

## Descriptors for Baobab (*Adansonia digitata* L.)

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Bioversity International belongs to the so-called CG centre group. The latter, in full the Consultative Group on International Agricultural Research (though no longer known under their full name), consists of some fifteen research centres that are members of the CGIAR Consortium. Each centre has a global mandate to study, improve and promote (sub)tropical crops and animal production. Research is carried out in close collaboration with hundreds of partners, including national and regional research institutes, civil society organizations, academia, development organizations and the private sector.

CGIAR's collaborative research is dedicated to reducing rural poverty, increasing food security, improving human health and nutrition, and ensuring the sustainable management of natural resources.

The 15 Research Centres generate and disseminate knowledge, technologies, and policies for agricultural development through the CGIAR Research Programs. The CGIAR Fund provides reliable and predictable multi-year funding to enable research planning over the long term, resource allocation based on agreed priorities, and the timely and predictable disbursement of funds. A multi-donor trust fund finances research carried out by the Centres through the CGIAR Research Programs.

In all, some 10,000 scientists and staff, top-notch research infrastructure and dynamic networks try to deliver adequate solutions to burning development questions. CGIAR's collections of genetic resources are the most comprehensive in the world, allowing the system's scientists to deliver on expectations, within their mandate.

Most CG centres focus on just one or a few crops/species. Bioversity and the World Agroforestry Centre (also, and perhaps better, known as ICRAF) have a broader mandate, however, covering and focusing on what are commonly known as under-utilised species. The latter are not necessarily little-utilised; rather there is little to no awareness of such species within formal, Western research, and because of this they are neither promoted nor given much consideration in mainstream research. This is a pity, as many people in the tropics (and thus the developing world) depend on these species for their food and, more generally, for their livelihoods.

It is against this background that both CG-centres collaborated to produce a booklet with so-called descriptors for *Adansonia digitata*, the emblematic baobab tree of Af-

rica. The baobab tree is part of the traditional farming system practised in most areas of (semi-)arid Africa. As such, it has an important cultural role and is a source of many interesting products used for food and medicine. Recently, for example, its pulp has been exported to the European Union where it is used for making syrup and juices. Baobab fruit pulp has been shown to be at least 200 times richer in vitamin C, and can thus be used in weaning food, and other applications where the latter is needed.

Unfortunately, the baobab has not yet been cultivated. ICRAF has been trying to develop the tree as a leaf vegetable: in Mali, baobab seeds have been planted in high-plant-density vegetable plots where leaves are regularly harvested, managing – what is ultimately a tree – the plant as a shrublet. In order to obtain good planting material, it is necessary to start with high-quality germplasm. The latter can be found through ethnobotanical field work, but once documented, it also has to be characterised and described for further reference and use. So-called descriptors help to describe in a more or less objective manner live plant material that can be very versatile. The idea is that if a researcher wants to describe material s/he has collected, s/he would use the descriptor list that is officially recognised and accepted by all for this specific species. In this respect, both Bioversity and ICRAF developed an illustrated descriptors list that should be the standard reference work for characterising baobab plant material collected at whatever location, by whatever researcher.

The 'Baobab descriptors', is part of a series of descriptors that is produced by experts in their own field. The baobab booklet was basically written-up by ICRAF specialists in collaboration with a core advisory group (including scientists from the University of Abomey-Calavi, Benin; University of Wisconsin, USA; Thine-Waal University of Applied Sciences, Kleve, Germany; and Ghent University, Belgium). Descriptors can be obtained for free from Bioversity (for scientists in the tropics), and have been developed for nearly a hundred different species, or species groups. Each descriptor list provides an international format and thereby uses/produces a universally understood language for plant genetic resources data. Baobab is described according to its morphological characteristics using quantitative characters, expressed as keys, or indeed descriptors, that try to cover the whole range of expressions for all plant parts. A descriptor is therefore scored using a scale, whereby each character can be entered onto a scoring sheet that is then shared with the scientific world at large.

The 'Baobab descriptors' is a fine piece of work that will help to bring an important, but still under-utilised (or rather not-so-well-known) plant species to the fore.

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