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## Diversity, Use and Consumers' Acceptance of Local Banana Cultivars in Ucayali, Peru

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### Abstract

Bananas (*Musa* spp.) constitute a large part of local food basket in many tropical countries. Some cultivars also possess medicinal properties or help to prevent vitamin A deficiency. This form of hidden hunger is still a problem in Latin America, but can be precluded by consumption of enough provitamin A rich food, such as dark leafy vegetables or orange/red fleshed fruits, including certain *Musa* cultivars. Though banana is a crop with high intraspecific diversity, locally used cultivars in many regions have not been characterised so far in terms of morphology, mode of use and consumers' acceptance. The study was conducted in Pucallpa, the administrative centre of the Ucayali region, located in the Peruvian Amazon. The Ucayali region represents one of the most important banana production areas in Peru. A survey of seven main retail markets in Pucallpa was performed in order to inventory all widely available *Musa* cultivars. All cultivars were morphologically characterised using previously published descriptors and their fruit pulp to peel ratio was calculated. Subsequently, the vendors and customers were interviewed to document local knowledge including vernacular names, modes of preparation and use patterns of each cultivar. Sensorial properties and overall acceptance of dessert type bananas were evaluated by local consumer panel.

In total 11 cultivars were documented including 5 cooking ('Bellaco', 'Campeón', 'Común', 'Mamaluca', 'Sapucho') and 6 dessert type bananas ('Capirona', 'Isla', 'Manzano', 'Muquicho', 'Rojo', 'Seda'). According to our best knowledge, one of the cultivars investigated has been newly documented in Peru. The highest pulp to peel ratio was found in dessert cultivars 'Muquicho', 'Manzano' and 'Seda'. Performances of overall acceptance were positively correlating with pulp sweetness, which indicates its impact on consumers' choices when compared to other characteristics studied. Moreover, orange-fleshed cultivars such as 'Rojo' and 'Isla' should be further studied as potential sources of provitamin A rich food.

**Keywords:** Human nutrition, intraspecific diversity, *Musa*, sensorial properties, traditional knowledge