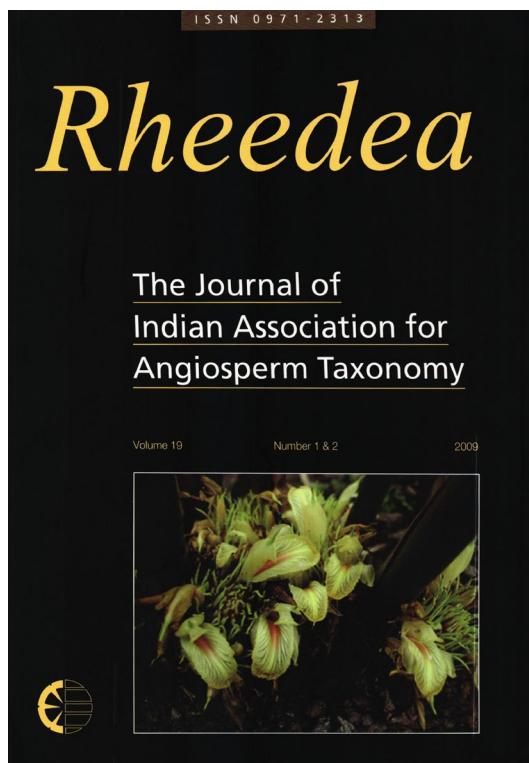


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# A New Species of *Eriocaulon* (Eriocaulaceae) from Maharashtra, India

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## Abstract

*Eriocaulon baramaticum* Shimpale, Bhagat, R. B. Deshmukh et S. R. Yadav a new species from Baramati Tahsil of Pune District of Maharashtra is described and illustrated. It is similar to *E. rajendrababui* R. Ansari & N. P. Balakr. and differs in having male flowers with two free sepals and eglandular petals.

**Keywords:** *Eriocaulon baramaticum*, New Species, Maharashtra, India

## Introduction

The genus *Eriocaulon* L. represented by c. 400 species is distributed in tropical and subtropical regions of both hemispheres (Mabberley, 2008). Karthikeyan *et al.* (1989) listed 72 species, 14 varieties and 1 forma from India. Systematic account on the genus in India by Ansari & Balakrishnan (1994) dealt 65 species to which several new species have been added in the last decade. Presently, the genus *Eriocaulon* is represented in India by about 90 species. Gaikwad & Yadav (2002) reported 40 species of the genus from Maharashtra State. Nine novelties have been added to the State of Maharashtra during last decade (Yadav *et al.*, 1998; Gaikwad *et al.*, 2002; Punekar *et al.*, 2003, 2004; Punekar & Lakshminarasimhan, 2004; Yadav *et al.*, 2008). During floristic survey of Baramati Tahsil of Pune district, some interesting specimens of *Eriocaulon* were collected. On critical analysis, they turned out to be a hitherto undescribed species, which is described and illustrated here.

***Eriocaulon baramaticum* Shimpale, Bhagat, R. B. Deshmukh et S. R. Yadav, sp. nov.**

**Fig. 1**

*Eriocauloni rajendrababui* R. Ansari & N. P. Balakr. similis, flore masculo sepalis 2 (rarissime 3) semper liberis, petalis sine glandula atra, floris feminei petalis 0.8 – 1.2 cm longis, seminibus apiculatis caudatis differt.

*Typus:* INDIA, Maharashtra, Pune District, Baramati Tahsil, Wagalgudi, 20.9.2007, Shimpale 5554 (Holotypus, CAL; Isotypii, BSI, MH, SUK).

