

Pseudoterranova cattani sp. nov. (Ascaridoidea: Anisakidae), a parasite of the South American sea lion *Otaria byronia* De Blainville from Chile

Pseudoterranova cattani sp. nov. (Ascaridoidea: Anisakidae), un parásito del lobo marino común *Otaria byronia* De Blainville en Chile

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ABSTRACT

The parasitic nematode *Pseudoterranova cattani* sp. nov. is described from the stomach of the South American sea lion *Otaria byronia* De Blainville, sampled along the coastline off central-south Chile, between 1980 and 1997. The adult and larvae of this species have been previously reported in the Southeastern Pacific Ocean as *Phocanema decipiens* Myers. Major differences with species from the North Atlantic and Northwest Pacific are based on the body size, number, distance and size of caudal papillae.

Key words: Ascaridoidea, Anisakidae, new species, *Pseudoterranova*, *Otaria byronia*, South American sea lion, Chile.

RESUMEN

Se describe al nemátodo parásito *Pseudoterranova cattani* sp. nov. encontrado en el estómago del lobo marino común *Otaria byronia* De Blainville, en muestras tomadas entre 1980 y 1997, a lo largo de la costa del centro-sur de Chile. Las larvas y adultos de esta especie han sido registrados en el océano Pacífico sudoriental como *Phocanema decipiens* Myers. Las principales diferencias con las especies del Atlántico norte y del Pacífico noroccidental se basan en el tamaño corporal y en el número, tamaño, distancia y proporciones de las papilas caudales.

Palabras clave: Ascaridoidea, Anisakidae, especie nueva, *Pseudoterranova*, *Otaria byronia*, lobo marino común, Chile.

INTRODUCTION

The codworm *Pseudoterranova decipiens* (Krabbe 1878) was formerly believed to be a worldwide distributed species. However, it is already known that is a species complex composed by at least five species, with minimal morphological and clearcut genetic differentiation (Di Deco et al. 1994, Mattiucci et al. 1998, Paggi et al. 1991, 1998). The only taxonomic study on *Pseudoterranova* in the Southern Pacific is the redescription of *P. decipiens* s. l. in *Otaria flavescens* Shaw (= *O. byronia* De Blainville, see Oliva 1988) (Cattan & Carvajal 1980). These authors mentioned the difficulty in distinguishing species and described the morphometry and general arrangement of caudal papillae. They were

able to discern on the shape of the caudal end of the spicule in adult males, but not on the detailed distances and ratios between the caudal papillae. SEM of *in vitro* cultured *P. decipiens* s. l. cephalic region with lips denticle distribution, and caudal region showing spicules, post anal plates and post anal papillae have been published (Carvajal et al. 1981). In the southeastern Pacific Ocean, off the Chilean coastline, allozymic and morphometric analyses revealed an undescribed *Pseudoterranova* species that was found as the adult stage in the South American sea lion *O. byronia*, and also as larvae in several fish prey species (George-Nascimento & Llanos 1995).

We describe herein this nematode and name it *Pseudoterranova cattani* sp. nov. in the honor of Dr. Pedro E. Cattan, Universidad de Chile, who

was the first to report and study the taxonomy of this parasite in Chile.

MATERIAL AND METHODS

Between 1980 and 1997, fifty five specimens of the South American sea lion were sampled between Cobquecura and Chiloé (between ca. 36 and 39° S), Chile, and examined for nematodes. Fifteen *Pseudoterranova* males and 15 females were examined for each morphometric variable from the material recovered. They were cleared in

