Bambara Groundnut Collecting in Togo

G. Mergeai 1/

Introduction

In December 1984 and December 1985, 2 collecting missions for Bambara groundnut (Vigna subterranea) were carried out in Togo. These missions were funded by the University of Maryland, USA, and organized by the Direction de la Recherche Agronomique du Togo and IBPGR.

The missions took place 19-22 December 1984 in the Région de la Kara and 12-21 December 1985 in the Région des Savannes, Région de la Kara and Région Centrale. Following a collecting route of 5500 km, a total of 326 samples of Bambara groundnut was collected in 41 villages.

The good growing seasons which prevailed in Togo in 1984 and 1985 permitted collection of adequate number of seed samples. Duplicate samples were sent to the University of Maryland, USA, and the International Institute for Tropical Agriculture (IITA), Nigeria.

The Bambara groundnut crop matures in December, but is earlier in the north than in the central region.

Method of sampling

Most of the samples gathered were of seeds brought by farmers from all parts of each village. Although this method is not the best sampling technique, it allowed for the collection of most of the existing variability. Only in a few cases were pods directly collected from the field.

Generally, farmers grow mixtures of seeds of different colours. Such samples were sorted out into different sub-samples. The interval between sampling sites was about 20 km but varied slightly depending upon population density and topography.

Collection and exploration

3 of the 5 administrative regions of Togo were covered: Savannes, Kara and Centrale. The importance of Bambara groundnut is decreasing, but it is not yet threatened by genetic erosion. In most of the tribes, its consumption is associated with funeral ceremonies and in some tribes with fetish activities.

Bambara groundnut is more resistant to drought than groundnut (Arachis hypogaea), and was an important food source for people of the Katchamba region during the prolonged drought of 1983.

It is considered more nutritious than groundnut and mashed seeds are used as a medicine against diarrhoea. Nevertheless, farmers prefer to grow Arachis hypogaea because of its value as a cash crop. The market for Bambara groundnut is rather small in most regions and more than 80% of production is reserved for local consumption. Black-seeded types are more rarely grown because they are often linked with fetish activities, except in the Bassar region.

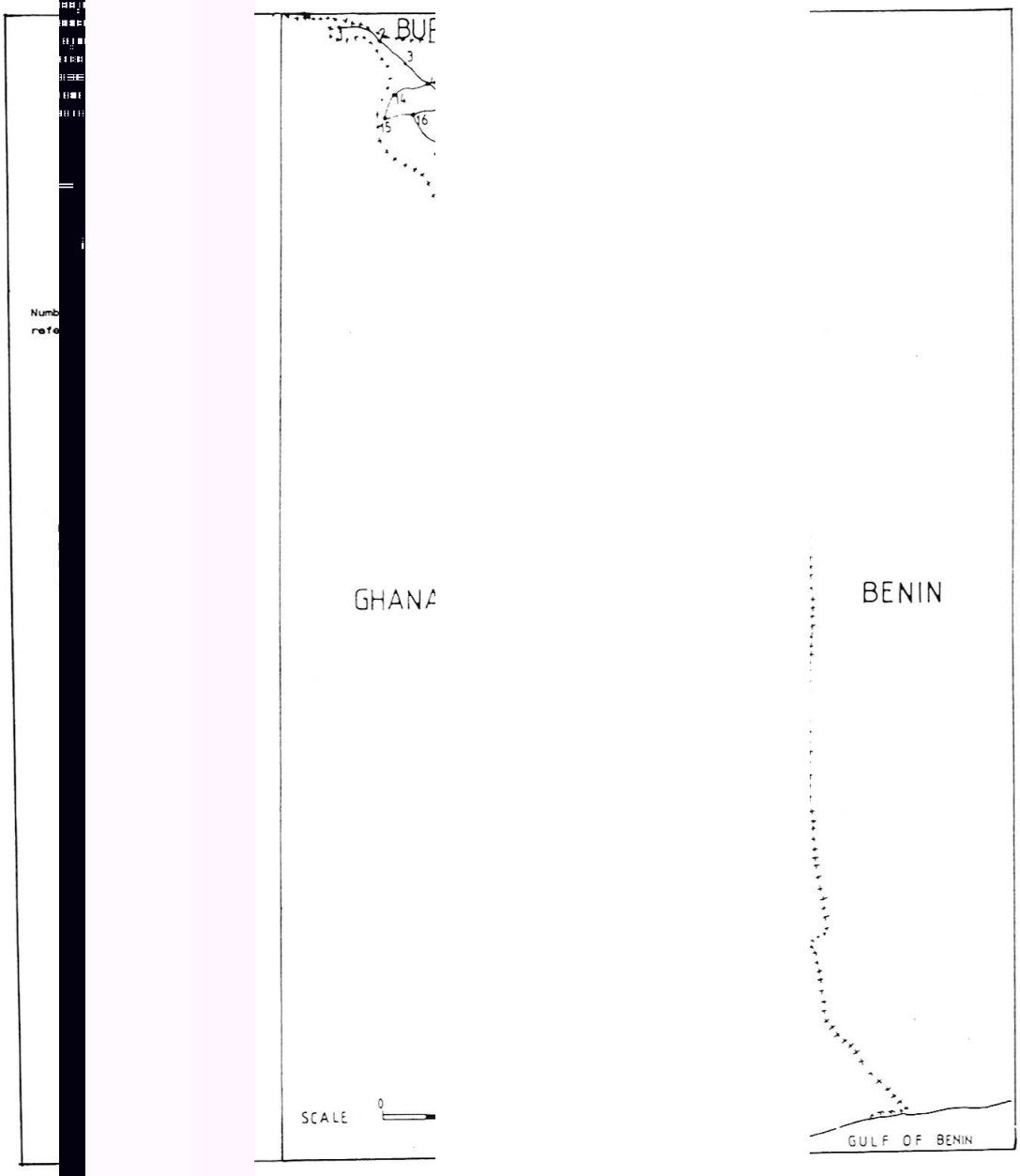
The seeds of Bambara groundnut can be made into small flat cakes, biscuits and mash. The seeds can also be eaten boiled or roasted and, after harvest, they are usually conserved in their pods which are shelled just before cooking or sowing. Bambara groundnut is less commonly grown south of Bassar and Sokode.

