

RESEARCH NOTE

A NEW SPECIES OF THE OSTRACODA GENUS *NEOSINOCY THERE* FROM THE LOWER MIOCENE BEDS OF LAKHPAT, KACHCHH

Abstract : A new species of the genus *Neosinocythere* Huang is described and illustrated. The present finding extends the geographic distribution and stratigraphic range of the genus.

Keywords : Ostracoda, Micro-Paleontology, Miocene, Kachchh, Gujarat

Introduction: The ostracode genus *Neosinocythere* was introduced by Huang Bao-Ren (1985) from the Quarternary bottom deposits of North Bohai sea. Subsequently Zhao and Whatly (1989) did the taxonomic revision of one of the species of Kingma (1948) from the Late Cainozoic of Indonesia and transferred it to the genus *Neosinocythere*. Recently Varma *et al.* (1993) described and illustrated a species *Neosinocythere dekrooni* (Kingma) from the recent marine waters of Tekkali Creek, East coast of India.

The ostracodes from the Lower Miocene beds of Kachchh have been studied in detail by Lyubimova *et al.* (1960), Tewari and Tandon (1960), Guha (1961, 1974), Khosla and Haskins (1980), Khosla *et al.* (1986) and Mehra and Khosla (1987).

However, the present study of ostracodes from the Lakhpat region reveals the presence of ostracodes genus *Neosinocythere*. The present note extends the geographic and geological limit of the genus and describes a new species.

The specimens of the new species comes from Lower Miocene beds exposed in a nala section, about 7 kilometers SE of Lakhpat Fort, Kachchh (Fig.1).

Systematics:

- Subclass : OSTRACODA Latreille, 1806
- Order : PODOCOPIDA Muller, 1894
- Superfamily : CYTHERACEA Baird, 1850
- Family : SINOCYTHERIDEA Huang, 1985
- Genus : NEOSINOCY THERE Huang, 1985

Neosinocythere lakhpatensis n. sp.

Plate 1, Figs.1-5

Name: After the Lakhpat Fort, Lakhpat, Kachchh.

Material: 71 carapaces and 34 valves.

Type level and locality: Fossiliferous yellowish-brown clay, Lower Miocene, Lakhpat, Kachchh, India.

Description: Carapace elongate, subtrapezoidal in lateral outline; greatest height at anterior cardinal angle; sexual dimorphism distinct, males being more elongate and less high than females; left valve larger than the right valve; dorsal margin straight, sloping down posteriorly; ventral margin nearly straight, produced posteriorly in a small caudal process; anterior margin obliquely rounded; posterior margin truncated in upper half, lower

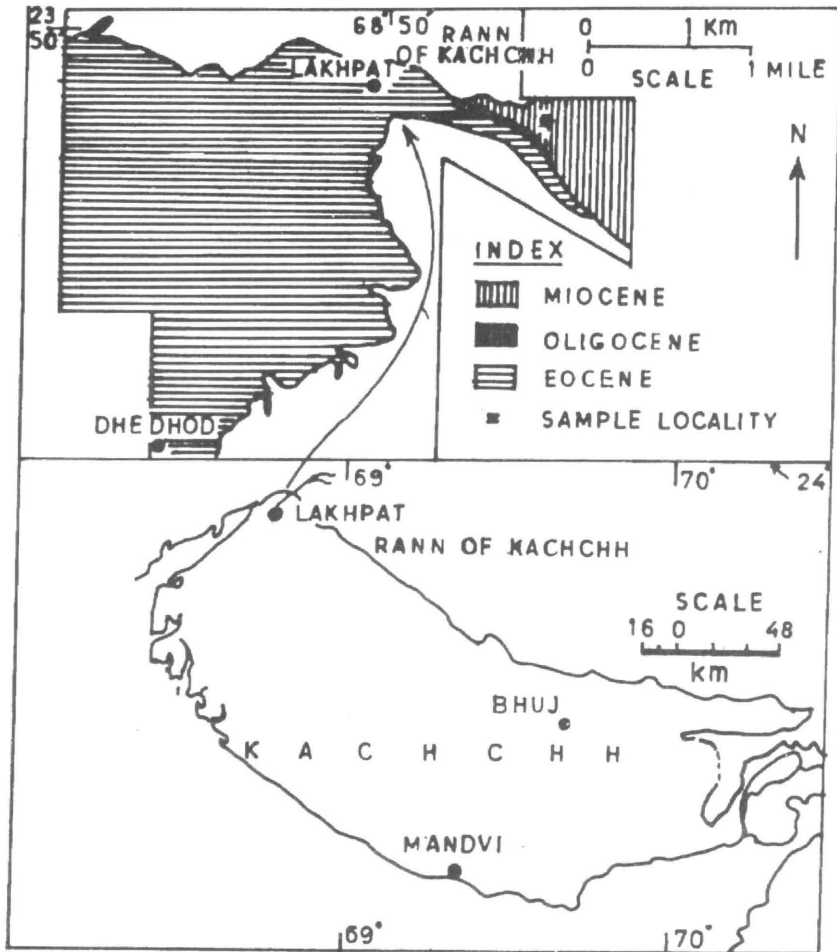


Fig.1. Geological map of a part of north-eastern Kachchh and Location of the sections studied.

portion produced in a small caudal process; in dorsal view carapace sagitate, with maximum width slightly posterior to middle. Valve surface ornamented by ridges and shallow reticulation; one ridge commences from anterior hinge ear and extends slightly away from anterior margin and then continues near ventral margin; another prominent ridge present in median region; both median and ventral ridges join at posterior region; rest of the carapace either smooth or with shallow reticulation.