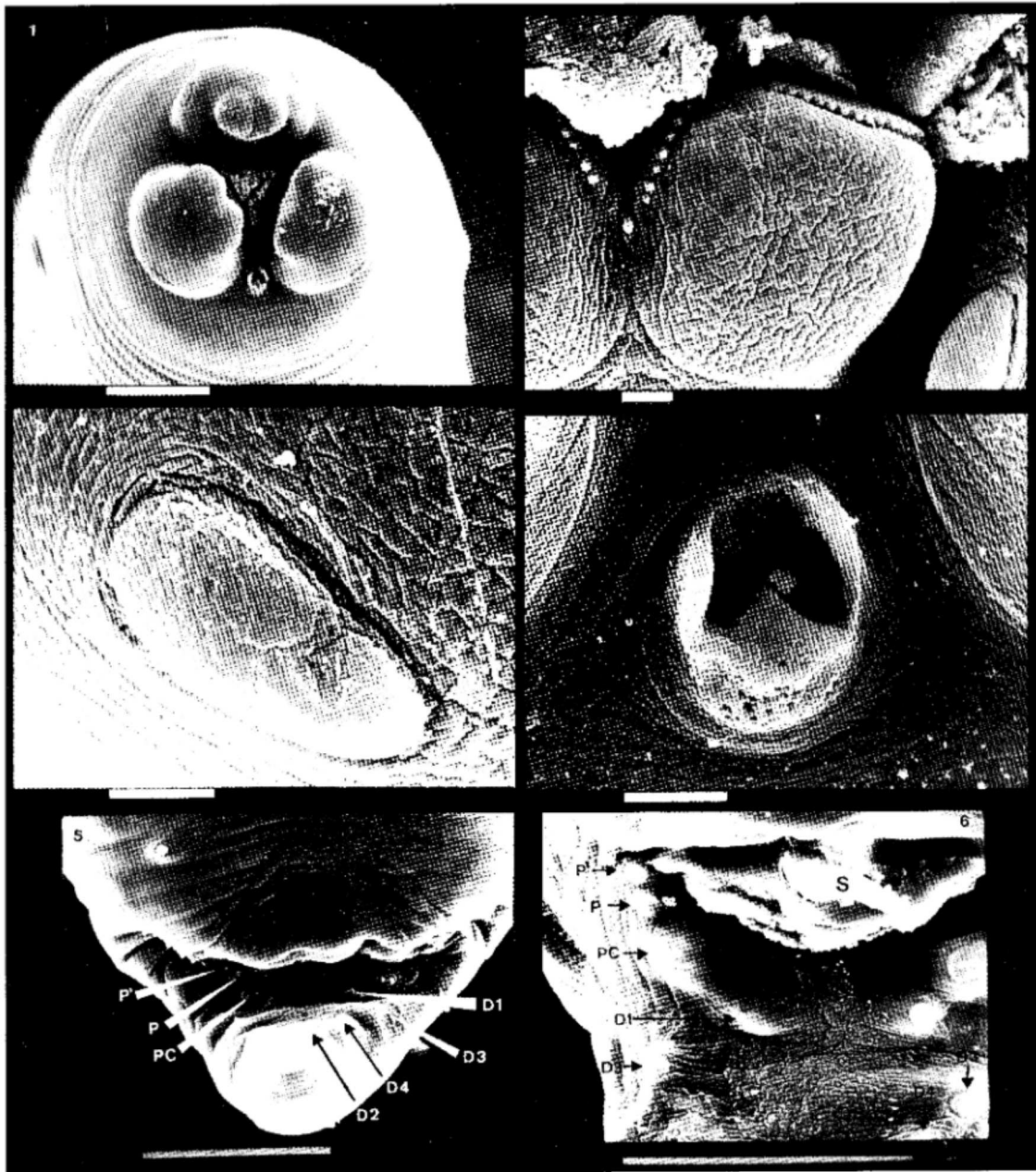


Fig. 1. Pseudoterranova cattani. 1: head, frontal view (100 μ m), 2: Denticle ridge in the lips (10 μ m), 3: lip papilla (10 μ m), 4: excretory pore (10 μ m), 5: male tail (100 μ m), 6: Postcloacal papillae (100 μ m). Codes of papillae as in Table 1, s= spicule.

Pseudoterranova cattani. 1: cabeza, vista frontal (100 μ m), 2: Borde de dentículos en los labios (10 μ m), 3: papila labial (10 μ m), 4: poro excretor (10 μ m), 5: cola del macho (100 μ m), 6: Papilas postcloacales (100 μ m). Códigos de papilas como en Tabla 1, s= espícula.