



The identity of *Neopsittaconirmus palaeornis* (Eichler) (Phthiraptera: Philopteridae) from *Psittacula derbiana* (Psittaciformes: Psittacidae), with a new synonymy

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Neopsittaconirmus palaeornis was originally described by Eichler (1943: 114; as *Pflegeriella palaeornis*) based on a single male from the Derbyan Parakeet, *Psittacula derbiana* (Fraser). Eichler (1943: 114) also examined a female, which appears to belong to the same species, found on a Blue Magpie *Urocissa erythrorhyncha* (Boddaert), almost certainly an accidental host. In his review of the genus *Neopsittaconirmus*, Guimarães (1974: 186) placed *Pflegeriella palaeornis* in that genus, and wrote: “Eichler’s description of this species is too deficient, and I had no specimens from the type-host.” Therefore, Guimarães was not able to describe it and compare it against the remaining species of *Neopsittaconirmus*.

Referring to *Neopsittaconirmus palaeornis*, Sychra (2006: 64) wrote: “The inadequate original description of this species and the loss of the type material make it impossible to know the identity of this species.” Accordingly, Sychra (2006: 65) excluded *N. palaeornis* in his key to the species of *Neopsittaconirmus*. However, we have recently been able to locate and examine the holotype of *N. palaeornis*, deposited at the Museum für Naturkunde, Humboldt-Universität Berlin, Germany.

The aim of this paper is to redescribe and illustrate both sexes of *N. palaeornis* and to place *N. difficilis* Guimarães, 1974 as a junior synonym of *N. palaeornis*.

Neopsittaconirmus palaeornis (Eichler, 1943)

(Figs. 1–4)

Pflegeriella palaeornis Eichler, 1943: 114. Type host: *Psittacula derbiana* (Fraser).

Neopsittaconirmus palaeornis (Eichler, 1943); Hopkins & Clay, 1952: 238.

Neopsittaconirmus lybartota difficilis Guimarães, 1974: 141. Type host: *Psittacula alexandri fasciata* (Stadius Müller)—**New synonymy.**

Neopsittaconirmus paleornis [sic] (Eichler, 1943); Guimarães, 1974: 186.

Neopsittaconirmus difficilis Guimarães, 1974; Price, Hellenthal & Palma, 2003: 200.

Neopsittaconirmus palaeornis (Eichler, 1943); Price, Hellenthal & Palma, 2003: 200.

