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BIODIVERSITY KNOWLEDGE GAPS IN THE STATE OF ALAGOAS

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Despite there is a great biodiversity on the planet, there are many gaps regarding to the knowledge of species distribution. This aspect is related mainly to the sampling effort, what means that, while some areas are well sampled, others are poorly sampled. Thus, our study aimed to explore biodiversity in the state of Alagoas, mapping existing knowledge gaps, in order to understand if areas with the greatest collecting effort are those with the highest species richness. First, we developed a database with geographic distribution information of the species, taken from the online GBIF platform, and then performed a data cleaning, excluding biases, duplicates, coordinates that did not correspond to the real location and species with less than 10 unique records of distribution. We divided the study area quadrants of one quarter of a decimal degree, where we recorded the number of species and the number of collecting records for each grid (this step was performed in DIVA-GIS software); as the values of the record numbers presented great variation, we transformed them into log before analyzing. To verify our hypothesis, we used the software R to investigate the best regression data that would explain the data. The best model was exponential, which confirmed our hypothesis ($r^2=0,9$, $p<0,001$). When we compared the map of species richness in Alagoas with a map that contains the locations of consevation units in this state, we noticed a coincidence between the areas with the highest number of species and those with the least amount of records in the state have the potential to harbor large biodiversity, which demonstrates that the distribution knowledge gap may be strongly associated with collecting addiction.

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