Inner lamella of moderate width; line of concrescence and inner margin coincide; selvage subperipheral. Marginal pore canals 4-5 along anterior margin. Hinge holamphidont, in right valve it consists of a stepped crenulate tooth, followed by a socket and then a posteromedian groove and a posterior crenulate tooth.

Dimensions (mm)	Length	Height	Width
Holotype (No. ML 19), male left valve	0.48	0.20	—

Paratype I (No. ML 20), female carapace	0.44	0.22	0.22
Paratype II (No. ML 21), female right valve	0.42	0.22	—
Paratype III (No. ML 22), female carapace	0.46	0.24	0.24

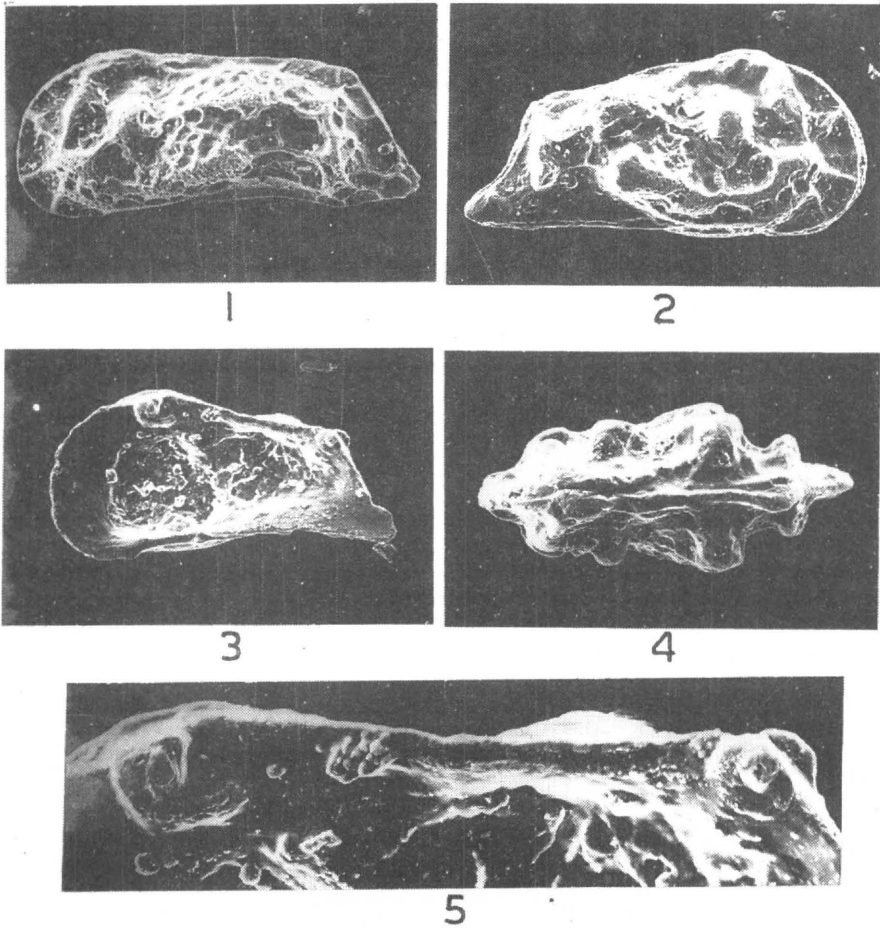


Plate.1. 1-5. *Neosinocythere lakhpatensis* n. sp. 1. Holotype (No. ML 19), a male left valve, lateral view, X122. 2. Paratype I (No. ML 20), a female carapace, right valve view, X134. 3, 5. Paratype II (No. ML 21), a female right valve. 3. Internal view, X121. 5. Hinge element X415. 4. Paratype III (No. ML 22), a female carapace, dorsal view, X120.

Discussion: The present species closely resembles *Neosinocythere dekrooni* (Kingma) described by Zhao and Whately from the Late Cainozoic of Indonesia, in overall lateral outline but clearly differs in the details of surface ornamentation.

Repository : The specimens described in this note are deposited in the Paleontology Laboratory, Department of Geology, M.L. Sukhadia University, Udaipur.

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*Dept. of Geology,
M.L. Sukhadia University,
Udaipur - 313 001*

M.L. NAGORI

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