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**DIAGNOSIS OF A NEW SPECIES OF NEOLITHODES  
(CRUSTACEA: ANOMURA: LITHODIDAE) FROM  
NEW ZEALAND (NOTE)**

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SUMMARY

A new stone crab, *Neolithodes brodiei* sp.nov., known from an ovigerous female taken in 455 fm (832 m) on the Campbell Plateau, is characterised and distinguished from the five species previously recognised. It is morphologically close to the North Atlantic *N. agassizii* and the South African *N. asperimus*.

Among material examined while preparing an account of the stone crabs (Family Lithodidae) of the New Zealand region, a single specimen of *Neolithodes* has been found which is clearly specifically distinct from the five members of the genus now recognised. Work in progress on this family in New Zealand, Japan and North America makes necessary a brief statement on this new form, enabling its name to become systematically available.

Genus *Neolithodes* A. Milne Edwards & Bouvier, 1894

***Neolithodes brodiei* sp.nov.**

A large stoutly-built, robustly-spined and thorny stone crab with elongate flattened legs. Dorsal surface of rostrum with a small pair of spines at its base immediately behind and to the side of the pair of strong, obliquely-projecting basal spines. Carapace bears about 10 major dorsal branchial spines and about 15 major marginal branchial spines on each side.

HOLOTYPE: Ovigerous female, NZOI Sta. F 135. New Zealand Oceanographic Institute, Reg. No. H 106.

DIMENSIONS: Length of carapace (including rostrum) c. 130 mm, (to base of orbit) 112 mm. Width of carapace (excluding lateral spines) 104 mm.

TYPE LOCALITY: NZOI Sta. F 135, Lat 50° 58' S, Long. 173° 57' E Campbell Plateau, 455 fm (832 m), *Globigerina* ooze, small Agassiz trawl, Campbell Plateau Cruise, HMNZS Endeavour, 30 January 1965.

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## DISCUSSION

*Neolithodes brodiei* differs from *N. capensis* Stebbing, 1905, *N. diomedea* (Benedict, 1895) and *N. grimaldii* (A. Milne Edwards & Bouvier, 1894) in having numerous thorns (secondary, small, acute spines) scattered between the major spines on the carapace and over the dorsal surface of the merus of the walking legs; from *N. agassizii* (Smith, 1882) and *N. asperrimus* Barnard, 1946, in having a pair of small spines at base of rostrum on dorsal surface and in having the walking legs very much flattened in cross section with dorsal and ventral surfaces almost parallel.

The New Zealand *Neolithodes*, with its thorny carapace and walking legs, is morphologically close to *N. agassizii* from the eastern coast of the United States and to *N. asperrimus* from off South Africa. *Neolithodes* is now known from deep-water in the North Atlantic, and in the Southern Ocean off South Africa, New Zealand and South America. Further discussion of *N. brodiei* will be contained in a future account of the New Zealand Lithodidae now in preparation.

The species is named after Mr J. W. Brodie, Director of the New Zealand Oceanographic Institute, in recognition of his leadership in New Zealand marine science.

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