

Conserving threatened plants of Guinea

By Charlotte Couch & Sékou Magassouba, 5th December 2022

The plant biodiversity of Guinea has been understudied for a long time, but in recent years there has been a flurry of discovery and renewed interest in the country's flora. Projects between partners at the Royal Botanic Gardens, Kew, Herbarium National de Guinée, Guinée Ecologie and the Guinean government have been identifying and documenting Tropical Important Plant Areas in the country.



Plateau de Benna, part of the Kounounkan TIPA . Photo: Xander van der Burgt.

This has involved extensive fieldwork, leading to the rediscovery of species presumed lost and the discovery of species new to science, most of which are endemic to Guinea. Research undertaken between 2016 and 2019 led to the documentation of 22 Tropical Important Plant Areas and the government's agreement to put these into legislation through an expanded national parks and reserves network. Alongside this work, threatened plant species of Guinea have been assessed for

the IUCN Red List as part of a project 'Towards developing a Red List of Guinean plants'. This project also developed specific species conservation action plans for 20 species in a pilot study to look at what information was available and the actions required to safeguard the species. To help facilitate, validate and discuss the Tropical Important Plant Area assessments and the conservation action plans, a working group was formed.



Working group on Tropical Important Plant Areas and Conservation Action Plans. Photo: Charlotte Couch.

This had members from all the partners, including from various departments of the Ministry of Environment and other research institutions, and was the first time such a group had come together to discuss plant conservation. As a result, the group didn't want the action plans that we had accomplished together to languish once the project was completed. We wanted to publicize the conservation action plans that had been developed so they may be of use to other researchers and companies (e.g. mining companies) who are required to perform mitigation as part of their works. This is why we produced the action plans in both French and English.



Approach to Kakiwondi Tropical Important Plant Area. Photo: Charlotte Couch.

The 20 conservation action plans are for plants of various lifeforms (i.e. trees, shrubs and herbs), all native, and some endemic to Guinea. Around 7% of the flora of Guinea is threatened with extinction. Fieldwork was needed to discover if certain species still existed in their historical ranges or if new sites could be found. For example *Vernonia djalonensis*, which has been elected as the national flower of Guinea, had not been collected for half a century. It was, and continues to be, only known from one site. It was relatively abundant at this site in the Fouta Djalon mountains, but much of the area has now been allocated for housing.



Bowal Tankon with *Vernonia djalonensis*. Photo: Charlotte Couch.

Other endemic species were also rediscovered, including *Diospyros feliciana*, *Anisotes guineensis* and *Cailliella praerupticola* after 60, 61 and 79 years, respectively. Other species were not so fortunate and have disappeared from some historical sites. For instance, *Kotschya lutea* and *Habenaria jaegeri* are no longer found in the Fouta Djallon as a result of extensive landscape changes over time.



Left: *Cailliella praerupticola*. Right: *Anisotes guineensis*. Photos: Xander van der Burgt.

Being able to bring together all of the data on these initial 20 species in the conservation action plans has been a good exercise for exploring the state of species' populations and what needs to be done to protect them for the future. However, it is a lengthy process and we are aware that to do this for all the endemic and threatened species would take many years. So we are now looking at other ways to combine species and the actions required to protect them, for example a national action plan for the conservation of threatened tree species is being explored and action plans that cover specific Tropical Important Plant Areas are being elaborated. We hope that the plans developed will be an effective way to protect the threatened plant diversity of Guinea for years to come.

The article "[Piloting development of species conservation action plans in Guinea](#)" is available in *Oryx—The International Journal of Conservation*.



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