ARICA: Advanced rice varieties for Africa

Arica rice, the high yield, disease and stress tolerant rice

ARICA hybrid rice lines offer high yields and resistance to diseases and environmental stresses. Developed through advanced breeding methods, they must surpass benchmarks in yield and grain quality over three seasons. Field tests show ARICA 1, 2, and 3 outperform NERICA-L 19, boosting rice production and food security in Africa.

Africa Rice Center
Sali Atanga Ndindeng

This technology is TAAT1 validated.

7·7 Scaling readiness: idea maturity 7/9; level of use7/9

Project adoption 11

Technology integrated in the 2PAU, BRIDEP, EFPP, ENSURE, ERAVCDP, ESFSP, PADCV-PTA, PUPSAN, RVCTP, SAPZ-II, and SEPAREF projects.

Inclusion assessment 4

Climate impact 7

Problem

- Traditional rice varieties in Africa yield inadequately.
- Common rice diseases and pests diminish yields and threaten food security.
- Environmental variability poses significant challenges, affecting crop growth and productivity.
- Traditional rice varieties struggle to adapt to diverse agroecosystems, resulting in suboptimal performance.

Solution

- ARICA varieties offer increased productivity and profitability.
- ARICA lines resist common rice diseases and pests, ensuring stable yields.
- ARICA hybrids withstand environmental stresses, ensuring consistent yields.
- ARICA varieties thrive in diverse agroecosystems, providing flexibility to farmers.
- Some ARICA lines possess traits like drought resistance and iron toxicity tolerance, addressing specific challenges.

Key points to design your project

- Steps to integrate ARICA technology:
  - Develop and certify tailored ARICA varieties.
  - Raise farmer awareness about benefits.
  - Facilitate financial support for seed purchases.
  - Provide training on cultivation and management.
- Accompanying solutions:
  - Deep urea placement for nitrogen management.
  - Foliar micronutrient addition for crop nutrition.
  - Engineered irrigation surfacing and water lifting.
  - Motorized weeders for effective weed control.
  - RiceAdvice digital support for comprehensive guidance.

356 USD
Planting, maintenance, harvesting and winnowing

50 - 111 %
Potential yield

IP
Open source / open access

Technology from

ProPAS

Commodities

Rice

Sustainable Development Goals

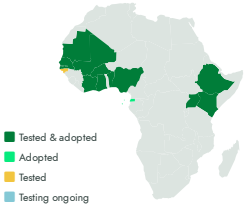
Categories

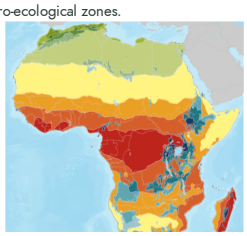
Production, Improved varieties, Yield improvement, Quality improvement

Best used with

Nitrogen management for Efficient Rice Fertilization, Foliar micronutrient addition for healthier rice, Precision Rice Irrigation and Surface Leveling, Motorized weeders f...
See all 5 technologies online

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.