

# Trichinella spiralis Owen, 1835 in American minks (*Neovison vison* Schreber, 1777) and wild rodents (Muridae and Cricetidae) in Chile.

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## Abstract

Trichinellosis is a worldwide disease that is considered emerging and neglected. Several hosts have been recognized around the world, however, there is a lack of knowledge of the role of free-range mammals in Chile. Herein we examined 555 individuals among American minks (*Neovison vison* Schreber, 1777. n = 100) and several myomorph rodent species (Muridae and Cricetidae. n = 455) from southern Chile with artificial digestion and molecular analyses. Rodents were captured in agricultural and wild protected areas, while minks were captured in mixed agricultural and unprotected wild areas. One rat (0.24%) in the Ñuble Administrative Region and seven minks (8.2%) in the Los Ríos Region were infected with *Trichinella spiralis* Owen, 1835. Our results suggest that native rodents are of low or null importance in the reservoir of *T. spiralis* in Chile. Conversely, our results suggest that *T. spiralis* is circulating in minks, but with low prevalence. Further studies are needed to assess whether minks are maintaining *T. spiralis* life cycle or are a dead-end host of this parasite in Chile. This study represents the first record of *T. spiralis* in a mustelid mammal in South America, increasing the number of free-range species that could participate in the reservoir.

## Hosted file

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