

GENERAL INTRODUCTION.

The Sweet Potato (Ipomoea batatas L.) belongs to the family Convolvulaceae and is the only species of this family which is economically important. It is believed to have originated in Tropical America and the West Indies where it has been cultivated for many thousands of years (11) but it is also now widely grown throughout the tropics, between the latitudes 30°N. and 42°S.

Botanically the family shows certain similarities to the Solanaceae but in the case of the sweet potato, the potato is a swollen root and not the swollen tip of an underground stem, or tuber, as in the Irish Potato. Despite this, it is commonly referred to as a "tuber". It is the ability to produce potatoes which makes both crops so important but in the sweet potato, the tops of vines can also be utilised; when young, as a spinach and later as a feed for livestock.

Both potatoes and vines show great variation amongst the many cultivars. The stems can be red or green in colour and can either trail or twine; there is also variation in the leaf shape and skin and flesh colour of the tubers and all these characters are considered when a cultivar is being identified (25).

As the crop is largely confined to small peasant holdings, production figures are not always available but it is known that it forms a major source of carbohydrates together with cassava and yams for large numbers of people living in the tropics. According to Mitra, (24) sweet potatoes, cassava and Irish potatoes can support more people on a given area of land than any other crop and Campbell (9) shows that it is third in order of importance to sugar and maize in its ability to produce energy per unit area of land (Table I). Furthermore the nutritive value of sweet potatoes is not excelled by any other crop and figures are available (Sen32) to show their superiority to Irish