

## ***Uncaria sessilifructus* Roxb. (Rubiaceae): A new generic record for Odisha, India.**

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**Abstract:** The genus *Uncaria* (Rubiaceae) has about 40 species with most species native to tropical Asia, three from Africa and the Mediterranean and two from the neotropics. *Uncaria sessilifructus* Roxb. finds its distribution in Indian subcontinent, China & Vietnam. Similipal Biosphere Reserve in the state of Odisha is a grand repository of Flora and Fauna. The occurrence of certain Himalayan taxa in this region is of great phytogeographical significance. *Uncaria sessilifructus* Roxb. is reported as new distributional record for Odisha from Similipal Biosphere Reserve. Occurrence of this taxon adds to phytogeographical uniqueness of the region and the state of Odisha in India. Correct botanical nomenclature, brief description, with photographs of the taxon have been provided for easy identification.

**Keywords:** Deccan Peninsula, Distribution, Himalayan element, Phytogeography, Similipal, *Uncaria*.

### **Introduction**

Similipal biosphere reserve is one of the seventeen biosphere reserves of India. This biosphere lies between 20° 17' to 22° 34'N latitude and 85° 40' to 87° 10' E longitude and situated in the northern tract of Odisha state. It is a part of Northern plateau and has continuity with Chhotanagpur plateau of Bihar state. According to biogeographic classification by Rodgers and Panwar (1988) Similipal has been placed under Mahanadian biogeographic region, Chhotanagpur biogeographic province and Deccan Peninsula biogeographic zone of India. However, Similipal represents features of all the four Biotic Provinces for which the state of Odisha is the junction. These provinces are Eastern plateau, Chhotanagpur, lower gangetic plain and the coastline. Similipal lies almost on the tropic of Cancer. It is a high plateau with steep slopes all around its lenticular outline overlooking the plain surfaces. Its large area, table land and hilly terrain varying in altitude from 40 MSL to 1168 MSL bestow upon it an unparalleled array of habitat types including tropical semi-evergreen, moist-deciduous, dry deciduous with their numerous sub-types making it a vast repository of diverse wild genes with wide adaptability to diverse climatic and ecological conditions prevailing there.

Haines (1921-25) explained that occurrence of Himalayan elements on South India hills were relicts of the time when the hills of Odisha were much higher and served as stepping stones for the migration of species from the high lands of Deccan peninsula to the newer Himalayas and *vice-versa*. Mooney (1950) one of the pioneer workers in Odisha and Bihar also expressed that some of the aforementioned elements are relicts from an earlier cooler climate & some are through migration effected by birds. Similipal biosphere reserve is a phytogeographic enigma as compared to other regions of the Deccan peninsula.

Recent study reveals that the floristic of the state is not fully understood though sporadically approach by Gamble (1915-36), Haines (*l.c.*), Mooney (*l.c.*), Saxena & Brahman (1994-96), Mishra (2004) and others. In connection with the study entitled "Quantitative assessment of phytodiversity and phytoresources of forests of Mayurbhanj, Odisha" *Uncaria sessilifructus* Roxb an interesting Himalayan element belonging to family Rubiaceae have been reported from Similipal.

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***Uncaria sessilifructus* Roxb. Fl. Ind. I: 520.1820; Hook. f. Fl. Brit. India 3:30.1880; Sing et al. (eds.), Fl. Manipur 1:492.2000.**

Extensive, woody climbers; hooks axillary, paired, recurved; young branches quadrangular, sparsely hirtellous. Leaves opposite, broadly elliptic, elliptic-oblong or elliptic-ovate, 5-16 x 3-7.5cm, glabrous above, glaucous beneath, cuneate at base, entire, apex abruptly acuminate, coriaceous. Inflorescence axillary or terminal, heads 6-15mm in diam.; bracts deltoid, upto 5 mm; peduncles 3-6 cm; bracteoles linear-lanceolate, upto 2 mm. Flowers sessile; calyx lobes minute, upto 2.5 mm, obconic; corolla cream coloured, tubular, upto 10 mm, lobes oblong, silky; stamens 5; ovary ellipsoid. Capsules sessile, ellipsoid, pubescent. Fig.1



**Fig.1:** *Uncaria sessilifructus* Roxb.; a. Habit & Habitat, b. Herbarium

**Fl. & Fr.:** December - February

**Ecological notes:** Rare, climbing on trees in semi evergreen forests.

**Distribution:** India (W.B., Sikkim, Assam, Tripura, Manipur, Nagaland, Arunachal Pradesh), Bangladesh, Bhutan, Burma, China, Vietnam.

#### Specimens examined:

Odisha: Similipal, Mayurbhanj, A. K. Biswal, 1293 (20.12.2009), Herbarium, North Orissa Univ. and Biswas, 1976 (26.02.34); Maheswari, 5032 (23.11.62); Mukherjee, 4567 (06.11.58); Mazumder & Dutta, 250 (14.05.67); Meebold, 6339 (Nov. 1907) at Central National Herbarium, Kolkata. (CAL).

#### Discussion

The genus *Uncaria* has about 40 species (*Uncaria* At) with most species native to tropical Asia, three from Africa and the Mediterranean and two from the neotropics (Mabberley, 2008). *Uncaria sessilifructus* Roxb. finds its distribution in Indian sub continent, China & Vietnam. Thus, new distributional record of the taxon from Similipal adds to phytogeographical uniqueness of the region and the state of Odisha in India.

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