

Short Communication

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Note on Ceropegia attenuata Hook. From Western Ghats, India

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Abstract

During intensive field survey in Western Ghats, Maharashtra, India, authors came across a species of *Ceropegia sect. Tilioris* H. Huber. It was identified as *C. attenuata* Hook, but recognized some new variation in flower which was not reported earlier from India which will be useful to delimit taxa. Present paper deals with note on polymorphism [1-3].

Keywords: Ceropegia attenuata; Polymorphism; Western Ghats; Maharashtra.

Introduction

The *Ceropegia* sect. *Tilioris* established by H. Huber in Mem. Sco. Brot. [4] with type species *C. attenuata* Hook. It comprises c, 38 species in the world distributed mainly India and south-east Asia, Malaysia (New Guinea, Philippensis) to Northern Australia [5,6]. In India, It is represented by 13 species of which 12 are endemic to peninsular India [2]. During an intensive exploration in the (Konkan) Sindhudurg, Western Ghats of Maharashtra during June to August, 2020, Author came across an interesting population of *C. attenuata* Hook. On examination in field as well as laboratory, it was found to be undescribed species. It was not, however it is *C. attenuata* Hook. with dark brown spots on basal portion on either side and mouth of carolla lobs.

After the scrutiny of literature [1-3] and careful dissections and repeated examining the live specimen in field and in laboratory, revels that it is similar to *C. anantii* Yadav et al. [3] due to one dark purple spot on either side at base on each corolla lobs only present in *Ceropegia anantii* Yadav et al. [3] and not recorded in *C. attetuata* Hook. When Hooker [5] described *C. attenuata* Hook. based on collection of Dalzell from Bombay, Ghats near Vigorna (K000357705 & K000357706 image!) but Dalzell (on sheets) and Hooker [5] in protologue did not clearly mentioned about any dark brown spot in corolla lobs.

A critical examination and observation of reach population of low elevated hills and plateaus at Vaibhavwadi and Phonda Ghats shows 1 to 7 dark brown spots irregularly occurs on either side at base on each corolla lobs and mouth of corolla tube, spots unequal in sizes, connected each other in one line, corolla tube is green, greenish yellow, brown, sometimes.

corolla tube with one dark brown spot, lobs connate and free at tip in bunch of two or three may be braked due disturbance of cattle foraging, rarely or abnormally with four lobed corolla (Figure 1), outer carona entire to bilobed, hairy to glabrous margins and within, curved in inside when dry, yellow to purple to brown (colour variable at base, tip, sometimes margin purple and yellow within).

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Figure 1: Ceropegia attemuata Hook.: (a-j) - Variations in colour, shape and cage of Flower; (k)- Flower L.S.; (l-m) - Corona; (n)-Corona-top view.

Conclusion

- 1. Author studied *C. attenuata* Hook. from different parts of Konkan region of Western Ghats of Maharashtra, India and population study reveals that the nature, number and distribution of dark brown spots, outer carona are variable in *C. attenuata* Hook. which is located about 80 km away from its type locality. It is one of extremely polymorphic species of *Ceropegia* sect. *Tilioris* and those dark brown spots on corolla lobs and entire to bilobed outer carona lobs, its colour can be considered as ecological variation in *C. attenuata* Hook.
- 2. C. anantii Yadav et al. [3] which is allied to former species, it opined that C. anantii Yadav et al. 3] of Ceropegia sect. Tilioris may be confused with C. attenuata Hook. in future due to presence of dark brown spots on corolla lobs but population study on type locality (Salva hills, Vaibhavwadi, district Sindhudurg) indicates that C. anantii Yadav et al. [3] is quite distinct species with dark brown spot on basal portion on either side of

corolla lobs, narrow carolla tube with abruptly dilated basal part and distinctive light windows and distributed in higher altitudes.

Specimens examined

India: Maharashtra State. District Sindhudurg, Vaibhavwadi- Sangulwadi Road (now it was destructed for constructions) Paithane V. A. and Kashetii R. P. 110, Aug, 2016; Salva hills, Paithane V. A. and Kashetii R. P. 227, Aug, 2016; Phonda Water tank hills slops Paithane V. A. and Kashetii R. P.. 307, Sept. 2017; Bhorchiwadi Paithane V. A. and Mainkar A. A. 467, June 2020; Bhurchiwadi, Paithane V. A. & Mainkar A. A. 472, 15 Aug. 2020; Salva hills, Paithane V. A., Mainkar A. A. and Dighe A. R. 473, 474 Aug 16, 2020; Bombay, Ghats near Vigorna, s.d., NA. Dalzell s.n. (K000357705 and K000357705 images).

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References

- 1. Ansari MY. Flora of India. Fascicle 16. Asclepiadaceae: Genus-*Ceropegia*. Botanical Survey of India, Kolkata (1984).
- 2. Kambale SS, Yadav SR. Taxonomic revision of *Ceropegia* (Apocynaceae: Ceropegieae) in India, Rheedea 29 (2019): 01–115.
- 3. Yadav SR, Sardesai MM, Gaikwad SP. *Ceropegia anantii* (Asclepiadaceae), a new species from Western Ghats, India. Journal of Bombay Natural History Society 101 (2004): 141-143.
- 4. Huber H. Revision der Gattung Ceropegia. Memorias da Sociedadu Broteriana. Instituto Botanico da Universidade de Coimbra 12 (1957): 33.
- 5. Hooker WJ, Icones Plantarum 9: t. 867. Reeve and Co., London (1852).
- 6. Bruyns PV, Klak C, Hanacek P. Arevised, phylogenetically based concept of *Ceropegia* (Apocynaceae). South African Journal of Botany 112 (2017): 399-436.