upland cultivation was seen in 1977 in the eastern province of Sierra Leone, where an upland rice field was reported to be virtually devastated.[6] In 1984, a similar occurrence of the virus was reported in a hydromorphic area in Côte d'Ivoire.[7]

In October 1985, the International Rice Testing Programme for Africa (IRTP-Africa) organized a monitoring tour to Liberia and Côte d'Ivoire for scientists from the national programmes of Ghana, Côte d'Ivoire and Nigeria and from the International Institute of Tropical Agriculture (IITA) (Ibadan, Nigeria) and the West-African Rice Development Association (Monrovia, Liberia). During this tour, yellow mottle symptoms were noticed on rice in the African Upland Rice Advanced Variety Trial (AURAVT) at Tombokro, Côte d'Ivoire, under a typical upland rice ecology. There are 18 entries in AURAVT, of which 15 originated from breeding programmes in West Africa, viz. IITA, the National Cereals Research Institute (NCRI), Nigeria, and the Institut des savanes (IDESSA), Côte d'Ivoire. These 15 lines had been selected from tests conducted in typical uplands and did not show any visible RYMV symptoms. The other three cultivars (UPL Ri-5, IR 52 and IR 10110-23-1), which had been selected for upland conditions in the Philippines, showed RYMV symptoms in all four replications. The disease was most severe on IR 52, one plot of which was completely destroyed. The entries were scored for disease reaction using a standard evaluation scale ranging from 0 (no disease symptoms) to 9 (severely diseased). The observations showed a rating of 3 for UPL Ri-5, 5 for IR 10110-23-1 and 9 for IR 52.

The presence of RYMV in IR 52 was confirmed with the agar-gel diffusion test, using an antiserum prepared against purified rice yellow mottle virus with a reaction end-point of 1/2048[8]

This is the first report of RYMV occurring naturally in upland cultivation in Côte d'Ivoire. The findings indicate the potential importance of RYMV in upland rice, although previous observations showed that it was mainly limited to lowland rice. The observations also emphasize the importance of selection for resistance to stresses prevalent in the region.

[6] IITA. 1980a. *Rice research for self-sufficiency in Sierra Leone*. Ibadan, Nigeria, International Institute of Tropical Agriculture.

[7] AWODERU, V.A. 1985. Annual report of the upland regional rice research station, WARDA, 1984.

[8] IITA. 1980b. *Annual report for 1979*. Ibadan, Nigeria, International Institute of Tropical Agriculture.

INDIA

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Marasmius bunch rot in an oil-palm plantation in the Andaman and Nicobar Islands

During a 1985 survey of the oil-palm nurseries and plantation of the Forest and Plantation Development Corporation, Hut Bay, Little Andaman, *Marasmius* infection was identified for the first time, caused by *Marasmius palmivorus* Sharples.

The oil-palm nurseries and plantation are located between 10 and 11° N latitude and 93 and 93° E longitude and extend over an area of 1 350 ha. Average rainfall is 266.3 mm, evenly distributed, with a mean daily temperature ranging from 23 to 31°C.

The survey revealed severe incidence of *Marasmius* bunch rot in the 1975-76 planting, which covered 160 ha. The infection was characterized by white or pinkish strands of rhizomorphs growing on the surface of rotting

bunches. Fructifications in the form of white caps were also noted, which were upturned when fully developed and had, on the under-surface, spore-producing white gills. The *Marasmius* infection was associated with severe bunch failure due to poor pollination. The fungus had been reported growing on mature fruit bunches, rendering them useless for oil production, and invading leaf bases.[1]

The inoculum potential of *Marasmius* rot can be increased by the saprophytic invasion of large quantities of debris collected in leaf axils and number of rotting inflorescences and bunches. Whenever climatic conditions are favourable, the fungus penetrates maturing or ripe fruits and causes the mesocarp to rot. Serious outbreaks of *Marasmius* rot can be expected under the weather conditions prevailing on the island, and with particularly high rainfall, serious economic losses may result.

The following measures are suggested as possible ways to check the spread of the disease within the plantation:

- timely harvesting of mature or ripe fruit bunches and regular pruning of immature, rotting bunches and dead male inflorescences;
- trimming of fronds as near to the trunk as possible, so that debris cannot collect in leaf axils;
- improving fruit set by assisting pollination; and
- spraying partially infected bunches with suitable fungicides. A prophylactic fungicide spray may be useful under appropriate conditions.

[1] TURNER, P.D. 1965. *Marasmius* infection of oilpalm in Malaya - a review. *Planter*, 41: 387-393.

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Botryodiplodia on mangoes and bananas

An outbreak of dieback disease of mango *(Mangifera indica)* occurred in the Dhaid area of the Central Region. The causal fungus was isolated and identified as *Botryodiplodia theobromae* Pat. It has since been isolated from other areas in the Western and Eastern regions. The disease incidence was not affected by seasonal temperatures, but was more prevalent in June-August, a period of frequent high winds. There was also some association of the disease with mealy-bug infestations.

Dieback occurred on two- to three-year-old seedlings after initial leaf blight and withering. Root symptoms were blackening and necrosis of the tap-root.

On older plants, dieback, twig blight and blackening of the stem were followed by stem-canker necrosis and root necrosis. In the later stages, severe wood rotting occurred, with stems and branches being broken by wind. Pycnidia appeared on the dying shoots.

On banana *(Musa acuminata)*, fruits were affected with stalk rot, finger drop, tip rot and fruit blemish, the brownish-black decay spreading uniformly along the fruit. Entire fingers were affected with soft decay. Pycnidia appeared on the skin, and in severe cases, the surface was covered by wefts of greyish mycellium.

The fungus was isolated from mango and banana, and both isolates infected and could be reisolated from mango seedlings.

This is the first report of *Botryodiplodia theobromae* on both mango and banana in the United Arab Emirates.