

Chapter 6

Freshwater crustaceans of the Nakorotubu Range, Ra and Tai- levu Provinces, Fiji.

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SUMMARY

A total of 12 decapod crustacean species from four genera and three families were collected during this RAP; (Varunidae: *Varuna*; Atyidae: *Atyopsis*, *Caridina*; and Palaemonidae: *Macrobrachium*). The number of taxa is less than those previously reported. This may be due to the lack of adequate sampling equipment for the habitats surveyed, such as electro-fishing gear as well as the lack of intensive survey due to time limitations.

INTRODUCTION

The crustacean fauna of Fiji is relatively poorly known with very few studies on the crustacean fauna within Fiji. George (1971) reported on the Spiny Lobster Survey in Fiji. Choy (1983, 1984, 1991) recorded a total of 9 *Macrobrachium* spp., 2 *Palaemon* spp., 11 *Caridina* spp., and one species each of *Antecaridina*, *Atyoidea* and *Atyopsis*. Marquet et al. (2002) compared the freshwater crustacean fauna of Vanuatu with Fiji.

A Rapid Assessment Program (RAP) was conducted between 30 November to 10 December 2009 in the Nakorotubu range of Viti Levu. This report deals with the crustacean fauna that were collected during this RAP. All materials studied have since been deposited in the Zoological Reference Collection (ZRC), Raffles Museum of Biodiversity Research, National University of Singapore with duplicates to be sent to the SPRH and Marine Biodiversity Collection centre at the University of the South Pacific, Fiji.

MATERIALS AND METHODS

Collection of the specimens were carried out using various kind of nets including minnow traps (Plate 14), which were employed mainly at night; hand collection (Plate 15) where even the smallest hand nets are not accessible; nets (Plate 16), and tray nets (Plate 17). Some of the specimens were also collected by artisanal spear fishing (Plate 18)

The habitats of the sampling sites were freshwater streams with rock and boulders on the sides, the bottom was sandy, or covered with small rocks or pebbles and gravels. The rivers were usually shallow (e.g. Station 7, Plate 21), certain region of the river were relatively deep. Some parts of the river were peppered with numerous riffles (Station 10, Plate 22). The width of the river ranged from very narrow (Station 7) to very wide (Station 10). Some of the rivers had cascades with rock pools (Station 5, Plate 20) while some were more or less even.

The detailed sampling station codes, localities and associated data are listed in Appendix 6.

RESULTS

A total of 12 decapod crustacean species from four genera and three families were collected from this RAP. The number of taxa is less than those previously reported. This may be due to the lack of adequate sampling equipment for the habitats surveyed, such as electro-fishing gear as well as the lack of intensive survey due to time limitations.