



## Rediscovery of an Endemic and Endangered Liana (*Uvaria eucineta* Bedd. Ex Dunn) From Odisha, India, After A Century

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**Abstract:** During plant exploration in Kuldiha Wildlife Sanctuary, Odisha an endemic and endangered liana *Uvaria eucineta* Bedd. ex Dunn (Annonaceae) rediscovered after a century which is presented here for easy identification and to take adequate measures for conservation.

**Keywords:** Endemism, Kuldiha, Liana, Odisha *Uvaria eucineta* Bedd. ex Dunn.

### Introduction

The state, Odisha is situated on the eastern coast of India. It is bestowed with varied physiographic conditions, moderately high rainfall, relative humidity and a fine network of perennial rivers providing congenial conditions for floristic diversity. Till date over 3000 angiosperms and pteridophytes have been recorded from the state, which represents 20 percent of the total floristic elements of India (Saxena & Brahmam 1990). During an exploration trip in December 2013 under the project Flora and Ethnobotany of Balasore district, an interesting *Uvaria* species (Figure.1) was collected. After a critical scrutiny with the original description and the type specimen available at the BSI herbarium, CAL as well as the relevant literature its identity has been confirmed as *Uvaria eucineta* Bedd. ex Dunn. The voucher specimen of the same is deposited at the Herbarium of the Central Botanical Laboratory, BSI, Howrah and other specimens to CAL, Howrah.

This species was described in 1914 on the basis of three specimens collected by R. H. Beddome in 1880 from Goosur, Russelkonda and Kurcholi hill forests of Ganjam district, Odisha. Since the type collection in 1880, it has not been reported from anywhere else in Odisha, including Ganjam district and type locality. So far throughout the last century and no specimen are found deposited in the major BSI herbaria, viz. CAL & MH. The species is treated under endangered category in the Red Data Book of Indian plants (Nayar & Sastry 1988) and IUCN 1997 publication of

threatened plants (IUCN 1997). Biswal & Manoj (2008) treated this plant prioritized threatened species for conservation efforts. The present collection of this plant species indicates the extension of distribution from Ganjam to Balasore district. *Uvaria eucineta* grows in hill forest at about 700 m in the Eastern Ghats. During the course of this survey the authors could locate three individual lianas at three different sites in Kuldiha wildlife sanctuary, Balasore. In all these three locations this species grows in association with *Strophanthus wallichiana* and *Anodendron paniculatus*. Presently efforts are on to relocate the species from the Kuldiha wildlife sanctuary to ascertain the population size as well as to collect seeds of this interesting species to raise seedlings and transplant subsequently to the similar microhabitats of Kuldiha wildlife sanctuary and also in different botanic gardens. Relocation of the habitat has been a necessary task to protect this liana from its probable extinction.

### *Uvaria eucineta* Bedd. ex Dunn in Bull. Misc. Inf. Kew 1914:182.1914

Liana. Leaves oblong, 11.5-18.5x3.0-6.5 cm, oblong, shortly acuminate, rounded at base, rusty-pubescent beneath when young, later on glabrous; nerves 12-15 pairs; petiole 6-10mm long. Flowers solitary, leaf opposed, pendulous; peduncles ca. 1m long, thick, tuberculate. Calyx globose, splitting irregularly, often connate at base; sepals 3, rounded at apex, ca. 1.2 cm across, scabrid with rusty tubercles, stellate-tomentose. Petals 6 (3+3), ca. 1.5-2.0x1.0cm; ovate

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rounded at apex united at base, tomentose. Stamens many in staminate flowers, ca. 2 mm long; connective truncate, subglobose at apex, fleshy. Carpel many, multiovulate. Ripe carpel oblong, 1.0-1.5x0.8-1.2 cm, rusty tomentose stalks of 0.5-1 cm long. Seeds many, biseriate.

**Flowering:** December – February; Fruiting: March - May

**Specimens examined:** Sujana K. A. 34476 (CAL); Dhole P. Arvind 32421 (CAL); R. Saravanan 33426 (Central Botanical Laboratory, BSI)



**Fig. 1:** *Uvaria eucincta* Bedd. ex Dunn

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