**Unlocking lablab potential: New genomic resources to accelerate breeding.**

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Under-utilised orphan crops hold the key to diversified and climate-resilient food systems. However, lack of genomic and advanced breeding resources has made their improvement extremely slow leaving their potential largely untapped.

Here, we report on orphan crop genomics using the case of *Lablab purpureus* (lablab), a legume native to Africa and cultivated throughout the tropics for food and forage. An Africa-led plant genome collaboration produced a high-quality chromosome-scale assembly of the lablab genome and re-sequenced cultivated and wild lablab accessions. The assembly highlights lablab domestication, genomic organisation of important anti-nutritional factors, genetic and phenotypic diversity and genomic loci underlying variation of important agronomic traits.

The generated genomic data provide a valuable resource for lablab improvement. Our inclusive collaborative approach also presents an example that can be explored by other researchers sequencing indigenous crops, particularly from low and middle-income countries (LMIC).

***References:***

[1] Njaci et al., 2023, Nat Commun, 14, 1915