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## AN EARLY RECORD OF GIGASIPHON MACROSIPHON (HARMS) BRENAN (LEGUMINOSAE-CAESALPINOIDEAE) FROM KENYA AND AN UPDATE ON ITS CONSERVATION STATUS

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During an investigation of the flora of Mrima Hill (Kenya, Kwale District, 4°29'S, 39°16'E) in September 1957, Bernard Verdcourt picked up a few fallen leaves which were characteristic and familiar, yet puzzling. Back in Nairobi, Peter Greenway recognised them as *Gigasiphon* and it was then clear why they had looked familiar. In early 1950, a small bundle had turned up in the herbarium at Amani, East Usambaras (before it was moved to Nairobi) which was a relic from the German days and had never been opened since. It proved to contain some very interesting material including a sheet, *Grote* 3763, from the East Usambara Mountains, an isosyntype of *Bauhinia macrosiphon* Harms described in 1915. On 31 August 1959, BV had the opportunity to collect adequate material and until recently the first record of the species (and only locality) from Kenya was considered to date from the finding of the few fallen leaves near Mrima.

There is, however, evidence that the tree was noticed in Kenya 38 years earlier. Quentin Luke was shown a letter, dated 5 February 1919, found by Anthony Githitho (of the National Museums of Kenya) in the Kenyan Forest Department archives, from F.L. Kelly (Assistant Conservator of Forests at Mombasa) to the Conservator of Forests in Nairobi. Kelly had been asked to demarcate Muhaka Forest (4°20' S, 39°31.5' E). Paragraph 7 of this letter mentions a tree which can only be *Gigasiphon*. Part of this paragraph is repeated here:

"7. Owing to the heavy rains about Christmas time a fair number of trees were in bloom and at Muhaka I found a leguminous tree with an unusually large and beautiful flower [see figure 1]. Unfortunately the tree was a high one and I was only able to find one perfect fallen bloom. This I pressed and will forward to you. The flower when pressed open was 8 inches in diameter with four white petals and the fifth petal yellow, shading to pink at the base. The sepals were long and narrow culminating in a blunt curled end. The flower was sweet scented and resembled a Bauhinea (sic), but had 10 stamens; leaves of the tree resembled those of a lime (Tilia) and with some difficulty I was able to obtain some of these. I also collected ripe seed. I saw about 6 trees in Muhaka but did not see any at Gogoni."

What happened to the flowers, leaves and seeds collected by Kelly is not known. They were certainly not in the Forestry Department herbarium which ultimately became part of the East African Herbarium. Kelly's discovery seems to have been totally overlooked. There is no mention of it in E. Battiscombe's 'A descriptive catalogue of some of the common trees and woody plants of Kenya colony, 1926'. He was Conservator of Forests in 1919.



Figure 1. Flower of Gigasiphon macrosiphon.

It is surprising that so small an area as Muhaka Forest has survived since Kelly's survey. It has done so because it is a 'Kaya', a sacred area set aside by the Mjikenda people, who moved southwards centuries ago to escape the Galla. Although their successful settlement of the Kenya coast meant that much of the original vegetation disappeared the Kayas have been protected as ceremonial areas where important Elders were buried, and medicinal plants and other forest products grown. The older traditions and the Kayas are now under great threat from non-indigenous sources and it is hoped that recent efforts to effectively protect what tradition has protected for centuries will be successful. Kaya Muhaka is about 150 ha in area at an altitude of 30-40 m. and dominated by *Cynometra suaheliensis* (Taub.) Bak.f.; 334 plant taxa have been recorded from this small area.

Attempts by Ann Robertson and QL to re-find BV's *Gigasiphon* at Mrima in 1988, during their work on the coastal forests, failed, and it was feared extinct in Kenya until they re-discovered it in Kaya Muhaka on 31 May 1990. The next day, they found another population in Gongoni Forest Reserve, where it was being logged to fuel a lime factory! QL tried to relocate this species in the East Usambaras in 1998 to no avail. No repeat of Eggeling's 1951 collection of *Gigasiphon* from the Rondo Plateau in southern Tanzania was reported by Bidgood and Vollesen after their expedition to this area in February 1991. Thus, by the beginning of the new century, the species was only known to exist naturally in Kaya

Muhaka and Gongoni Forest Reserve, with cultivated specimens known to exist in the National Tropical Botanic Garden, Hawaii and the Botanic Garden in Nairobi. It is 'red-listed' by IUCN and classified as "Vulnerable". It was therefore of some interest that QL found a mature specimen in the Udzungwa Mountain NP, south-western Tanzania, on 6 October 2001, at an altitude of 880 m and that a tree planted in QL's garden at 1800 m started flowering early in 2004, now the highest record for this potentially ornamental species.