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## **Bantu expansion follows the Savannah Corridor through the Equatorial rainforest**

We present a phylogenetic classification of the Bantu languages based on new lexical data for 450 languages, using a novel Bayesian phylogenetic methods that allow for varying rates of lexical evolution. By applying a relaxed clock dating method we trace the Bantu expansion, finding the major migration routes and date estimates for all nodes. Our results imply a different major migration route than has been proposed in several recent studies.

The initial migration, starting from the Bantu homeland in the Mbam region (Cameroon), agrees with previous work. The model infers a main migration wave, beginning around 4500 BP, south towards Cameroon and Gabon and the rainforest. At around 2500 BP we find evidence for a big split of the Bantu people. This key aspect of the Bantu expansion occurs when the ancestors of the present day Western Bantu migrated south from Northern Congo through the rainforest following a newly opened savannah corridor. The other group, the ancestors of the present day Eastern Bantu, continued along the north and east edges of the rainforest and settled the Eastern and Southern Bantu areas.

Our results differ from recently published work by showing that Bantu expansion was influenced by the environmental and climatic conditions. Indeed, our results fit nicely with the current hypotheses about the climate-induced vegetation change that occurred 2500 years ago and which opened savannah “corridors” through the equatorial forest (Maley, 2001; Bostoen and al., 2013). The climatic conditions have facilitated the Bantu expansion and influenced the Bantu population movements.

Bostoen, K., Grollemund, R. & Koni Muluwa, J. 2013. Climate-induced vegetation dynamics and the Bantu Expansion: Evidence from Bantu names for pioneer trees (*Elaeis guineensis*, *Canarium schweinfurthii*, and *Musanga cecropioides*). *C. R. Geoscience*.

Maley, J. 2001. La destruction catastrophique des forêts d’Afrique centrale survenue il y a environ 2500 ans exerce encore une influence majeure sur la répartition actuelle des formations végétales. *Systematics and Geography of Plants* 71: 777-796.