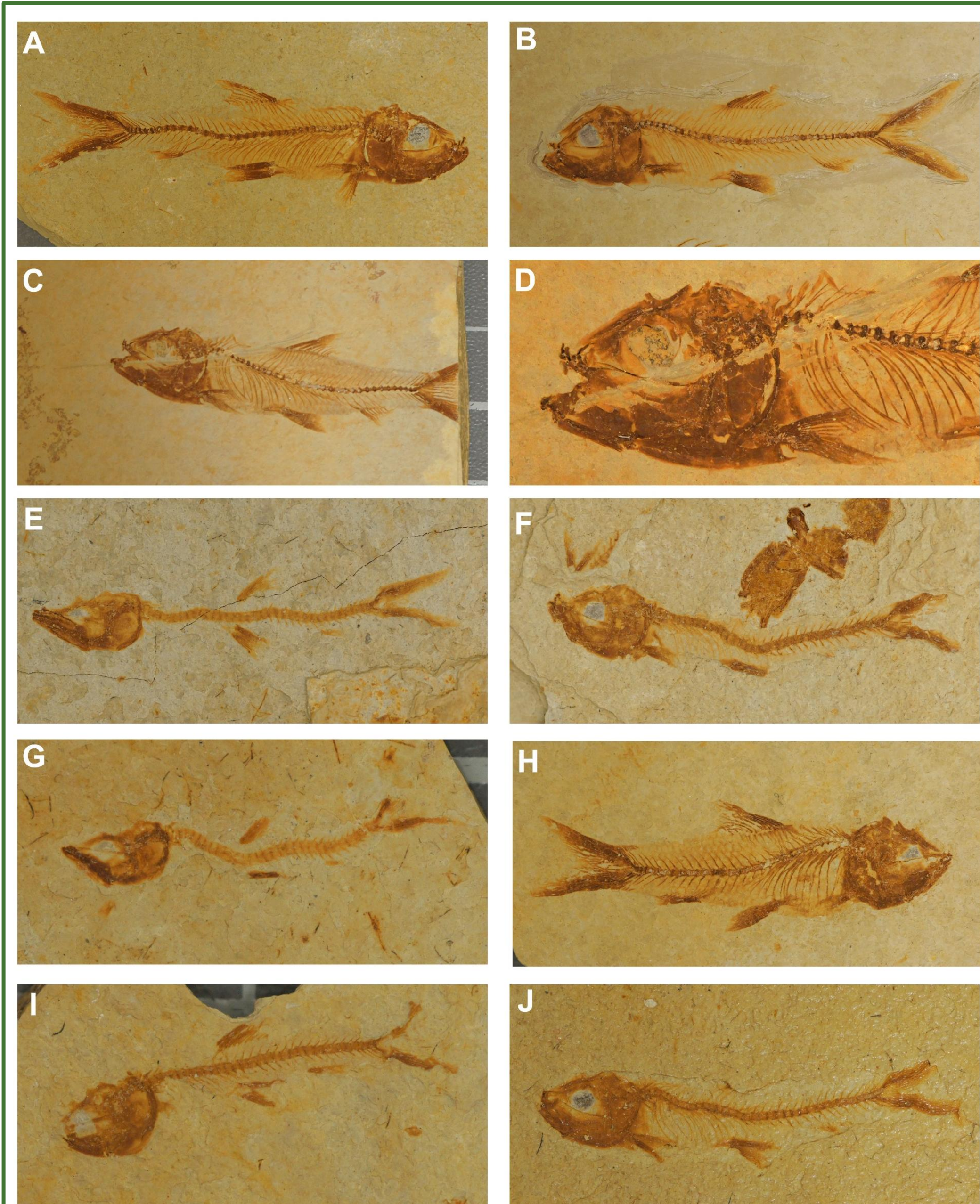
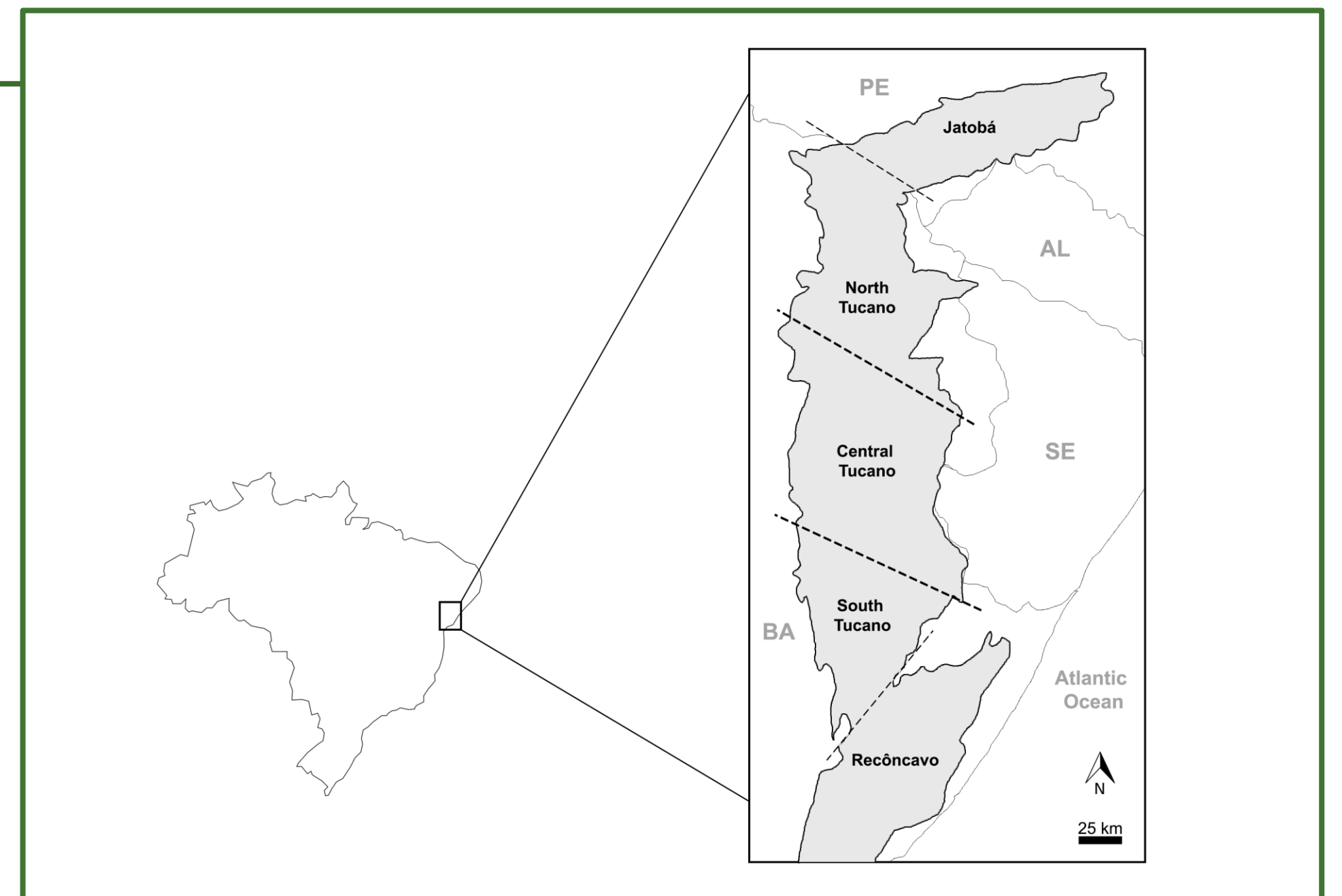
Ingrid M. VEIGA, Paulo M. BRITO

