Occurrence of tricarpy in *Ceropegia attenuata* Hook. (Asclepiadaceae)

The floral characters are the basis of plant classification and very specific within different taxa of plants. The family Asclepiadaceae is characterized by bicarpellary, syncarpus, superior ovary and fruit a pair of follicles[1]. Santapau and Irani[2] on the basis of critical study further explained that the pistil is bicarpellary, typically composed of 2 free superior ovaries, 2 styles which cohere above to form a flattened five-angled stigma head; fruit is a pair of follicles which are divaricate. These are the common characters, which are found in all the genera of the family. *Ceropegia* L. is an important taxon of this family. In India, the genus is represented by 45 species[3], of which 28 are endemic to the country[3,4]. Almost 50% species of *Ceropegia* L. are found in the Western Ghats. Many species are facing different threats and 16 species are recorded under different categories in the *Red Data Book*[5].

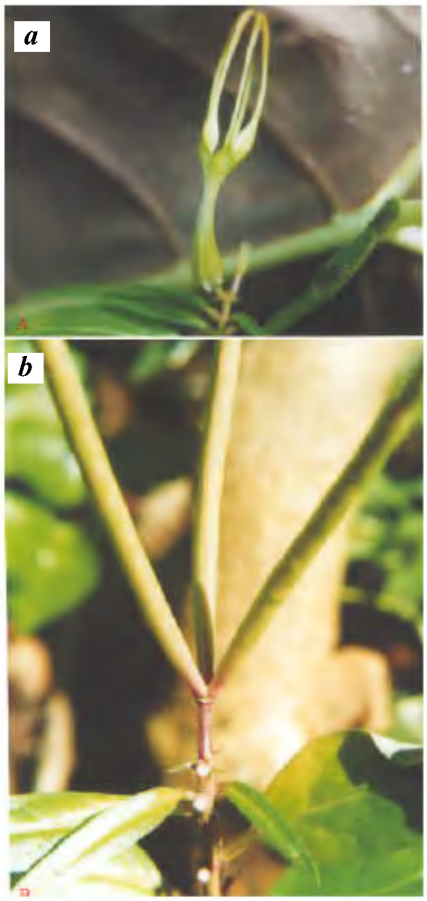

Figure 1. *Ceropegia attenuata* Hook. ***a***, Flower. ***b***, Three follicles developed from a tricarpellary ovary.

For conservation and regeneration studies, 12 species, viz. *C. attenuata* Hook., *C. bulbosa* Roxb., *C. bulbosa* var. *lushii* (Grah.) Hook., *C. hirsuta* Wight & Arn., *C. lawii* Hook., *C. mahabalei* Hemadri & Ansari, *C. media* (Huber) Ansari, *C. oculata* Hook., *C. oculata* var. *subhirsuta* Huber, *C. panchganiensis* Blatt. & McC., *C. rollae*, Hemadri and *C. vincaefolia* Hook. are planted in earthen pots at our garden. These species are collected from different localities in Western Ghats. The specimen of *Ceropegia attenuata* Hook. (Vulnerable)[5] was collected from Radhanagari, District Kolhapur.

Under 'cultivation' all the above species showed flower development but fruit set had been observed only in some species, viz. *C. attenuata*, *C. bulbosa*, *C. bulbosa* var. *lushii*, *C. hirsuta*, *C. mahabalei* and *C. rollae*. After fruit setting upper flowers aborted in all the above species. In *C. mahabalei* and *C. rollae* only one follicle develops first to full size and then the other, while in the remaining species both the follicles from a pair develop simultaneously.

Surprisingly, in the *C. attenuata* Hook. there were three follicles developed instead of two (Figure 1). All the follicles developed simultaneously and were of almost equal length (ca 5.0–5.5 cm), straight, tapering to a fine point. Santapau and Irani[2] reported that sometimes single follicle develops in this species, but not three. This communication is a report on the formation of three follicles in the genus *Ceropegia* L. (Asclepiadaceae).

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