

ABSTRACT.

Three experiments were carried out at the Central Marketing Agency in an attempt to store sweet potatoes (*Ipomoea batatas*) more cheaply but just as effectively as the American system of curing. The findings of these experiments showed that sprouting, rotting and the subsequent loss in dry matter and water, could not be controlled by applications of two anti-sproutants, Tuberite and Maleic Hydrazide, and two fungicides, Sofanate and Allisan at the levels used.

In the last experiment, mechanical damage was introduced into the treatments which showed that tubers free from damage stored much better than bruised roots. The undamaged roots were stored for 14 weeks, during which time the original dry matter was decreased by 30% and total water by 40%. Approximately 20% of these tubers suffered from decay, whereas the damaged tubers suffered 60-100% decay. The most common fungus causing disease was *Botryodiplodia theobromae*.

As a result of these findings a survey of harvesting and handling was carried out in the Louis D'Or district of Tobago. It was found that most damage occurred after the potatoes had been sold to the Central Marketing Agency. Various suggestions were put forward for the reduction of damage due to handling, including the use of rigid wooden crates instead of bags.