Department of Ecology, Rio de Janeiro State University, Rio de Janeiro 20550-900, Brazil

Department of Zoology, Rio de Janeiro State University, Rio de Janeiro 20550-900, Brazil

### INTRODUCTION & AIM

The **Amargosa Bed** is a fossiliferous stratigraphic marker within the Marizal Formation, cropping out throughout the Tucano Basin in **Northeastern Brazil**. The fossil record of this unit was first reported during the 1650's and 1960's and is currently comprised by remains of dinocysts, pollen, plants, invertebrates, and vertebrates, as well as ichnofossils. In light of **continued excavation work**, several new remains (35 scale impressions and approximately 200 articulated fish remains) have been retrieved and are currently being studied in order to assess their **taxonomic identity and significance**.



A, UERJ-PMB 290. B: UERJ-PMB 302. C-D, UERJ-PMB 314, E, UERJ-PMB 166. F, UERJ-PMB 188, G, UERJ-PMB 235. H, UERJ-PMB 157. I, UERJ-PMB UERJ-PMB 171. J, UERJ-PMB 195.

### RESULTS & DISCUSSION

So far, morphological approaches have shown the existence of **three scale morphotypes** unlike those present in the previously described fish taxa – which were reevaluated and redescribed in detail (Veiga & Brito, 2025). In the same sense, the **articulated remains**, still under study, can be assigned to at least **four morphotypes** with distinct proportions and morphological characteristics that hint at possible new taxa for the Amargosa Bed.

### CONCLUSION

These new findings, although still **preliminary**, highlight the **biological paleodiversity** of the unit – which likely comprises a higher number of taxa and ecological actors than previously thought.

### REFERENCES / FOUNDING