Erect, annual, acaulescent herbs, 20 – 25 cm high. Leaves rosulate, linear, acuminate, up to 5 cm long, glabrous. Peduncles few to many, up to 20 cm long, virgate, angled below the receptacle. Sheaths 3 – 5 cm long, glabrous; limbs lanceolate, entire, acute. Heads ovoid, c. 2 mm across, grey or black; receptacles obpyriform, glabrous. Involucral bracts erect, 1.8 – 2 × 0.8 – 1 mm, elliptic-ovate, obtuse, dentate, chartaceous, glabrous. Floral bracts 2 – 2.5 × 0.5 – 1 mm, obovate, acute, entire, black or grey, few-haired at apex. Male flowers: subsessile; sepals 2 (rarely 3), free, 1 – 1.2 × 0.1 – 0.2 mm, falcate, acute, glabrous or with few hairs at apex; petals 3, elliptic-ovate, hyaline, subequal, obtuse, 0.2 – 0.3 × 0.1 – 0.2 mm, glabrous, eglandular; stipe with a black gland at mouth region; stamens 6; anthers black. Female flowers: subsessile; pedicels c. 0.1 mm long; sepals 3, free, subequal, falcate, acuminate, sparsely hairy at apex, 0.8 – 1.2 × 0.1 – 0.2 mm; petals 3, free, unequal, one petal slightly longer than others, 0.8 – 1 × 0.05 – 0.1 mm, two smaller up to 0.8 mm long, narrowly obovate, eglandular, almost glabrous or rarely with 2 or 3 hairs at apex, obtuse, hyaline; ovary ovoid-ellipsoid; style 3-fid. Seeds brown, elliptic, 0.3 – 0.4 × 0.1 – 0.2 mm, apiculate at base, tailed at apex;

