

SOME DATA ON THE GENETIC ORGANISATION OF  
THE DIOSCOREA CAYENENSIS-ROTUNDATA COMPLEX  
IN IVORY COAST

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SUMMARY (voir résumé français à la fin)

The culture of yams in Africa involves the preferential use of two species. One is of Asian origin, *Dioscorea alata*, and has not been discussed. The other is a native of Africa, *Dioscorea cayenensis-rotundata* and is the subject of this detailed study.

A collection including more than 800 samples has been constituted by a series of trips in Ivory Coast. The natural variability encountered was examined using two complementary tools, one involving a grid of morphological descriptors, the others the analysis of starch gel electrophoresis for four enzyme system.

The results showed the following :

- 1.- The *D. cayenensis-rotundata* complex can be subdivided into a limited number of groups.
- 2.- The precise morphological description of each is possible and a list of characteristics is given.
- 3.- The electrophoretic zymograms confirm the structure in identical groups and also lead to an intragroup genetic discrimination.

INTRODUCTION

Yams (*Dioscorea* spp.) is a genus composed of about 600 species according to Knuth (1924). The domestic species, with exclusively vegetative reproduction, are localized primarily in the intertropical belt. There are two main species in West Africa, one *D. alata* originating in Asia and the other *D. cayenensis-rotundata* which is native.