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Regional Variation in Riblet Frequency in the *Ptychodon*
(*Ptychodon*) *hectori-hunuaensis* Complex (Mollusca:
Charopidae)

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Abstract

RIBLET frequency in the first post-nuclear whorl has been studied in samples involving the *Ptychodon* (*Ptychodon*) *hectori-hunuaensis* complex. These were collected at 80 localities from the North Cape in the far North to the Nelson District in the north of the South Island. Although intra-zonal variation is considerable, regression lines calculated from North-South zones indicate clinal tendencies.

INTRODUCTION

RIBLET frequency is a statistic commonly employed in the systematics of terrestrial Mollusca. Variation in post-nuclear whorl counts in single populations of a number of New Zealand genera has been studied (Cumber, 1960) and utilized in a revision of the genus *Phenacohelix* (Cumber, 1961). More recently (Cumber, 1962) riblet frequency studies in a species of the genus *Charopa* revealed regional patterns with some hint of a latitudinal cline. The present study was carried out to determine whether the genus *Ptychodon* showed similar tendencies. The statistic employed is the riblet count of the first post-nuclear whorl, which may be readily determined in all but a few of the older specimens. The materials utilized were taken by the author during the past 20 years and involve some 80 collection sites ranging from North Cape to the Nelson district. The species may be collected readily from leaf, etc., held up in the axils of *Rhopalostylis*, *Astelia* and *Freycinetia*, but occur in most forest litter—especially that held up off the ground in ferns and moss.

RESULTS

Text-fig. 1 indicates the sampling sites, numbers of specimens examined, and the range in riblet count, the sites being grouped into five zones. Four of these comprise North to South divisions of the North Island, the fifth being the Nelson district of the South Island. Text-fig. 2 sums the frequencies within successive zones and indicates the presence of a second species in zones 3-5. Text-fig. 3 shows frequencies for individual samples involving the two species. Text-fig. 4 indicates frequencies encountered in zone 1 (species 1). Fig. 1 shows specimens from a northern low frequency population (species 1), and specimens from a population involving the two species.