In the Moba tribe, the growing of traditional cultivars is forbidden to young people; however, this does not

---

1/ IBPGR Intern based at time of writing in Togo

FAO/IBPGR Plant Genetic Resources Newsletter, 67:38-40



rary of Bambara grou

5 in Togo

chocyanins. Small-seeded cu
inner seed coats, are valu
ick cooking and better tas
all-red or all-black colo
e same locus because red

Doku, E.V. and Karikari, S.K. 197
11:47-56

ume

Cet article présente deux brève
quelles un total de 236 accessions
ersité génétique de cette espèce s

umen

Este artículo describe el trabaj
34 y 1985 en el cual un total
nobotánica y la diversidad genética

Table 1. Summary of data concerning the collecting missions

Regions	No. of collecting sites			No. of accessions collected		
	Dec. 1984	Dec. 1985	Total	Dec. 1984	Dec. 1985	Total
Savannes	0	20	20	0	180	180
Kara	7	11	18	75	70	145
Centrale	0	1	1	0	1	1
Total:	7	32	39	75	251	326

ap … e black- and wh … oduced from Bu … s ago.

Ge

… d during the mi … bunch and se … scribed by Do … the species ha … e cultivars di … h habit and ve … size and wr … nd colour of se … t and colour of

wr … come from pc … from smooth ex … have a more ge … opment, are sr … e later than

… he leaves is of … presence of ar … ltivars have

tiply to cultivation of larg … ed for their quite-seeded cultivars int … te. Alleles furkina Faso less than 20 year … ur may be at th … seeds often

produce plants with black seeds. Red seems to be dominant to black.

In the northern areas of Togo, in addition to the large black- and white-seeded types introduced from Burkina Faso, 2 other cultivars with large seeds (red or white with a large black eye) originated from the Bassar region near the Ghana border; from there they have spread to north of the city of Mango.

These 3 high-yielding cultivars are grown by most of the people in their areas of distribution. These tribes currently cultivate the new cultivars along with their traditional small-seeded and smooth pod-types.

A type with small light brown-to-orange coloured seeds and smooth pods seems to have come from the Lamba region (slightly further north than Kara). A type with small purple mottled seeds is known to produce the highest number of seeds per plant; it seems to have come from the Kabie region. In the south the main types are white, and of small-to-medium size; these originated with the Anas people who brought the seeds from the Yoruba area in Nigeria during the late 19th century.

enetic diversity

All the cultivators collect … ssions belong to the … emi-bunch types as d … oku 1/. No wild form of … as been discovered. Th … differed in morphology (growt … egetative development), … rinkling of the pods, size a … eeds, number of pods per plar … f leaves.

In general, large seeds … rinkled pods and small seeds … ods. Large-seeded cultivars … xtensive vegetative devel … enerally more open, and matur … mall-seeded cultivars.

The dark green colour of t … ften linked with the

1/ … . Operational selection in wild Bambara groundnuts. Ghana J. of Sci., 11:47-56

… missions de collecte effectuées au Togo en 1984 et 1985 au cours … de pois de terre furent recoltées. L'agronomie, l'ethnobotanique et la … t révisées.

… realizado durante dos misiones de corta duración en Togo, en los años … e 236 accesiones de bambarra fueron recolectados. La agronomía, la … on reseñadas igualmente.