V-NanoDay, April 8-10, 2026 - Poster Session: "Nanomaterials and biofertilizers in agriculture"

Agronomic innovations in the cultivation of grain sorghum for the resilience of cropping systems

Giovanni Caccialupi[1,*], Federica Caradonia[1], Justyna Milc[1], Leonardo Cicala[1], Alessandro Zatta[2], Roberto Davolio[2], Fabrizio Ruozzi[2], Barbara Prandi[3], Giovanna Visioli[3], Gianluigi Giannelli[3], Mariolina Gullì[3], Lorenzo Stagnati[4,5], Emanuele Livetti[4,5], Matteo Busconi[4,5] and Enrico Francia[1]

[1] *Department of Life Sciences, University of Modena and Reggio Emilia, Via Amendola 2, Pad. Besta, 42122 Reggio Emilia, Italy*

[2] *C.R.P.A. Centro Ricerche Produzioni Animali S.c.p.A., V.le Timavo 43/2 42121 Reggio Emilia, Italy.*

[3] *Centre SITEIA.PARMA, University of Parma, 43124 Parma, Italy*

[4] *Dipartimento delle Scienze delle Produzioni Vegetali Sostenibili, DI.PRO.VE.S, Università Cattolica del Sacro Cuore, Piacenza, Italy*

[5] *Centro di Ricerca sulla Biodiversità e sul DNA antico (BioDNA), Università Cattolica del Sacro Cuore, Piacenza, Italy*

[*] *Corresponding author: giovanni.caccialupi@unimore.it*

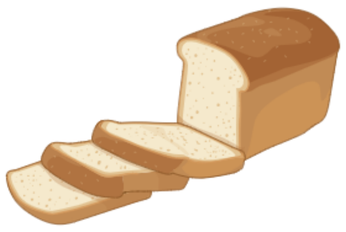
RISORGO Aims

Genetics

Characterization of 96 white sorghum accessions and seed multiplication for farmers

Agronomy

Three years of multi-location trials and biostimulant application under rainfed conditions



