## **Mauritius Sugar Industry Research Institute**

## Rare crops of Mauritius: II. Bambarra groundnut

(N Govinden, MSIRI, Réduit)

This pulse crop is known here under the vernacular name, '*pistache malgache*'. In Francophone Africa it is called 'voandzou'. Its botanical name is *Vigna subterranea* (syn. *Voandzea subterranea*). It has always been rare in Mauritius and, now, it has practically disappeared.

The bambarra groundnut resembles the common groundnut (*Arachis hypogea*) in being a low-growing herb which produces pods underground. The branches develop along the

ground, which gives the plant a rosette-like appearance. The flowers are tiny and, after pollination, the pods develop in the soil. The large majority of pods are single-seeded and round, and only a few have two



seeds. The beige-coloured seeds are also round and, on



Figure 1. Young plants of bambarra groundnut

drying, they are slightly larger than peas.

Figure 2. Dry seeds of bambarra groundnut

The bambarra groundnut has the following agronomic characteristics:

- 1. It grows best on light, sandy soils.
- It is adapted to dry conditions. In Mauritius, it should be planted from September to December. When it is planted later than January, it develops and flowers normally, but it does not produce pods under short days.
- 3. Bambarra groundnut is a nitrogen-fixing legume, but most of our soils do not have sufficient bacteria for effective nodulation. Consequently, at planting, the shelled seeds should be coated in mud formed by mixing water with some soil taken from a plot or field in which well-developed bambarra groundnut plants have been grown before.
- 4. The growth cycle is about four months.
- 5. Like groundnuts, the seeds are rich in protein, but in contrast to groundnuts, they are low in lipids.

The seeds can be consumed in three main ways. Firstly, the fresh pods can be boiled and the seeds eaten as snacks. The fresh seeds can be cooked in stews (Fr. *fricassée*) or currys, alone or with meat. Since shelling of the fresh pods is quite difficult, it is preferable to boil them first before extracting the seeds. Finally, the pods can be dried for storage and, later, the shelled seeds can be cooked, preferably in a pressure cooker, just like dry beans or peas after soaking in water for 12 hours.

The bambarra groundnut does not taste like common groundnut. Its taste is unique and closer to that of peas.

Small amounts of seeds coated with mud as explained above can be obtained from MSIRI. Requests should be addressed to the Head, Food Crop Agronomy Department. Seeds have also been given to Barkly Experiment Station for multiplication.