

***Crocosmia* Planch - an addition to Iridaceae of Kerala, India**

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The petaloid monocot family Iridaceae with cosmopolitan distribution, especially in South Africa, Asia and Europe is represented by about 70 or 80 genera and ca. 2000 species. In India, it is represented by 15 genera, 35 species and five varieties (Bahali *et al.* 2004; Sunil & Pradeep 2011).

The family Iridaceae in Kerala is represented by two genera with one species each, viz., *Aristea ecklonii* Baker, *Eleutherine bulbosa* (Mill.) Urb. (Sasidharan 2004; Nayar 2006). While revising the Iridaceae of Kerala, a routine study of the specimens deposited in MH was done. It was apparent that the specimen (MH 62541) annotated as *Tritonia pottsii* from Idukki had not been mentioned in any of the literature dealing with the flora of Kerala. The specimen also matched correctly with the type sheet of *Crococsmia pottsii* deposited in K (K000321096). *Crococsmia* Planch., a genus of South Africa and Madagascar with about nine species (Mabberley 2008) had not been recorded by Karthikeyan *et al.* (1989). In Tamil Nadu, *Crococsmia pottsii* (McNab ex Baker) N.E. Br. was reported by Henry *et al.* (1989) based on the single sheet from Kodaikanal deposited in MH (MH 24490); while Matthew (1999) reported the well-known hybrid *C. X crocosmiiflora* (Lemoine) N.E. Brown also from Kodaikanal, but overlooked the occurrence of *C. pottsii*. Vikraman (2006) in his extensive work on the horticultural and ornamental plants of Kerala also had not recorded this species. Hence the present report confirms the occurrence of this taxon in Kerala State. Also, the name change in the taxa has effected a new generic record for the state of Kerala. A brief description along with figures are given for easy identification and confirmation. Specimens are deposited in the Madras Herbarium, Botanical

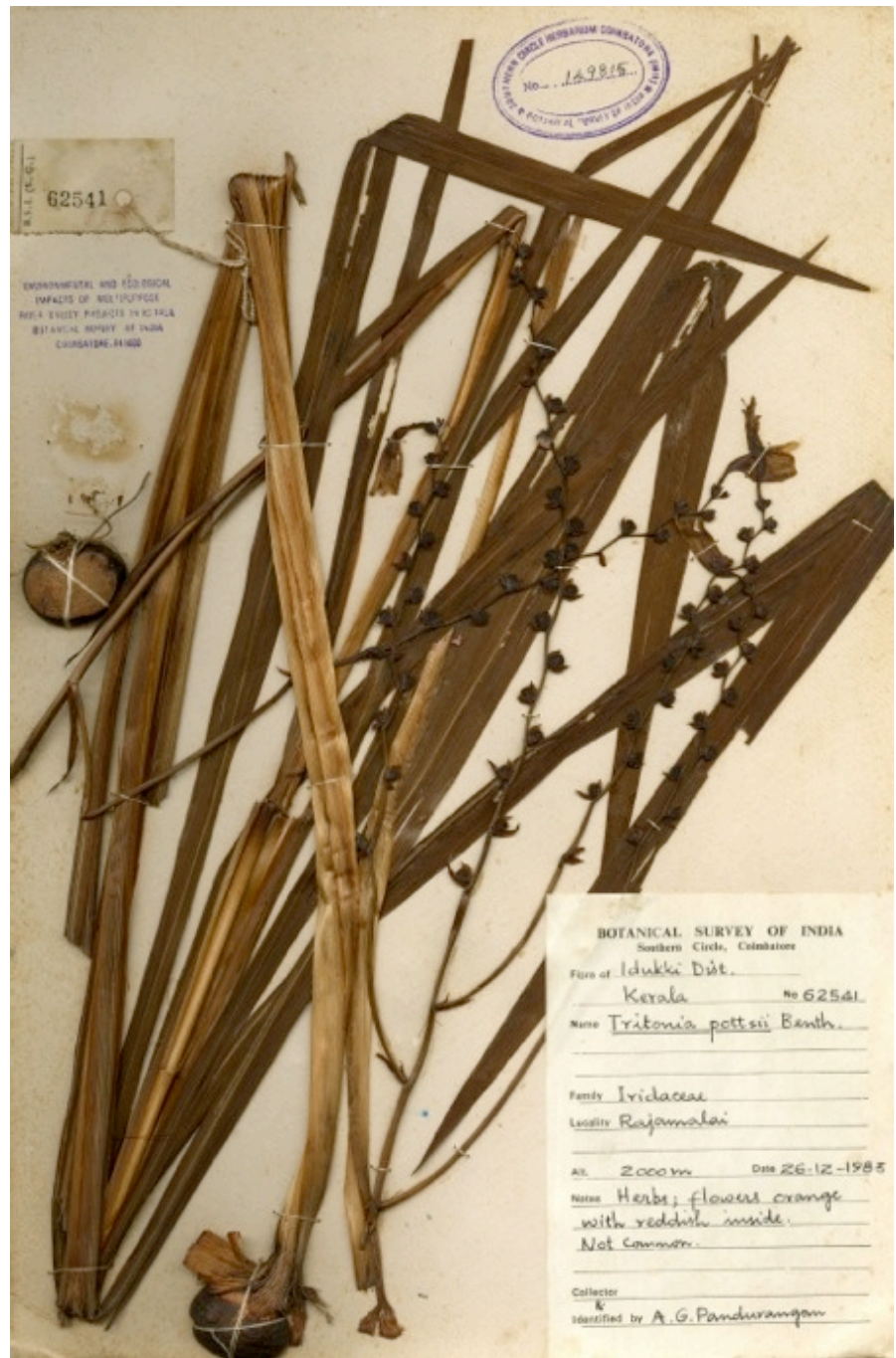


Image 1. Herbarium of *Tritonia pottsii* Benth

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Crococsmia pottsii

(McNab ex Baker) N.E. Br. in Trans. Roy. Soc. South Africa 20: 264. 1932; Chithra & Janarth. in A.N. Henry & al., Fl. Tamil Nadu Anal. 3: 32. 1989. *Montbretia pottsii* McNab ex Baker in Gard. Chron. 1877 (2): 424. 1877.

