**Faba bean: From orphan crop to genomic trailblazer**

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Faba bean (*Vicia faba*) is a globally adapted protein crop with a high yield potential and an exceptional nitrogen fixation capacity. Just a decade ago, faba bean was an orphan crop with scarce genetic and genomic resources. However, the development of the first reference genomes [1-2] has paved the way for high-resolution gene mapping and molecular genetics. I will illustrate how this new genomic information is enabling us identify markers and candidate genes robustly associated with agronomic traits across populations. I will also share our emerging understanding of the genetics that control genotype by environment interactions for yield, and how this is allowing us to predict the performance of specific genotypes in unseen environments. Lastly, I will discuss the ongoing efforts to further enhance faba bean genetic and genomic resources.

***References:***

[1] Jayakodi, M. et al. The giant diploid faba genome unlocks variation in a global protein crop. Nature **615**, 652–659 (2023).

[2] <https://projects.au.dk/fabagenome>