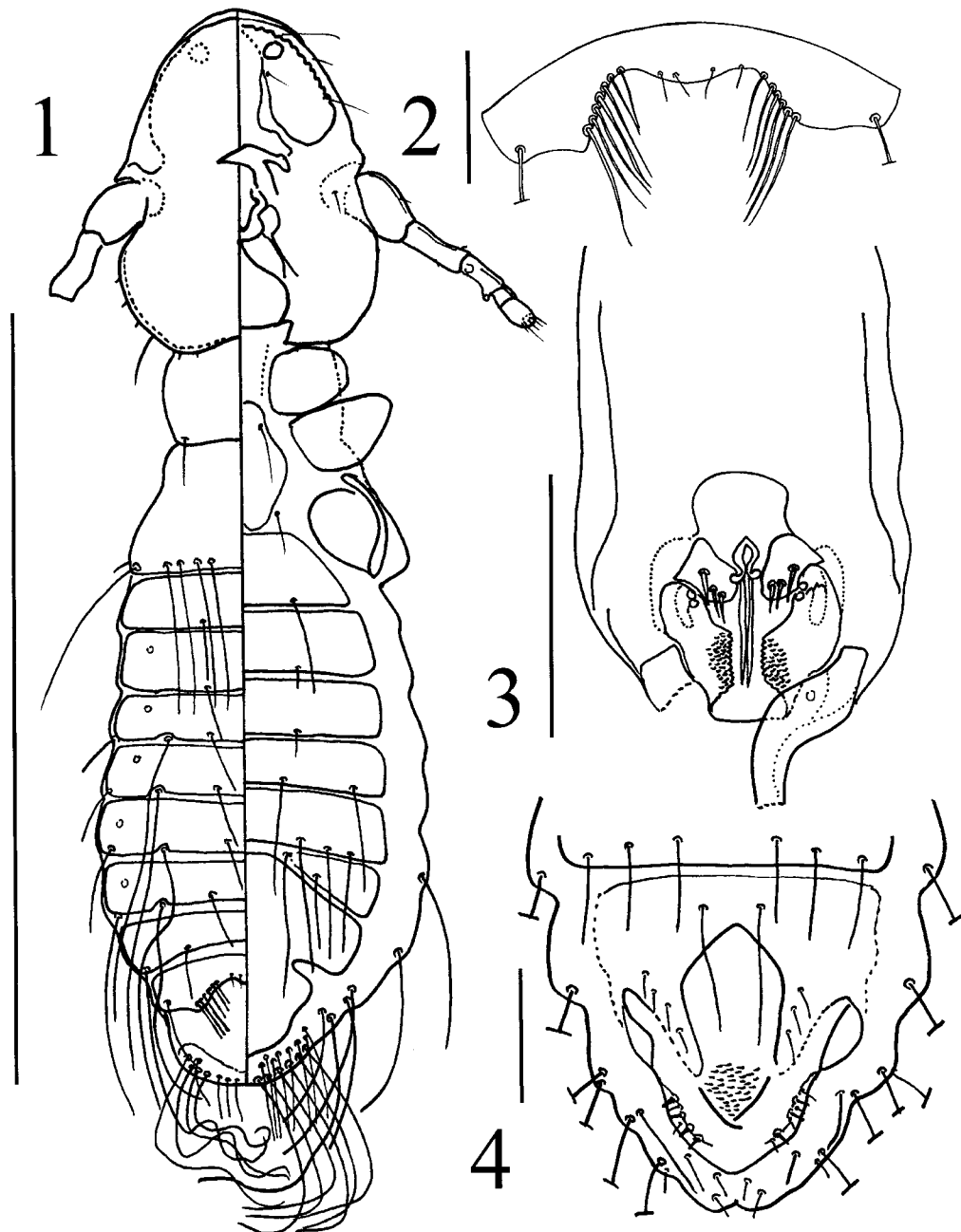
Redescriptions

Holotype male. As in Fig. 1. Preantennal region as long as postantennal; anterior margin bordered by narrow hyaline margin. Antennal segment I stout, segment III with two verrucous processes. Metanotum with 4 very long marginal setae on each side. Tergites IV–VII with 1 long tergo-lateral seta on each side (one long tergo-lateral seta also on one side of tergite III); tergites III–VIII with 1 medium long tergo-central setae on each side; tergite IX (Fig. 2) narrow, with a median indentation on its posterior margin bearing 13 medium long setae (7 on one side and 6 on the other) and 4 short central setae. Abdominal sterna II–VII each with 2–6 setae, with lengths as shown in Fig. 1. Male genitalia as in Fig 3. Dimensions (in millimetres): Head width (HW), 0.35; head length (HL), 0.43; preantennal length (PAL), 0.21; postantennal length (POL), 0.22; prothorax width (PW), 0.25; metathorax width (MW), 0.35; abdomen width at level of segment VI (AW), 0.44; total length (TL), 1.38; genitalia width (GW), 0.130.

Dimensions of 5 males from *Psittacula alexandri*: HW, 0.27–0.30; HL, 0.37–0.39; PAL, 0.17–0.19; POL, 0.19–0.21; PW, 0.19–0.22; MW, 0.27–0.31; AW, 0.28–0.34; TL, 1.39–1.43; GW, 0.098–0.105.

Female. Mostly as for male. Tergo-lateral seta on each side of tergites IV–VII; tergites II–VIII with very short tergo-central setae on each side. Ventral terminalia as in Fig. 4; subgenital plate angular with conspicuous submarginal “V-shaped” furrow. Dimensions: HW, 0.39; HL, 0.47; PAL, 0.24; POL, 0.23; PW, 0.26; MW, 0.39; AW, 0.53; TL, 1.88.

Dimensions of 4 females from *Psittacula alexandri*: HW, 0.28–0.34; HL, 0.38–0.44; PAL, 0.18–0.19; POL, 0.20–0.22; PW, 0.21–0.23; MW, 0.31–0.34; AW, 0.34–0.41; TL, 1.62–1.79.



FIGURES 1–4. *Neopsittaconirmus palaeornis* (Eichler). 1—male; 2—male abdominal tergite IX; 3—male genitalia; 4—female ventral terminalia.

Remarks. The above descriptions are almost identical to those of Guimarães (1974) for *Neopsittaconirmus difficilis*, with the exception of specimens of *N. palaeornis* from *Psittacula derbiana* being bigger in all dimensions than those from *Psittacula alexandri*. Larger dimensions in the lice from *Psittacula derbiana* could be due to the size of this parakeet being bigger than *Psittacula alexandri* (see Collar, 1997). Somewhat misleading is the presence of one long tergo-lateral seta on one side of tergite III in the holotype of *N. palaeornis*. Since the presence of tergo-lateral setae on tergites

III–VII is characteristic of a group of four *Neopsittaconirmus* from Cockatoos (Cacatuidae) (Sychra 2006), we assume that the presence of this seta on *N. palaeornis* is only an abnormality. Therefore, we place *N. difficilis* as a junior synonym of *N. palaeornis*. This synonymy conforms to the phylogeny of *Psittacula*, because *P. derbiana* is the closest species to *P. alexandri* (see Groombridge *et al.* 2004).

Material examined

Holotype male of *Neopsittaconirmus palaeornis* (WEC 225b) ex *Psittacula derbiana*, CHINA, Shanghai, Oct 1935, leg. H. Höne. Deposited at the Museum für Naturkunde, Humboldt-Universität Berlin, Germany.

Other material examined

Female of *N. palaeornis* (WEC 222Ba) ex *Urocissa erythrorhyncha* (accidental host), CHINA, Wa-Su-Kou, Setchwan, 10 Oct 1935, leg. E. Schaefer. Deposited at the Museum für Naturkunde, Humboldt-Universität Berlin, Germany.

Paratypes of *Neopsittaconirmus difficilis*: 1 female and 1 male ex *Psittacula alexandri*, THAILAND, Phum Phan Mt., Sakon Nakhon, 21 Jun 1954, leg. R. E. Elbel & B. Lekagul; 1 male ex *Psittacula alexandri*, Upper BURMA, Myitkyina, 21 Jan 1945, leg. H. S. Fuller; 2 females and 2 males ex *Psittacula alexandri*, THAILAND, Muangkluand and Thungkha, Kapoe, Ramong, 22 Dec 1962, leg. Wanit Songprakob. All deposited at the Natural History Museum, London, England.

Acknowledgments

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