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Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org
ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

NOTE

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26 May 2017 | Vol. 9 | No. 5 | Pp. 10233–10235 10.11609/jott.2640.9.5.10233-10235



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EUPHORBIA ROYLEANA BOISS., (EUPHORBIACEAE) A NEW RECORD FOR THE EASTERN GHATS, INDIA

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Euphorbia L., is the largest genus in the family Euphorbiaceae and the sixth largest genus among flowering plants, consisting of around 2,000 species and occurring throughout the world chiefly in tropical, subtropical and warm temperate regions. The genus is represented by 84 species in India and addition of Euphorbia kadapensis Sarojin. & R.R.V. Raju (2014), E. gokakensis S.R. Yadav, Malpure & Chandore (2016), and E. seshachalamensis Prasad & Prasanna (2016). The genus stands at the top with 30 species endemic to India (Balakrishnan 1998; Binojkumar & Balakrishnan 2010).

During the present floristic studies in the Eastern Ghats of Odisha, flowering specimens of an unknown *Euphorbia* were collected from the region. After critical investigation of its diagnostic characters, the specimens were identified as *Euphorbia royleana* Boiss., hitherto unreported from the region (Images 1 & 2). On screening the relevant taxonomic literature (Saxena & Brahmam 1995; Binojkumar & Balakrishnan 2010), it was found that this species had no past record of its occurrence from anywhere in the Eastern Ghats. Therefore,

the present report of *E. royleana* is the first record for the region of the Eastern Ghats.

Euphorbia royleana Boiss.

in DC., Prodr.15(2):83.1862, nom. nov. pro. *E. pentagona* Royle, non Haw.1828; Brandis, For. Fl. northwestern India 438.1874; Hook.f., Fl. Brit.India 5:247.1887;



ISSN 0974-7907 (Online) ISSN 0974-7893 (Print)

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Parker, For. Fl. Punjab 445.1918; Duthie, Fl.U. Gangetic Pl.3:76.1903; Collett, Fl. Simlensis 446.1921; Brandis, Indian Trees 558.1921; Gamble, Man. Indian Timb.591.1922; Bor, Man. Indian For.Bot.172. 1953; Babu, Herb. Fl. Dehra Dun 459.1977; Bir & Sharma in Indian For.106:744.1980; Polunin & Stainton, Fl. Himalaya 112.1984; Almeida, Fl. Maharashtra IVB: 319.2003.

Description: Shrubs or small trees, 2-4 m tall with dense crown, glabrous, stems woody, branched; branches whorled above, 5-7 angled, slightly projected 5mm long, blackish; spines paired, divaricate 2-4 mm long. Leaves alternate, sub-sessile, obovate-oblanceolate attenuate at base, margin entire, apex mucronate, 4-10 by 2-4 cm, glabrous, fleshy, caducous, often absent when in flower, midnerve prominent. Cyathia sub-terminal and from internodal sinuses of branches, solitary, in diads or triads, the central one sessile, yellowish, primary peduncles 1-3 above the podarium, ca. 5mm long. Bracts ovate, acuminate, as long as involucre, membranous. Involucre turbinate, 3-4 by 4-5 mm, yellow, lobes 4, broad, fimbriate; glands 5, transversely oblong, ca. 3mm wide, ca. 1.5mm long. Staminate florets: pedicels ca. 1mm long, bracteoles laciniate, ca. 1.8 mm long, an-

Date of publication: 26 May 2017 (online & print)

DOI: http://doi.org/10.11609/jott.2640.9.5.10233-10235

Editor: N.P. Balakrishnan, Coimbatore, India

Manuscript details: Ms # 2640 | Received 31 February 2016 | Final received 09 April 2017 | Finally accepted 01 May 2017

Citation: Sarojinidevi, N. & R.R. Venkataraju (2017). Euphorbia royleana Boiss., (Euphorbiaceae) a new record for the Eastern Ghats, India. Journal of Threatened Taxa 9(5): 10233–10235; http://doi.org/10.11609/jott.2640.9.5.10233-10235

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Funding: UGC - No. F. No3-7/2011(SAP-II), Dt. 01.04.2011).

