Thus there are now two species of *Salenocidaris* known from the vicinity of New Zealand; the present record (approximately 120 miles east of North Cape) establishes *S. hastigera* in the deep sea echinoderm fauna of New Zealand, and the known distribution of this species is extended to include the Malay archipelago, Indian Ocean and New Zealand, in 370–2,565 metres.

Order ARBACIOIDA

Coelopleurus sp.

Material Examined: Station 56, 33° 58′ S., 172° 07′ E., 140–190 fathoms (252–342 metres), five fragments of primary radioles.

REMARKS. The radiole fragments appear to belong to a representative of genus *Coelopleurus*. Members of this genus are characterised by possessing slender, slightly curved primary radioles, which are triangular in cross-section, with a median keel on the upper side. The shaft is smooth, shining, due to the presence of a well developed cortex layer. On some of the uppermost radioles the cortex is apparently never developed (Mortensen, 1935).

The largest radiole here is 145mm long, with a base triangular in cross-section, each side of the triangle being 4mm across. The radiole tapers gradually, and at its distal extremity (where it is broken) is approximately oval in cross-section. Two smaller fragments of length 110mm and 76mm are similar to that described, but the smallest fragments (70mm and 52mm) differ in that they appear to lack the smooth, shining cortex. Apparently these are the "uppermost radioles" to which Mortensen (1935) refers.

All but the smallest fragments are heavily encrusted in epizoans, including serpulid worms, bryozoans, and cirripedes. The radioles are white, those without a cortex layer yellowish-white.

These radioles cannot be assigned to a known species, but their great length serves as a guide for future investigations. The only species which has radioles approaching the size of the present fragments is *C. floridanus* Agassiz, in which the primary radioles may exceed 130mm in total length. This species is known from the West Indies north to Cape Hatteras on the American east coast. In the Indo-west-Pacific, no known species have primary radioles which exceed 100mm in length. Probably the present material represents a new species. While most species are centred about Japan and the East Indian region, one, *C. australis* Clark, is known from Australia. The present record, off Three Kings Islands, adds another northern genus to the known bathyal fauna of the New Zealand region.

Order TEMNOPLEUROIDA

Pseudechinus variegatus Mortensen. Plate V, fig. 1.

Pseudechinus variegatus Mortensen, 1921, p. 167, figs. 12, 14, 16, Pl. VI, figs. 21–21, Pl. VII, figs. 19–23; Lambert & Thiery, 1925, p. 672; Mortensen, 1943, p. 243, fig. 131.

Material Examined: Station 53, 33° 56′ S., 172° E., 440–450 fathoms (792–810 metres), 2 naked tests.

REMARKS. The two tests are small, with aboral surfaces damaged, so that no details of the apical system can be given. Dimensions:

	Horizontal Diameter mm	Height mm	Peristome mm
1.	13.0	8.5	6.5
2.	8.0	5.0	5.0