

Participatory evaluation of introduced traditional African vegetables by women farmers in Madagascar: opportunities and challenges

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Abstract

Traditional African vegetables (TAVs) are nutritious and generally easy to grow and hardy. In Madagascar, local or wild leafy vegetables are very popular. Some of them, like *Galinsoga parviflora* and *Bidens pilosa* remain in the wild, picked and sold when needed. For amaranths, there is no cultivated species. Wild amaranths are only for feeding pigs. The objectives of this study were (i) to assess the adaptation of these new TAVs to the local growing conditions of women and to understand their appreciations for these vegetables, (ii) to estimate their potential in improving nutrition and as a source of income. A participatory survey was conducted in the Itasy and Antsirabe regions. Seed kits of 12 species of TAVs were introduced from the World Vegetable Center in 2019 and shared to 200 women: 4 species of African nightshade, 5 species of amaranth, 1 African eggplant and 2 Ethiopian mustard. The results showed that the introduced vegetables can adapt well to the local growing conditions. The germination rate was fair (76% TAVs have more than 75% germination rate). The mortality rate is low (84% have less than 25% mortality). About 40% of the women, however, had difficulties with poor soil fertility and insect attacks especially on Ethiopian mustard. Watering was also an issue for the 18%. The taste of the TAVs is highly appreciated though the preferences differed. However, only the nightshade species, already familiar are the most sold. These new TAVs have great potential for improving household nutrition and income.

Keywords: Adaptation, adoption, women farmer preferences, new accessions introduction