Competing interests: The authors declare no competing interests.

Acknowledgements: The first author thanks the University Grants Commission (UGC), New Delhi for financial support under SAP project (UGC Sanction Letter No. F. No3-7/2011(SAP-II), Dt. 01.04.2011). We thank the anonymous reviewers for their suggestions to improve this article, and Microsoft Corporation for the map used in this article.



Image 1. A - Distribution area of Euphorbia royleana; B - Close view of distribution

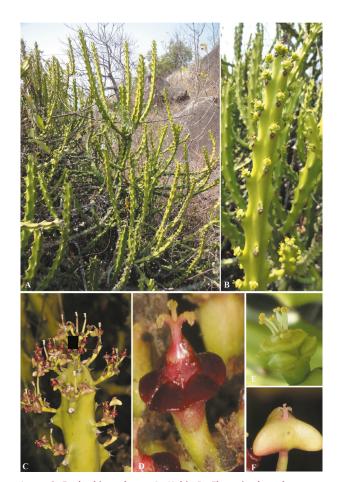


Image 2. Euphorbia royleana: A - Habit; B - Flowering branch; C - Branch with fruits; D - Cyathia; E - Staminate florets; F - Capsule. © A,B,E-- Sarojinidevi; © C,D,F - Navendu Page

thers sub-globose. Pistillate floret: gynophores 15mm long, ovary sub-ovoid, styles free from the middle, stigma shortly bifuricated. Fruits subglobose, trigonous with three compressed, obtuse cocci, 6–9 mm in diam., glabrous, greyish-green. Seeds sub-globose, 2–2.5 mm in diam., brown to pale black, ecarunculate.

Habitat: Rare in scrub forests and dry rocky hill slopes.

Specimen examined: 31440 (SKU), 23.ii.2016, near Balapur, Khurda District, Odisha, coll. N. Sarojini Devi, at Sri Krishnadevaraya University Herbarium, Anantapuramu District, Andhra Pradesh, India (Image 3).

Distribution: In India, the species is hitherto known in the states of Himachal Pradesh, Punjab, Uttarakhand, Arunachal Pradesh, Nagaland, Meghalaya, Tripura and Assam. The present exploration extends its distribution to southeastern peninsula from Odisha as an extension of distribution from the northern states. The present study reports that *E. royleana* is now found in the Eastern Ghats region also (Image 1).

Phenology: Flowering and fruiting; February–June.

Specimens consulted: The collected species is matched with the authentic herbarium specimens stored at CAL Herbarium: Balik, Arunachal Pradesh, Burkill, 30.i.1912, 350m, Burkill 36508 (CAL); Lakshimipur, Sadiya, Arunachal Pradesh, 24.viii.1909, Burkill 32682 (CAL); Bahshar, Nirt, Himachal Pradesh, 24.iv.1891, Lace 847 (CAL).

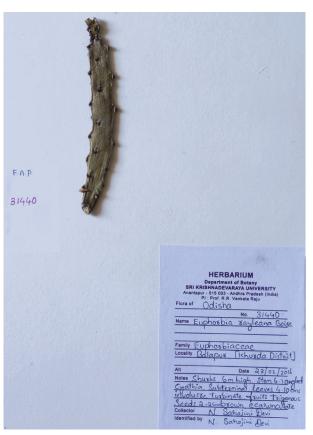


Image 3. Herbarium of Euphorbia royleana

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ISSN 0974-7907 (Online); ISSN 0974-7893 (Print)

May 2017 | Vol. 9 | No. 5 | Pages: 10141-10248 Date of Publication: 26 May 2017 (Online & Print) DOI: 10.11609/jott.2017.9.5.10141-10248

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