Nitrosorg : a research program dedicated to develop tools for improving grain quality (protein content and digestibility) and adapted to poultry feeding

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One of the objectives of this project is to develop high-throughput characterization tools for the protein content and digestibility, but also starch and tannin content and endosperm texture that can affect this digestibility. The consortium will mobilize these tools to characterize the current European varietal offer, a panel representing the worldwide diversity, and the parental lines of the partner's breeding programs. Finally, we will carry, on a smaller panel of genotypes, an analysis of kafirin composition, and an exhaustive analysis of *in vitro* and *in vivo* protein digestibility (as part of poultry feeding).
These analyses should allow us to assess the relevance of the high-throughput screening tools developed and will lead to the definition of the target ideotypes for poultry feeding. In the long term, these results will contribute to the development of grain sorghum varieties with a better protein content and digestibility, and therefore an improved nutritional value.

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