

Distribution of Wild Rice in Ivory Coast

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Introduction

During the period from October to November in 1984, the writers have been sent to Ivory Coast for collection of the wild and cultivated rices under the project, "Studies on the Distribution and Ecotypic Differentiation of Wild and Cultivated Rice Species in Africa", supported by a Grant from the Ministry of Education, Science and Culture of the Japanese Government.

On the distribution of wild rice in Ivory Coast, some reports have already been published¹⁻⁶). Though Ivory Coast has been considered to be one of the most important distribution areas of wild rice in Africa, accumulation of complete data on these aspect is far from being perfect. Taking these facts into account, the present study was made to accomplish the distribution and ecotypic differentiation of wild rice in Ivory Coast. In the present paper, the locality and habitat of wild rice were described. The data of the morphological characters of the grains are now preparing.

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Distribution and habitat of wild *Oryza* species

The localities concerned in this trip were central and northern parts of Ivory Coast. Geographical distributions of wild rice found were briefly illustrated in Fig. 1. In this figure, route of the trip and the growing areas of the wild rice are given.

Distribution of wild rices collected were listed up in Table 1. In this table, collection number, species name, date of collection, detailed locality and some informations of the habitat were described.

Most of the seed samples collected were carried back to Japan and their plant and grain characters are now being analysed at Kagoshima University.

General characters of habitats and distributing localities are as follows;

Oryza longistaminata CHEV. et ROEHR.

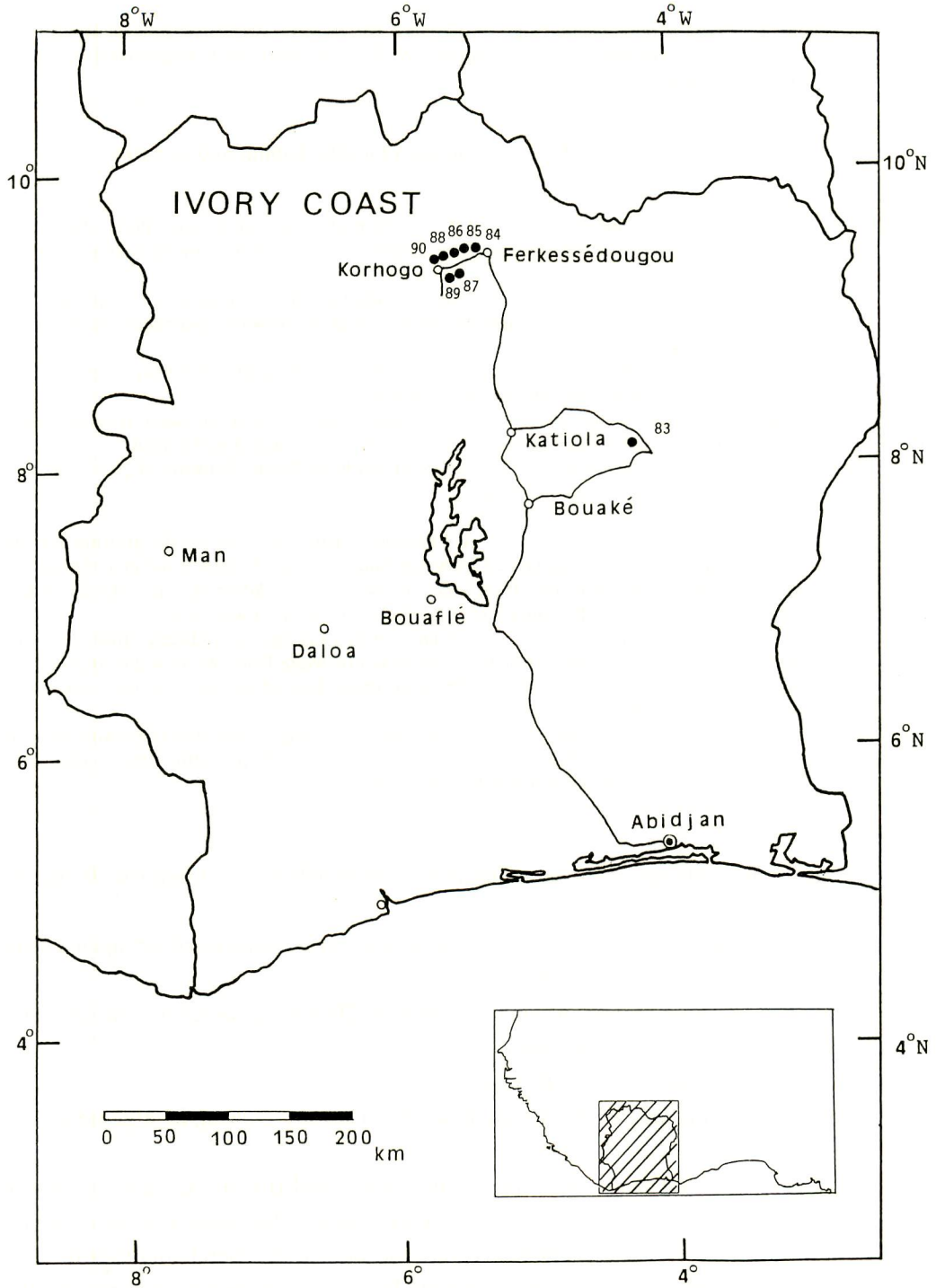


Fig. 1. Map showing several localities where the wild rice in Ivory Coast were collected. Solid line; route of observation, filled circle; collected area, open circle; main town. Code-numbers used in the figure are corresponding to the strain number used in the table.

