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A taxonomic revision of the rattans of Africa (Arecaceae: Calamoideae)

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Abstract

The rattans of Africa are represented by the endemic palm (Arecaceae) genera *Laccosperma*, *Eremospatha* and *Oncocalamus*, as well as by a single species of the otherwise Asian genus *Calamus*. These climbing palms occur in a wide range of ecological conditions within the lowland tropical forests of the continent and, throughout their range, play a significant role in the forest economy of the region through the utilisation of their stems, or cane. Despite this economic importance, until recently the taxonomy of this group has been unclear. Based on recent fieldwork as well as thorough examination of herbarium records, a taxonomic treatment of all African rattans is presented. This paper recognises 22 species in the four genera, including four recently described species.

Key words: Arecaceae, palms, Palmae, rattans, taxonomy, tropical rain forest

Introduction

The first rattans from the African continent were collected by the French botanist Baron Palisot de Beauvois. Palisot de Beauvois was appointed in the capacity of “gardener” to the mission of Landolphe (1786–88), with the aim to establish a French trading station, where today is Nigeria. In this capacity he was responsible for the establishment of plantations in the area, but instead he spent much of his time collecting herbarium specimens. Between 1786 and 1787, Palisot de Beauvois explored Owerri and the region around Benin, travelling as far east as Calabar. The collections made by Palisot de Beauvois included samples of many taxa new to science and culminated in the publication of his 19-volume *Flore d’Oware et de Benin en Afrique* (1805–1820). The first volume (1805) included the first description of an African rattan species. Although morphologically distinct from its Asian relatives, particularly in its floral arrangement, Palisot de Beauvois included the taxon in the rattan genus *Calamus*. Further collections of rattan were made in the Niger Delta by Barter (1857–1859) and in the major estuarine areas and coastal forests of Sierra Leone, Nigeria, Cameroon and Gabon by Mann (1859–1863). These collections provided a basis for the first comprehensive treatment of the palms of Africa by Mann & Wendland (1864). Their paper described these new palm discoveries and including eight species of rattan, seven of which were new species. In recognition of the morphological uniqueness of the African rattan taxa, Mann and Wendland (1864) described four main rattan subgenera of the genus *Calamus*, to which, aside from *C. deërratus* G.Mann & H.Wendl. (or “true” *Calamus* as they termed it), *Ancistrophyllum*, *Laccosperma*, *Oncocalamus* and *Eremospatha* were consigned.

Drude (1877) first elevated *Laccosperma* to generic rank. This was followed by Wendland who, in Kerchove’s *Les Palmiers* (1878), elevated the rattan subgenera, *Eremospatha* and *Oncocalamus*, to generic