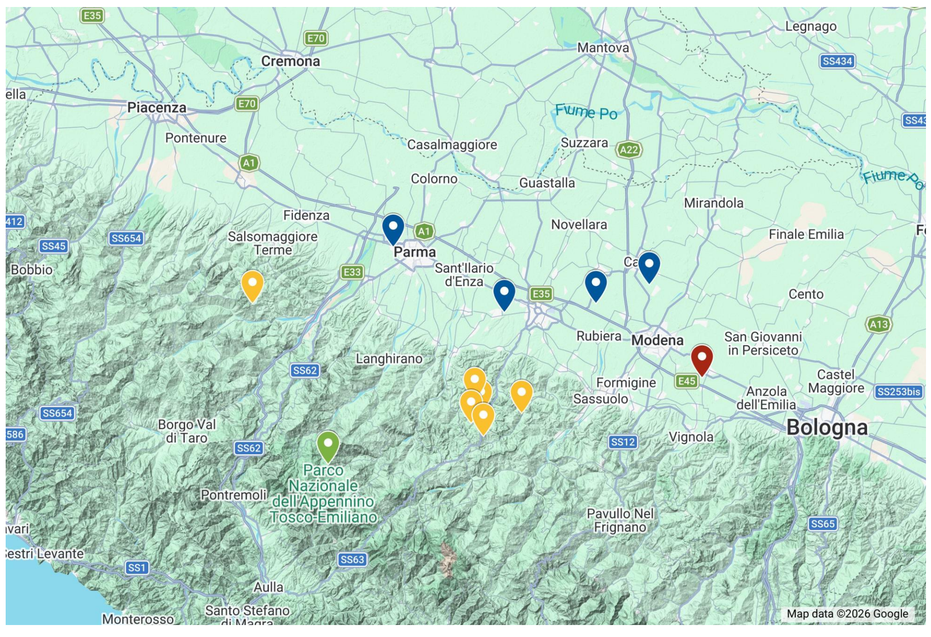
Food

Quality characterization for a novel and sustainable product

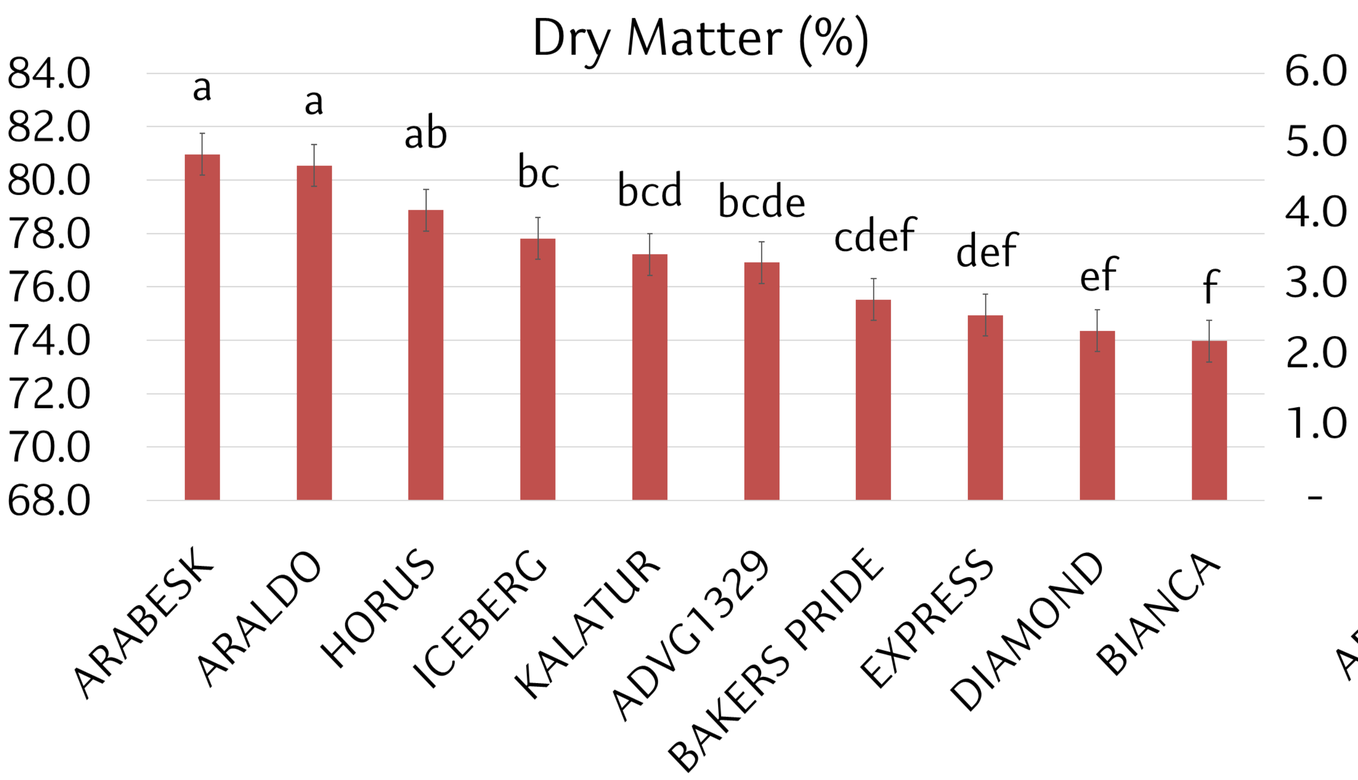
First Year

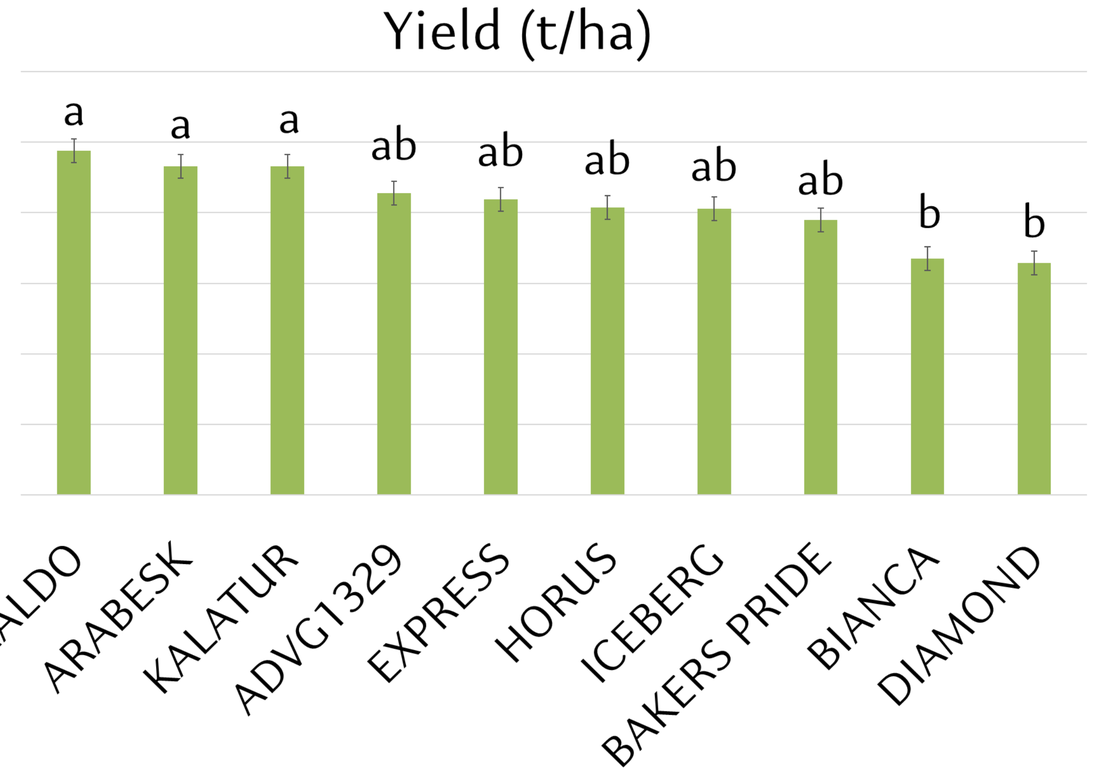
Three agronomic trials:

- **Agronomic Trial** of 10 hybrids at Beccastecca Farm (**red**)
- **PGPR Trial** 5 hybrids tested with the application of PGPR when plants reached the 4-leaf stage at Beccastecca Farm (**red**)
- **Adaptation Trial** 2 hybrids were selected for the multi-location trial (**blue**, **yellow** and **green**)



Agronomic Trial Results





Bars represent mean values ± standard deviation (SD). Different letters indicate statistically significant differences among hybrids according to one-way ANOVA followed by Duncan's multiple range test ($p < 0.05$).

Results

Agronomic and Adaptation Trials → Early maturity was the key factor for successful harvest

PGPR Trial → No treatment effect was observed, likely because unfavorable weather conditions after application masked the response

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