

The Bryofauna of Remote Coastal Labrador: including a review of current Canadian records

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Abstract

Nematodes, tardigrades and bdelloid rotifers were identified from moss samples collected from sites near three remote towns in northern, coastal Labrador, Canada. Twenty-three nematode genera, 18 tardigrade species and six rotifer species were identified. All findings were new records for Labrador and many were new records for Canada including three nematode genera (*Zeldia* Thorne, *Daptonema* Cobb and *Steineria* Mikoletzky) and two species of rotifer (*Macrotrachela punctata* Murray and *Macrotrachela aculata* Murray). Canadian bryofaunal studies are reviewed and distributional patterns for Canadian taxa are discussed.

Key words: Nematoda, Tardigrada, Rotifera, range extensions

Introduction

Canadian bryophilous animals have received little ecological attention and initial surveys are lacking for many regions (Potter & McKeown, 2003). This study focused on three dominant groups of bryofauna, *i.e.*, nematodes, tardigrades, and bdelloid rotifers (*e.g.*, Kinchin, 1987, 1989, 1990) from Labrador. We first review studies of each group in Canada and then discuss the methods and results of a recent survey of bryofauna in Labrador.

The published literature on Canadian studies of soil and litter nematodes (Table 1) are mainly restricted to papers about economically important species, with a few detailing preliminary biological surveys or using nematodes as indicators of environmental impact *e.g.* British Columbia (Hayes *et al.*, 1999; Panesar *et al.*, 2000, 2001; Forge & Simard,