2. Study of variations of the rice variety NERICA 2

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Rice is an important food crop in West Africa. Its culture covers a large part of the area under cultivation in food crops. It is therefore being constantly investigated in order to improve its performance in an ecology continually harshing.

The West Africa Rice Development Association (WARDA), in 1994, has created a series of interspecific varieties of rice called NERICA (New Rice for Africa) (WARDA 1998), of which two have been approved in Cote d'Ivoire since 2000. While the NERICA 1 does not pose virtually a problem regarding stability in cultivation, the NERICA 2 shows by contrast several types. The National Rice Program and the National Laboratory Support for Agricultural Development seized the official agriculture department for the purpose.

In order to understand the problem of variation, 200 panicles derived from different plant individuals were harvested and then cultivated. These panicles have been unanimous recognized on the basis of the descriptor of NERICA 2 in the official catalog of rice varieties, by technicians of the structures involved in the study. These panicles were grown in a strip unrehearsed, in order to assess the behavior of individuals brothers. Each panicle, corresponding to a basic plot, is represented by 3 rows of 11 plants each. The hill spacing is 20 cm both on the line and between the lines. Each plot is distant from the next 40 cm. The whole trial includes 200 elementary parcels spread over 6 bands of 30 and two bands of 10.

The various farming operations were carried out in accordance with the recommended practices in the irrigated lowlands.

A descriptive statistics on quantitative characteristics, measured on the 11 plants of middle row taken from each basic plot, demonstrate compliance with the official list of varieties (Table 1).

Panicles (2.5%) have distinguished by the white beard and the lack of black spots on the grain. The descriptor of official catalog does not mention that character. In addition, the type white beard and an intermediate type between the NERICA 1 (2 blacks spots) and the NERICA 2 (presence of beard), identified on the same site, in a plot (Fig. 1), deserve attention. Moreover, the reaction to phenol confirmed that all of these belong to the species *O. Sativa*.

In conclusion, it's clear that NERICA 2 shows a phenotypic instability. Discussions should therefore be conducted by the government on the characters to be included in the official catalog.

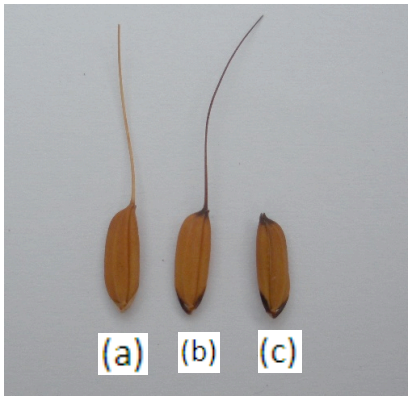

Fig. 1 Picture of grains of NERICA: typical NERICA 2 (a), intermediate type (b) and NERICA 1 (c)

Table 1 Comparison of quantitative characteristics of the trial to those of the official catalog

	Maturity (day)	**1000 grains weight (g)**	**Form of grain (mm)**	**Height (cm)**
Trial	92.0 ± 5.5	25.8 ± 0.3	2.90 ± 0.32	91.57 ± 4.60
Official catalog	90.0	24.9	2.80	95.00

Reference

WARDA, 1998. Focus: interspecifics. Africa-Asia Joint Research on Interspecific Hybridisation between African and Asian Rice varieties: Highlights of 1998 Activities. Blue Pencil-Editing & design. ADRAO, Bouake, Cote d'Ivoire. p. 1.