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Ensete ventricosum in Ethiopia: The Need to Grow More than One Landrace

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Abstract

Ensete ventricosum (genus Ensete: Musaceae) serves as the staple or co-staple crop for 15–20 million people. It is grown in home gardens in southern and south-western Ethiopia under varying climates from 1300–3300 m asl. Leaf sheaths and corm provide starchy food which can be stored for long periods after fermentation. Moreover, all parts of the plant are used providing useful products for household, agriculture, and traditional medicinal treatments. Numerous landraces are cultivated.

According to folk taxonomy, landraces differ in their phenotype and in their use. Criteria for differentiation of the phenotype are size and shape of pseudostem and leaves, and colour of leaf sheaths, midribs, and lamina. Regarding human consumption, landraces are separated into three groups: (1) boiling the underneath corm, (2) extracting starch from leaf sheaths and corm for fermentation and (3) both. Furthermore, farmers prefer certain landraces for their fibre, dried leaf sheaths, animal feed, and for traditional medicinal treatments. Landraces differ in their site requirements and susceptibility to pests and diseases. Some landraces tolerate drought and frost. With rising altitude, their number declines, and only few landraces are observed in very high altitudes above 2800 metres.

The traditional groups reflect their polyphenole content. Landraces tolerant to drought, frost, and pests and diseases have a bitter taste, and are used only to produce fermented food from the leaf sheaths and corm. They are tall in size (>7 m) and provide strong fibres. On the other hand, landraces with low polyphenole content are not bitter and therefore favoured for their boiled corm. They are small (<6 m) and develop a bulbous pseudostem. However, their yield is small, and they are highly affected by drought, frost, and pests and diseases. Most medicinal landraces are included in this group. The third group shows intermediate characteristics but cannot compete with either the tolerance of the hardy landraces or the good taste of the sensitive ones. In some regions, these groups are associated with gender (male/female/intermediate).

Experiments on vegetative development and leaf anatomy confirm these traditionally identified groups.

Keywords: Anatomy, enset, *Ensete ventricosum*, Ethiopia, ethnobotany, folk taxonomy, landraces, morphology, Musaceae, Zingiberales