

variety AR051H and this variety was named ISRIZ-9 in Senegal. This variety is aromatic and has a high yield potential (10 to 13 t/ha) and very good organoleptic qualities. AfricaRice currently has a wide range of hybrid lines that adapt to African conditions with short, medium and long cycles according to needs.

Major characteristics of AR051H (ISRIZ-9)

- Ecology: Irrigated
- Cycle: 110 days in rainy season; 130 days in off-season
- Potential yield: 13 t/ha
- Taste: Good, Aromatic

Hybrid varieties: Opportunities for increasing farmers' income, rural employment and seed companies

The specialized work required for the multiplication and production of seed of hybrid rice varieties, creates rural employment and generates additional income for farmers and seed producers.

Because of its high yield advantages, hybrid rice technology is very important for food security in rice-consuming countries and promotion of private sector enterprises based on hybrid rice seed.



**Hybrid rice:
A new opportunity for Africa**



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Technologies for African Agricultural Transformation



Description of hybrid rice

The use of hybrid varieties is one of the best solutions to increase rice production in Africa. For large-scale production, hybrid rice technology gives a yield advantage of 15 to 20 percent, or more than one ton of paddy per hectare compared to the best selected varieties.

The success of hybrid rice production for the market has enabled China to diversify its agricultural production over millions of hectares of land.

In Africa, average rice yields are estimated at 2 t/ha, which are among the lowest in the world. Yet Egypt has one of the highest yields in the world at around 10 t/ha. Rice yields in Egypt are high thanks to the use of hybrid and conventional rice varieties with high yield potential. In Africa, Egypt is the only country to have developed and popularized hybrid rice varieties with yields of 12-14 t/ha.

Development of hybrids at AfricaRice

In 2010, the Africa Rice Center (AfricaRice) started the hybrid rice research program, for which the basic material, male sterile lines and maintainer lines came from the International Rice Research Institute (IRRI) as part of AfricaRice-IRRI collaboration.

Hybrid lines created from African material are better adapted to African growing conditions and are resistant to biotic and abiotic stresses by giving good yields and good cooking quality.

Results of PVS trials

Between 2014 and 2016, in collaboration with the Senegalese Institute of Agricultural Research (ISRA) and the Senegalese release services, four hybrid lines were identified for Participatory Varietal Selection Trials (PVS) at three sites in the country, namely Ndiaye, Fanaye and Dagana.

The results of the trials made it possible to release the hybrid