Descriptors developed for *Adansonia digitata* L. (Baobab tree)

The baobab tree found widely distributed in many African countries particularly in hot, dry savannahs of sub-Saharan regions is highly appreciated for its nutritive value. The tree also holds several medicinal properties. It serves as a substantial source of income for rural communities, particularly women who rely on them. It can also be stated that the tree is in the transformation phase of domestication from the wild. At this important juncture, Bioversity International and the International Centre for Research in Agroforestry (ICRAF) have released the publication “Descriptors for Baobab”.

Descriptors are a standardized international system that define the different characteristics of a species and allow scientists all over the world to accurately assess the genetic and morphological diversity in its genetic resources. It is the product of exhaustive collaboration amongst 15 core scientists, with consultations from baobab experts worldwide. “This descriptor list is the first, in the Descriptors Series, focusing on a neglected, undomesticated African food tree species with highly nutritious fruits and leaves,” said Katja Kehlenbeck, an ICRAF research scientist, who hopes that more descriptor lists will follow for the many other valuable African food tree species.
The remarkable, long-lived baobab tree has a short, swollen trunk, wide-spreading branches and a large, round canopy. Almost all parts of the baobab are useful for human beings, with fruits and leaves being the most important for food and nutrition security of local communities. The naturally dry, whitish fruit pulp has five times the vitamin C concentration of an orange, and is high in minerals such as calcium, magnesium and iron. It can be eaten fresh or processed into porridge, juice, jam, ice cream and sweets. The seeds are rich in protein and fat and can be roasted and eaten as a tasty snack or pressed into oil for consumption and industrial use, particularly for cosmetic products. The leaves have high protein, beta-carotene and iron content and are used fresh as leafy vegetables or dried and powdered as a soup ingredient.

The production of baobab pulp and leaves is almost entirely based on trees growing naturally in forests and woodlands or in farmers’ fields. As in other undomesticated tree species, there is a high variability among wild baobab trees in valuable characteristics such as the number and size of fruits, proportion of pulp from the whole fruit, taste of pulp and nutrient content of pulp, seeds and leaves. The present descriptor list will help in the domestication and cultivation of the species that is necessary to sustainably develop baobab value chains and meet the growing demand from local and international customers for high-quality baobab products. Biodiversity International has been the major driver in promoting the descriptor system and has developed and published over 100 descriptor lists since 1975. Adriana Alercia, who has been running the series for many years said, “We expect this list to support studies focusing on documenting characterization and evaluation traits and conserving baobab genetic resources, selecting superior mother trees for domestication and cultivation and, mainly, increasing production and use of nutritious baobab products.”

The following countries of Africa have a wide distribution of the species:
Senegal, Mali, Niger, Benin (Western Africa)
Namibia, South Africa, Mozambique, Zambia, Malawi (Southern Africa)
Sudan, Ethiopia, Kenya, Tanzania (Eastern Africa)