

# Arthropods (Acari, Mallophaga, Siphonaptera) collected from *Procyon lotor* (Linnaeus, 1758) (Mammalia, Carnivora, Procyonidae) in Poland

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**ABSTRACT.** From 9 specimens of *Procyon lotor* collected in vicinity of Dobroszyn and Górzycza (Lubuskie province) 61 arthropods of 6 species were obtained: Siphonaptera (one specimen), Acari (3 species), Phthiraptera (one specimen – *Trichodectes octomaculatus*; new species to fauna of Poland) and one specimen of Psocoptera.

**Key words:** *Procyon lotor*, arthropods, ectoparasites, faunistic, Poland

## Introduction

The raccoon, *Procyon lotor* is the permanent element of the Polish fauna [1]. The most numerous population of this species is found in Warta Mouth National Park [2, 3]. So far, ectoparasites associated with *P. lotor* have not been studied in Poland. In this paper 6 species were found on this host. *Trichodectes octomaculatus* is new species to the fauna of Poland.

## Material and methods

From 9 dead *Procyon lotor* collected in the vicinity of Dobroszyn and Górzycza (Lubuskie province) 61 specimens of arthropods were obtained. Raccoons were collected on the side of the roads: Kostrzyń-Witnica and Kostrzyń-Słubice between October 2007 and August 2008. The collection sites were adjacent to the protection zone of the Warta Mouth National Park. All dead *P. lotor* were deposited in the Department of Zoology and Ecology of Wrocław University of Environmental and Life Sciences.

All found arthropods were stored in 75% ethanol, then mounted in Berlese's liquid, and identified under a microscope.

## Results

### Siphonaptera

Family Pulicidae Billberg, 1820

1. *Ctenocephalides felis* (Bouché, 1835)

Material: one male

In Poland it is common species. Its main host is *Felis catus* Linnaeus, 1758, but in the rural areas it has also been frequently collected from *Canis familiaris* Linnaeus, 1758. Moreover, it was found on *Homo sapiens* Linnaeus, 1758 and *Rattus* sp. [4]. In USA this species was found on *P. lotor* and *Didelphus virginianus* Kerr, 1792 [5, 6].

### Phthiraptera

Family Trichodectidae Kellogg, 1896

2. *Trichodectes (Stachiella) octomaculatus* (Paine, 1912)

Material: 22 females, 14 males, 13 juveniles

This species is associated with *P. lotor* and earlier was known only from North America. Later it was introduced into Europe together with raccoons. Now it is known from Belgium [7]. Probably occurs in all European countries where lives *P. lotor*. New to the fauna of Poland.

### Acari

Family Laelapidae Berlese, 1892

3. *Hypoaspis (Alloparasitus) oblonga* (Halbert, 1915)

Material: one female

Free-living species, rare in Poland. It was found in moss, under bark and in nests of rodents. First record from mammals in Poland.

Family Hirstionyssidae Evans et Till, 1966

4. *Echinonyssus isabellinus* (Oudemans, 1913)

Material: two females

In Poland, this species is widely distributed and was collected from a many rodents and insectivorous [8]. It never was found on Carnivora. In USA it was collected from *P. lotor* [9].

Family Ixodidae Murray, 1877

5. *Ixodes hexagonus* Leach, 1815

Material: 7 larvae

In Poland, this species mainly was found in southern part of the country. It is the first record from the Lubuskie province. Among hosts are mentioned: *Erinaceus* sp., *Mustela putorius* (Linnaeus, 1758), *M. nivalis* (Linnaeus, 1758), *Meles meles* (Linnaeus, 1758), *Castor fiber* (Linnaeus, 1758), *Clethrionomys glareolus* (Schreber, 1780), *Mus musculus* (Linnaeus, 1758) *C. familiaris* and *Ovis aries* (Linnaeus, 1758) [10].

### Psocoptera

Undetermined species

Material: one specimen

Undetermined species was collected from *P. lotor*. All Psocoptera are free-living species. In Poland from mammals only undetermined Psocoptera was found on *Nyctalus noctula* (Schreber, 1774) [11].

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