Tritonia pottsii (McNab ex Baker) Benth. ex Baker in Bot. Mag. 109: t. 6722. 1883. *Gladiolus pottsii* McNab ex Baker in Gard. Chron. 1877 (2): 424. 1877 *nom. inval.*

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Figure 1. *Crocosmia pottsii* (McNab ex Baker) N.E. Br. a - habit; b - branched inflorescence; c - flower-cut open; d - stigma-enlarged; e - overy-vertical section

Herb, up to 1.5m high. Bulbs globose, woody when dry, connected by a long thread-like rhizome. Stems slender when young, erect at maturity (Fig. 1, Image 1). Leaves basal and cauline, faintly plicate; basal leaves 4 or 5, sheathing at base, distichous rosette, up to 55x2.3 cm, linear-lanceolate, long acuminate at apex, greenish, moderately firm in texture; cauline leaves similar to basal ones, up to 65cm long. Peduncle associated with two or three leaves, but smaller. Panicle 30–45 cm long, with three to five ascending branches, holds up to twenty flowers each, reaches half-way down; spathe represent two small membranous valves, the outer lanceolate, the inner oblong, entire or faintly emarginated at apex, enclosing one sessile flower. Perianth infundibuliform, about 6cm long, bright deep yellow, more or less reddish on the outside; perianth segments 6, oblong, half as long as the tube. Stamens 3, contiguous, inserted half way in the perianth-tube; anther linear-lanceolate, ca 1x0.2 cm long, versatile, 2-lobed; filament tubular, ca. 2cm long. Style elongated with three short cuneate branches at apex; stigma slightly lobed with capitate or flattened apex. Capsule ovoid, obtusely angled, many seeded.

Specimens examined: 62541, 26.xii.1983, 2,000m, Rajamalai, Idukki District, Kerala, India, coll. A.G. Pandurangan; 24990, 27.vii.1965, 1,800m, Perumalmalai, Kodaikanal, Tamil Nadu, India, coll.

K.M. Sebastine.

Flowering & Fruiting: July-August.

Habitat: Along stream sides. As an escape.

Distribution: Tropical South Africa, Madagascar, Colombia, Europe (cultivated), India (probably introduced).

Notes: This plant was introduced to Edinburgh Botanic Garden by G.H. Potts, after whom it was named by McNab (Baker 1877; Hooker 1883). McNab had proposed the same species as *Gladiolus pottsii* which is considered invalid according to the rules of IBN. This plant is hybridised with *Crocosmia aurea* (Pappe ex Hook.) Planch. to get *Crocosmia* × *crocosmiiflora* (Lemoine) N.E.Br., an ornamental plant. The occurrence of *C. pottsii* in Western Ghats is of scientific and anthropological interest.

Acknowledgements:

Authors are grateful to Dr. G.V.S. Murthy, Sci. F & HOO, Botanical Survey of India, Southern Regional Centre, Coimbatore, for facilities and encouragement.

References

- Bahali, D.D., M. Sanjappa and S.P. Rath (2004).** Geographical Distribution of Iridaceae in India. *Indian Journal of Forestry* 27(3): 251–256.
- Baker (1877).** *Montbrettia pottsii*, pp. 424–425. In: The Gardeners Chronicle. Vol - VIII. London.
- Henry, A.N., V. Chitra and N.P. Balakrishnan (1989).** *Flora of Tamil Nadu. Analysis - Volume 3.* Botanical Survey of India, Coimbatore, 32pp.
- Hooker, J.D. (1883).** *Trittonia pottsii*, In: Curtis Botanical Magazine, vol 39. Tab 6722. London.
- Karthikeyan, S., S.K. Jain, M.P. Nayar and M. Sanjappa (1989).** *Florae Indicae Enumeratio: Monocotyledonae.* Flora of India Series 4. Botanical Survey of India, Kolkata.
- Mabberley, D.J. (2008).** *The Plant Book.* Cambridge University Press, Cambridge, U.K.
- Matthew, K.M. (1999).** *The Flora of Palni Hills, South India. Part 2.* Tiruchirappalli.
- Nayar, T.S., A.R. Beegam, N. Mohanan and G. Rajkumar (2006).** *Flowering Plants of Kerala - A Handbook.* Tropical Botanic Garden and Research Institute, Palode, Thiruvananthapuram, Kerala, India.
- Sasidharan, N. (2004).** *Biodiversity Documentation for Kerala, part 6: Flowering Plants.* Kerala Forest Research Institute, Peechi, Kerala, India.
- Sunil, C.N. and A.K. Pradeep (2011).** *Sisyrrinchium* (Iridaceae): A new genus record for India. *Rheedea* 21(2): 170–171.
- <http://apps.kew.org/herbcat/getImage.do?imageBarcode=K000321096>. Data from RBG Kew HerbCat database downloaded on 17 Sep 2013 at 11:38 BST
- Vikraman, R.R. (2006).** Systematic Studies and Landscape application of Ornamental Plants in Thiruvananthapuram District. PhD Thesis. University of Kerala.
- Zhao Yutang, H.J. Noltie and B. Mathew. (2000).** *Flora of China.* Missouri Botanical Garden Press, St. Louis 24: 297–313.