

Breaking boundaries in sorghum value chains: the impact of Europe-Africa collaborations and future prospects

David Pot (david.pot@cirad.fr)

GIV / AGAP / BIOS, Cirad, Montpellier, France

Sorghum is a staple crop in semi-arid regions and its interest for diversifying the crop portfolio in Europe is increasing. While recognizing the regional differences in cropping practices, environmental conditions, and socio-economic contexts, both semi-arid and European regions face common challenges such as climate change adaptation and mitigation, development of new products and uses, and management of emerging biotic constraints. Collaborative efforts between European and African teams have played a crucial role in addressing these challenges.

This presentation will highlight various past and present collaborative actions between Africa and Europe across different scientific disciplines. These actions encompass the analysis of sorghum genetic diversity, developments of pre-breeding populations and phenotyping tools for breeding programs, multi-scale analyses of trait development for value chains stakeholders, and integrated approaches combining agronomy, ecophysiology, genetics, and breeding to support the development of customized crop production systems.

In addition to showcasing existing and ongoing collaborations between Europe and Africa, this presentation will aim to emphasize the need for a collaborative European-African framework that aligns with global actors in response to the rapidly evolving climatic and socio-economic conditions worldwide. Although significant progress has been made in knowledge and data sharing, further synergistic actions are necessary to foster innovation and facilitate their adaptations to diverse contexts. Establishing stronger connections within the sorghum research community and forging links with other plant communities, including cereals and beyond, would for instance greatly enhance sorghum research efficiency and impacts.