



## **Consistent differences between tropical forest and savanna nitrogen cycling characteristics as inferred by leaf and soil $^{15}\text{N}/^{14}\text{N}$ ratios across three continents**

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The ratio of  $^{15}\text{N}/^{14}\text{N}$  can act as important indicator of ecosystem Nitrogen cycling and thus essential key ecosystem processes. Although evidence for general patterns accumulates across the globe, such as foliar  $\delta^{15}\text{N}$  decreasing with increasing mean annual precipitation and decreasing mean annual temperature, as well as forests generally having a more open Nitrogen cycle, a comprehensive understanding of the Nitrogen cycle in tropical ecosystems is still lacking.

We present data on foliar and soil  $\delta^{15}\text{N}$  from 62 permanent sampling plots in tropical zones of transition - area where forest and savanna coexists under similar macro climatic conditions - across South America, Africa and Australia.

After controlling for phylogeny and location, we show that  $\delta^{15}\text{N}$  relationships in tropical forests and Savannah are consistent irrespective of precipitation.