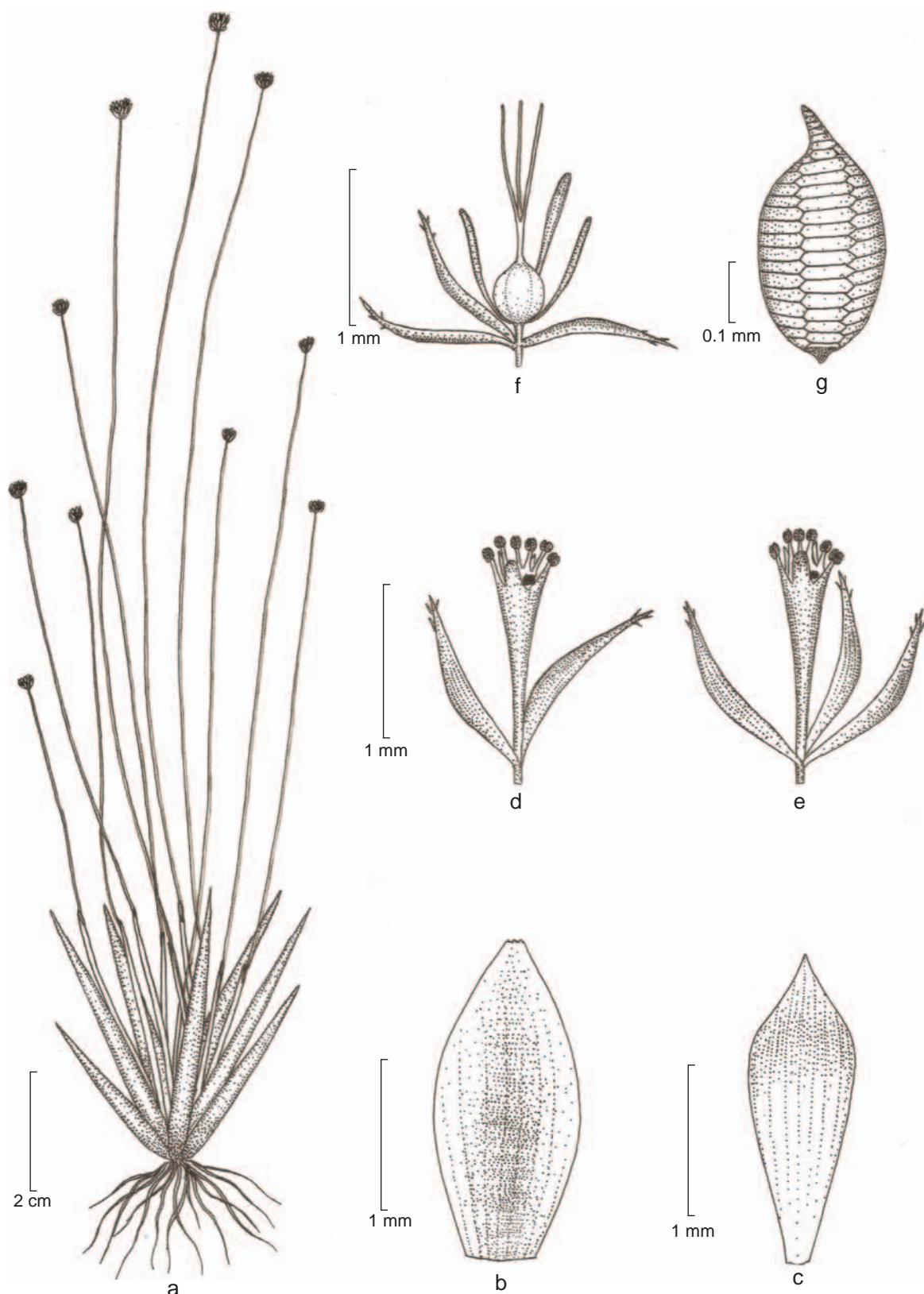


Figure 1. *Eriocaulon baramaticum* Shimpale et al. sp. nov.: a. Habit; b. Involucral bract; c. Floral bract; d, e. Male flowers; f. Female flower; g. Seed.

seed coat cells transversely elongated, arranged in vertical rows, without appendages.

Similar to *Eriocaulon rajendrababui* R. Ansari & N. P. Balakr. but differs in having male flowers with 2 free sepals (very rarely 3) and eglandular petals; petals of female flowers 0.8 – 1.2 mm long and tailed seeds (as against glandular petals in male flowers, 0.5 – 0.8 mm long petals in female flowers and non-tailed seeds in *E. rajendrababui*).

**Etymology:** The specific epithet '*baramaticum*' is after the type locality, Baramati in Pune District.

**Flowering & Fruiting:** September – December.

**Habitat:** Grows in open areas on the rocky beds of streams, associated with *Dichanthium annulatum* (Forssk.) Stapf, *Hoppea dichotoma* Willd., *Lindernia oppositifolia* (L.) Mukerjee, *Flaveria trinervia* (Spreng.) C. Mohr, *Echinochloa colona* (L.) Link, *Dipcadi saxorum* Blatt., *Fimbristylis* and *Eleocharis* species.

**Status:** Rare; presently known only from its type locality.

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#### Literature Cited

- Ansari, R. & N. P. Balakrishnan 1994.** *The Family Eriocaulaceae in India*. Bishen Singh Mahendra Pal Singh, Dehra Dun.
- Gaikwad, S. P. & S. R. Yadav 2002.** *Eriocaulaceae in Maharashtra*. In: Pullaiah, T. (Ed), *Biodiversity of*

*India* **1**: 256 – 341. Regency Publications, New Delhi.

**Gaikwad, S. P., Sardesai, M. M. & S. R. Yadav 2002.** A new species of *Eriocaulon* L. (Eriocaulaceae) from Maharashtra, India. *Rheedia* **12**: 133 – 136.

**Karthikeyan, S., Jain, S. K., Nayar, M. P. & M. Sanjappa 1989.** *Florae Indicae Enumeratio: Monocotyledonae*. Flora of India Ser. 4. Botanical Survey of India, Calcutta.

**Mabberley, D. J. 2008.** *Mabberley's Plant Book – A Portable Dictionary of Plants, their Classification and Uses* (Third Edition). Cambridge University Press, Cambridge, UK.

**Punekar, S. A. & P. Lakshminarasimhan 2004.** *Eriocaulon peninsulare* (Eriocaulaceae) – a new species from India. *Nord. J. Bot.* **23**: 173 – 175.

**Punekar, S. A., N. V. Malpure & P. Lakshminarasimhan 2003.** Five new species of *Eriocaulon* L. (Eriocaulaceae) from the Western Ghats, India. *Rheedia* **13**: 19 – 27.

**Punekar, S. A., Malpure, N. V. & P. Lakshminarasimhan 2004.** Three new species of *Eriocaulon* L. (Eriocaulaceae) from Peninsular India. *Sida* **21**: 625 – 635.

**Yadav, S. R., Gaikwad, S. P. & M. M. Sardesai 1998.** A new species of *Eriocaulon* L. (Eriocaulaceae) from India. *Rheedia* **8**: 145 – 147.

**Yadav, S. R., Potdar, G. G., Anil Kumar, A., Otaghvani, M. & Anand Sonkar 2008.** *Eriocaulon epedunculatum*, a new species of Eriocaulaceae from Western Ghats of India. *Kew Bull.* **63**: 503 – 505.

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