

Family CYTHERIDAE Baird, 1850

Subfamily CYTHERINAE Baird, 1850

Genus LOXOCYTHERE Hornibrook, 1952

TYPE SPECIES: *Loxocythere crassa* Hornibrook, 1952.

Loxocythere crassa Hornibrook, Pl. 1, Figs. 20–22

1952. *Loxocythere crass* Hornibrook; N.Z. geol. Surv. paleont. Bull. 18: 30–1, Pl. 2, Figs. 26–31.

OBSERVED RANGE: Although *Loxocythere crassa* is based on Recent specimens, Hornibrook (1952a) considered that the species could be traced back in the Tertiary to Hutchinsonian. In the present investigation its range has been extended to Middle Otaian.

Family LEPTOCYTHERINAE Hanai, 1957

Genus CALLISTOCYTHERE Ruggieri, 1953

TYPE SPECIES: *Cythere littoralis* Mueller, 1894.

Callistocythere hanai n.sp., Pl. 2, Figs. 26–28

DESCRIPTION: Carapace sub-quadrangular, laterally compressed. Maximum height in the anterior third. This species is dominated by a system of large, rounded ridges, which although generally similar in size, do, over the number of specimens examined, display minor variations in shape. Inner lamella wide, especially antero-ventrally. Selvage parallel to the outer margin. Line of concrescence very wide anteriorly. Marginal pores straight and simple, generally short. Hingement: left valve with a lower ridge containing small teeth, above which is a thin faintly crenulated groove which widens into terminal sockets. These sockets are open towards the inner margin. Normal pores small and few in number.

DIMENSIONS OF HOLOTYPE: Length, 0.65mm; height, 0.41mm; width, 0.16mm.

TYPES: N.Z. Geological Survey Cat. No. TO1006. Holotype and two paratypes.

TYPE LOCALITY: Map sample 8. Grid ref. S68/989123. N.Z. Fossil Record No. S68/1138.

TYPE LEVEL: 225ft below the top of the Gowan Hill Sandstone. Hutchinsonian to Awamoan.

REMARKS: Although many species of *Callistocythere* have been described which display these systems of ridges, particularly by Ruggieri (1962) and Hanai (1957), *Callistocythere hanai* n.sp. appears to be the only species as yet described with few, prominent ridges.

Genus MUNSEYELLA van den Bold, 1957

TYPE SPECIES: *Toulminia hyalokystis* Munsey, 1953.

Munseyella rectangulata n.sp., Pl. 2, Figs. 29–30

DESCRIPTION: Carapace sub-rectangular, posterior compressed. Dorsal and ventral margins almost straight, anterior depressed to form an acute angle with the ventral margin. Carapace dominated by an antero-marginal furrow. A few shallow reticulations occur over the entire carapace. Inner lamella broad anteriorly and postero-ventrally. Selvage parallel to the outer margin. Anterior vestibulum large. Marginal pores straight, few in number. Hingement: right valve with a large, smooth, posterior tooth. Anterior tooth also large and slightly lobate. On the inside of each tooth is a socket. Median hinge element is a crenulate groove which is covered in the middle by a flange which extends over it from the dorsal margin. Normal pores numerous and evenly distributed.

DIMENSIONS OF HOLOTYPE: Length, 0.68mm; height, 0.34mm; width, 0.13mm.

TYPES: N.Z. Geological Survey Cat. No. TO1007. Holotype and six paratypes.

TYPE LOCALITY: Map sample 5. Grid ref. S68/991121. N.Z. Fossil Record No. S68/1141.

TYPE LEVEL: 80ft below the top of the Gowan Hill Sandstone. Hutchinsonian to Awamoan.