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# *RICCIOCARPOS* CORDA (HEPATICAE) FROM MALDAH DISTRICT, WEST BENGAL: A NEW GENERIC RECORD FOR GANGETIC PLAIN

SHEO KUMAR, JAGDISH LAL AND PRATIBHA GUPTA
*Botanical Survey of Inda, Indian Botanic Garden, Howrah-711 103*

ABSTRACT

Genus *Ricciocarpos* Corda (Family Ricciaceae) has been recorded for the first time from the Gangetic Plain of West Bengal. The same has been described along with the ecological notes and associated aquatic macrophytes.

## INTRODUCTION

Family Ricciaceae is represented by two genera, namely *Riccia* L. and *Ricciocarpos* Corda in Indian Hepatic flora. *Riccia* L. is a cosmopolitan genus and distributed in all the bryo-geographical units of India (except Andaman and Nicobar Islands), whereas *Ricciocarpos* Corda is restricted in its distribution in only Western and Eastern Himalaya and South India (Deb, 1954; Kashyap, 1929; Lal and Singh, 1993; Tewari and Pant, 1994).

The vast expanse of Gangetic Plain, extending from the Himalayan foothills to Bay of Bengal, passes through densely populated townships, industrial belts and rich arable land. The hepatic vegetation is very poor in this area and only five thalloid liverwort genera are known to occur in this region. These are *Asterella* Beauv. (1), *Plagiocahasma* Lehm. & Lindenb. (1) and *Mannia* Opiz (1) of family Aytoniaceae, *Cyathodium* Kunze (2) of family Cyathodiaceae and *Riccia* L. (9) of family Ricciaceae. *Riccia* L. is the dominant genus with 9 species in Gangetic Plain. The discovery of genus *Ricciocarpos* Corda, a rare taxon from this area is very significant. The same is presented in this paper.

## TAXONOMIC DESCRIPTION AND DISCUSSION

**Ricciocarpos natans** (L.) Corda in Opiz, Beitz. Zur. Nat., 12: 651. 1829; Kash., Liverw. West. Himal. Panjab Pl. 1: 89-90. 1929. *Riccia natans* L., Syst. Nat. Ed., 10: 1339. 1759. (Plate I)

Thalli, thick, dichotomously branched with broadly obovate lobes, margins deep purple; dorsal surface with conspicuous polyhedral markings and simple pores; pores minute, surrounded by 6 cells as slightly thickened walls. Ventral scales long, pendant with serrated margins, deep purple. Rhizoids absent. Sterile.

*Habitat and Ecology :* Free floating aquatic in freshwater swamps with blackish yet clear odorless water having 6.5 pH growing in association with *Azolla pinnata* R. Br., *Ceratophyllum demersum* L., *Eichhornia crassipes* Solms, *Enhydra fluctuans* Lour. Fl. Cochinch., *Hydrilla verticillata* Presl,*Ipomoea aquatica* Forssk., *Ludwigia perennis* L., *Marsilea minuta* L., *Nymphaea nouchali* Burm.

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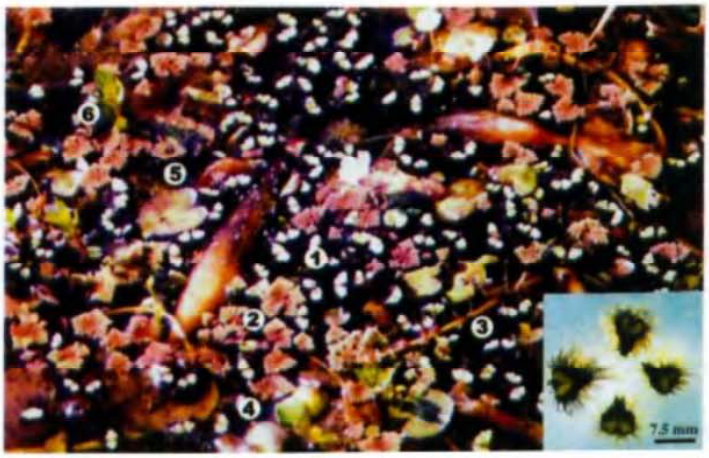



Plate-I : 1. *Ricciocarpos natans* (L.) Corda in association with other aquatic macrophytes and in inset magnified view of thallus showing general morphology (Scale Bar = 7.5 mm), 2. *Azolla pinnata* R. Br., 3. *Ludwigia perennis* L., 4. *Eichhornia crassipes* Solms, 5. *Nymphaea nouchali* Burm. *f.* 6. *Enhydra fluctuans* Lour. Fl. Cochinch. and other forms.

f. and *Vallisneria spiralis* L. in Garhal bil, Maldah District, West Bengal, collected by Dr. Sheo Kumar and Dr. Pratibha Gupta, Field No. 45.

*Distribution :* Kashmir (Dal Lake), Uttaranchal [Kumaon (Bhimtal and Nainital), Garhwal (Chamoli-Dewartal)], Manipur (Loktak Lake) and South India.

The discovery of genus *Ricciocarpos* Corda from Gangetic Plain is very significant and this new locality bridges the gap in its range of distribution within India. It was floating on surface of stagnant water of the bil like sparkling stars in the sky, sterile and rare. It is represented by only one species namely *R. natans* (L.) Corda in Opiz and is included under the category of rare taxa with narrow ecological range and restricted distribution in India. Years ago, the water logging area in Garhal bil was about 5 km$^2$ (as per SI, 1975) with greater water depth and rich bio-diversity. However, now a day, its extent has reduced considerably in terms of area, depth and the bio-diversity owing to extensive paddy cultivation after draining out of water by pumping. The habitat of the species is, therefore, under great anthropogenic pressure putting a question mark on the long-term survival in its present location.

## ACKNOWLEDGEMENTS

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## पश्चिमी बंगाल के मालदाह जिले से *रिक्सिओकार्पस* कोर्डा (हेपाटिसी) गांगेय मैदान से एक नया जेनेटिक अभिलेख

शिव कुमार, जे. लाल एवं पी. गुप्ता

सार संक्षेप

पश्चिम बंगाल के गांगेय मैदान से पहलीबार जीनस *रिक्सिओकार्पस* कोर्डा (कुल रिक्सिएसी) का अभिलेख हुआ है। पारिस्थितिकीय टिप्पणियों एवं संगत जलीय मेक्रोफाइट्स के साथ उसका वर्णन किया गया है।