

Acarina of Saudi Arabia

Hypopi of Hypoderidae (Acarina: Sarcoptiformes) Parasites of the White Pelican in the Arabian Gulf, Saudi Arabia

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Abstract: Endoparasitic hypopi of the Sarcoptiform bird mites *Phalacrodectes (P.) punctatissimus*, (1 specimen) and *Pelecanectes apunctatus* (19 specimens) were collected in the air sacs of *Pelecanus onocrotalus* at Damman in April 1981.

حلميات المملكة العربية السعودية

الاطوار الصائمه (Hypopi) لعائلة Hypoderidae (عناكب: مرتبه Sarcoptiformes)

المتطفله على البجع الحوملي الابيض في الخليج العربي ، المملكة العربيه السعوديه

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خلاصه: جرى جمع نموذج واحد للطور الصائم لنوع من الحلميات المعروف باسم *Phalacrodectes (P.) punctatissimus* و 19 نموذجا من الطور الصائم لنوع *Pelecanectes apunctatus* وكلاهما من الطفيليات الداخليه من مرتبه Sarcoptiformes وجدت في الاكياس الهوائية لطير البجع الحوملي الأبيض في الدمام في أبريل سنة 1981م.

During investigations of viruses in Argasid ticks (*Ornithodoros muesibecki*, Hoogstraal) on the coastal islands of the Arabian Gulf in 1981 (HOOGSTRAAL and BAFORT, 1982), one author (J.M.B.) had the opportunity to examine a pelican shot in the fishing harbour of Damman and brought by students to the Department of Biology of King Faisal University. On necropsy hypopical stages of hypoderid mites were found in the respiratory tract.

FAIN and BAFORT (1966, 1967) have shown that the hypopi parasites of subcutaneous tissues of pigeons belong to a family of free living sarcoptiform mites: Hypodectidae and not to a plumicole species: *Falculifer rostratus* Buchholz. More recently FAIN (1968) proposed a new name for the family of parasitic hypopi of birds: Hypoderidae.

Two species of hypopi were collected in the air sacs of the bird. No specimens were seen in the lungs or in the subcutaneous tissues at first examination; however, the body of the bird was disposed off before a more thorough examination could take place. In this paper we are reporting a new host for two species of mites and the first record of parasitic hypopi in birds in Saudi Arabia.

1. *Phalacroctes (Peledectes) punctatissimus* Černý, 1969

1 specimen from 1 *Pelecanus onocrotalus*, Damman, Eastern Province, Saudi Arabia, 12 april 1981. Until now, *P. occidentalis occidentalis* and *P. occidentalis carolinensis* Gmelin were known as hosts of this species (ČERNÝ, 1969; PENCE and COURTNEY, 1973).

Length: 970 μ , Width 445 μ . There are only minor differences in relation to the redescription of that species given by PENCE and COURTNEY (ibid.): the setae h and sh are shorter (60 and 75 μ , for more than 110 μ in *P. punctatissimus*; the tarsus IV is shorter (8,5 μ , for an average of 12 μ in *P. punctatissimus*).

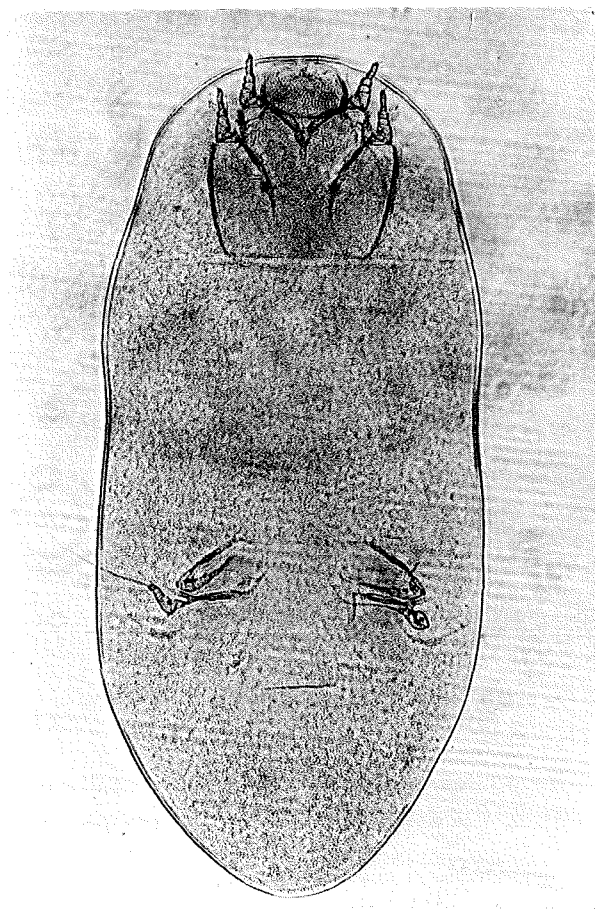


Fig. 1: Photomicrograph of endoparasitic hypope. *Phalacroctes punctatissimus* (x 115).

2. *Pelecanectes apunctatus* Pence and Courtney, 1973

19 specimens from one *P. onocrotalus*, Damman, Eastern Province, Saudi Arabia, 12 april 1981. Until now *P. occidentalis carolinensis* was known as host of this species (PENCE and COURTNEY, 1973). One of our specimens is 570 μ long and 330 μ wide.

The basal spine of tarsus IV is thinner and longer than reported in the original description of the

species, and the ga and gm setae are distinctly longer (approximately 100 μ).

The specimens are deposited in the Koninklijk Museum voor Midden Africa at Tervuren and in the private collections of the authors.

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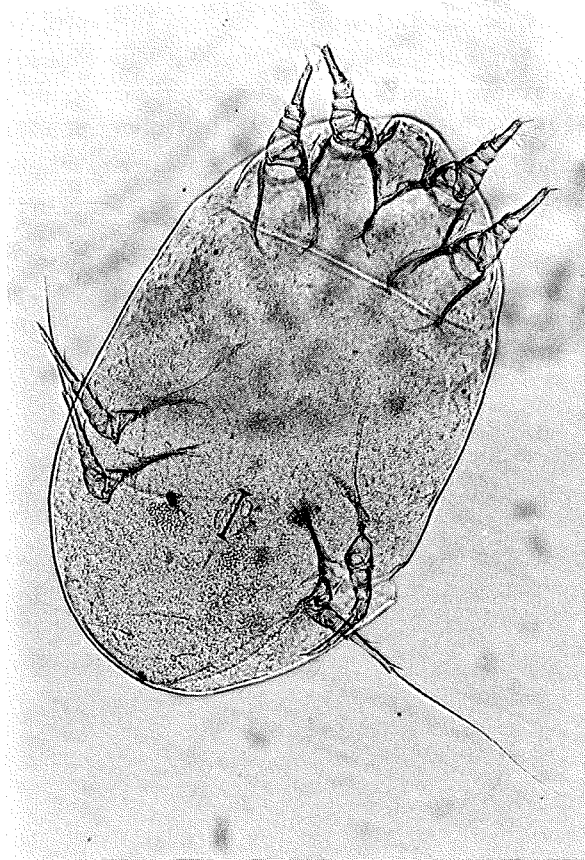


Fig. 2: Photomicrograph of endoparasitic hypope. *Pelecanectes apunctatus* (x 145).

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