Table 1. Distribution and habitat of the wild rice collected and observed in Ivory Coast, 1984. Abbreviations: **L**; *Oryza longistaminata* CHEV. et ROEHR., **B**; *Oryza breviligulata* CHEV. et ROEHR., m; meter or meters, km; kilometer or kilometers, *N, E, S, W*; north, east, south and west sides of main road, respectively

Collected No.	Species	Date	Place	Detailed locality, habitat and remarks
W83	B	Oct. 31	Sobara	SW 2 km northwest from Sobara. Pond, dia. 100 m, growing in edge and central regions. 40 cm height in the maximum. Grassy land in other side of road.
W84	L	Nov. 1	Lokpoho	N,W 3.2 km west from Lokpoho. Large ponds, 50 m × 100 m each. Growing in edge together with <i>Leersia</i> sp. Growing sporadically in central region which makes a small island.
W85	L	Nov. 1	Bandama	N 2 km west from Bandama. Growing in paddy field, <i>O. sativa</i> and <i>O. glaberrima</i> . Small amount of plants.
W86	L	Nov. 1	Bandama	N 2 km west from Bandama. Growing in paddy field of <i>O. glaberrima</i> . Small amount of plants. No plant in good managed paddy fields.
W87	L	Nov. 1	Korhogo	N,S Near Korhogo Town. Growing in paddy field, <i>O. glaberrima</i> , and near irrigation canal.
W88	L	Nov. 1	Korhogo	N 3 km east of Korhogo. Sporadically growing in paddy field, <i>O. sativa</i> , which was separated by waste land, 20 m width, from road in south side, by an embankment, 30 cm height, from other paddy field, <i>O. glaberrima</i> , in east side, and by irrigation canal, 2 m width, from other paddy field, <i>O. sativa</i> , in west side.
W89	L	Nov. 1	Korhogo	S 3 km east of Korhogo. Sporadically growing in semi-dried paddy field of <i>O. sativa</i> , which was separated by waste land, 30 cm width, from road in north side, by irrigation canal, 2 m width, from paddy field of <i>O. sativa</i> , in west side, slowly down to paddy field in east side.
W90	L	Nov. 1	Korhogo	S 3 km east of Korhogo. Sporadically growing in paddy field of <i>O. glaberrima</i> , which was separated by waste land, 10 m width, from road in north side, by connected semi-dried rice field in west side.

Population of the species were found in several localities, *i.e.*, Lokpoho, Bandama, Korhogo.

They were found in pond, paddy field, irrigation canal, semi-dried-up upland field, pasture, waste land, road-side ditch.

They had creeping growth in pond and swamp. They were sometimes adjacent to a rice field separated by an embankment.

Oryza breviligulata CHEV. et ROEHR.

Population of the species was found in Sobara. They are growing in large pond.

It is generally said that natural population of the wild rice species was recently on the decrease in number of localities, and reduced in size of the respective sites, in view of both of the species. These phenomena were ascertained in several countries of tropical areas in the world, and were caused mainly by continuous and severe dryness. It is serious problem for preservation and collection. In general, these phenomenon was looked upon as quite an unusual one, but recently it occurred frequently. The habitat was seriously disturbed, and the plant, not only annual but also perennial species, could not be available for living. The latter species propagated ordinarily by rhizome. Though

the rhizome has been generally seen to be advantageous organ for resisting to strong drainage, but it will die during the very long drainage duration.

On the other hand, it is unquestionable that the plant found have survived under such severe natural selection. So, it might be anticipated to find available gene(s) showing drought resistant in these population.

Summary

During the period from October to November in 1984, the writers have been sent to Ivory Coast for collection of the wild and cultivated rice, and 8 strains of wild rice, *i.e.*, 7 of *Oryza longistaminata* CHEV. et ROEHR. and 1 of *Oryza breviligulata* CHEV. et ROEHR., were collected.

Their localities and habitats were reported in detail. Locality names are as follows; Lokpoho, Bandama, Korhogo, Sobara. They were found in pond, irrigation canal, paddy field, waste land.

In the analyses of the data obtained in the field survey, morphological and genetical characters, ecotypic differentiations of these species may be discussed in the future.

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