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## WELCOME ADDRESS OF C.M. MESSIAEN

On behalf of the President of the Centre INRA AG

I am entrusted to welcome you in Guadeloupe in the name of "INRA", the French National Agronomic Research Institute, a ramification of which was created here more than 30 years ago.

A complete "Agronomic Research Centre" was established in 1964.

Cohabiting in French West Indies with other French overyears institutes, or technical centers, interested in Sugarcane, Banana or Pineapple development and problems, our Institute, which in France covers the whole field of Agriculture and Agroindustry, became specialized here, besides general studies on soil, climated and plant diseases and pests, towards a food autosufficiency orientation : forage crops, cattle breeding, vegetable plants, pulses, and, of course, Tropical tubers, on which the research team directed L. DEGRAS has worked for 20 years.

Now, everybody may ask a critical question : is it wise to place an important research effort and, in the same way to hold such an important international congress in so small a country ?

The answer rests not only on the presence of hotel commodities, beaches and fine weather.

The correct answer may be given by the country itself, and the behaviour of its people.

Guadeloupe is an exceptional tool for agronomic research. It links by an isthmus two islands belonging to the two kinds which can be found among lesser Antilles :

a low, limestone island similar to Barbados or Antigua, and a younger volcanic one looking like Saint-Lucia or Saint-Vincent.

At short distances from one place to another can be found annual rainfalls from 35 to 200 inches, and very different types of soils : juvenile volcanic ones, typical oxisoils, and black clayish neutral vertisoils, with predominance either of calcium or magnesium.

More recently human industry has completed this nature's gift by the installation of a big pipe which brings water from the volcanic island to the other one, for irrigation.

We can hope for 1990 that 15% of the arable land in the country will be under irrigation : an impressive prospective, which doubtlessly will ask the research institutes a number of problems...

Guadeloupean small farmers are not less interesting than their island. From a mixture of precolombian, african and european traditions, they have elaborated by themselves, at the margin of sugarcane or coffee estates, during last centuries, an original food producing agriculture, diversified following the microclimatic conditions.

Shifting agriculture, with burning of the secondary forest, the trunks of young trees being left as yam poles can be observed in the karstic hills of the "grands fonds" in Grande-Terre. A regular pattern of associated yams, tannias and dasheens is the base of the food producing gardens in Basse-Terre, with the addition of short-cycle crops (beans cowpeas, squashes, cucumbers) during the young stage of these tuber crops, and often of sweet potatoes at the end of the cycle.

In fresh water mangroves, pure stands of dasheen plants can be observed between *Pterocarpus* trees.

During the 70ies someones have feared the disappearance of these tropical tuber-based food producing systems, under the weight of economic factors : easy importation of low cost foods such as rice, noodles or white potatoes, ageing and non-replacement of tuber-producing farmers.

These last years, however, probably under the impact of the economic crisis, (and with the help of immigrated haitian han power), we can see, inscribed in the landscape of limestone and volcanic hills, and between the mangrove trees, a revival of these gardens based on long-cycle tropical roots and tubers. This kind of agriculture has therefore made the proof, not only that it will not die, but also that it is able of evolution : an evolution often spontaneous, using fertilizers and weed killers derived from the sugarcane and banana industries, tractors for making ridges, but also able to utilize faster than supposed new yam clones introduced by INRA, or to suppress poles for *alata* yams in the same way as in INRA farms.

It appears also that these farmers are not alone in their determination to go on growing tropical tubers and increasing their production. Their efforts would be meaningless if they were not supported by the major part of the population of the country, even those who have no more familial garden, or possibilities of exchange with neighboors.

They want to buy in the markets, and to cook at home yam, tannia, dasheen, sweet potato or topi-tamboo tubers, at prices varying between 0.3 and 0.8 U.S. dollars for a pound, even when white potatoes arrive from France at 0.1 to 0.3 US dollars.

I hope you have been convinced by this demonstration : even a small country like Guadeloupe can be considered as a good place for agronomic research, and especially for work concerning tropical root and tuber crops.

Next thursday you will have the occasion to visit this country, some of its tuber-producing farmers, and the Agronomic Research Centre.

Unfortunately, after a month of May 1985 with some rains, but perhaps not the total amount of water necessary for the initial growth or installation of tropical root and tuber gardens, we have had no rains at all during June 1985. Therefore the tuber-producing garden or the INRA experimental plots you will see will not be as luxuriant as they use to be during this period of the year.

We hope, however that the long-expected rain will not fall exactly next thurday...!