

Research article

Proposals for replacement names for two Afrotropical species of the subfamily Phaoniinae and resurrection of a *Phaonia* species (Diptera: Muscidae)

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Abstract: The names of *Dichaetomyia suffusa* van Emden, 1942 and *Phaonia capensis* Zielke, 1971 are occupied by *Dichaetomyia suffusa* Malloch, 1929 and *Phaonia capensis* Curran, 1938, respectively. Therefore the replacement name *Dichaetomyia adamskae* **nom. nov.** is given to *Dichaetomyia suffusa* van Emden, 1942, and *Phaonia necapensis* **nom. nov.** to *Dichaetomyia capensis* Zielke, 1971. The differences between the two species *Phaonia necapensis* and *Phaonia brunneivittis* Emden, 1943 are described documenting that *Phaonia necapensis* is a good species, clearly distinct from *P. brunneivittis*.

Keywords: *Dichaetomyia adamskae* **nom. nov.**, *Phaonia necapensis* **nom. nov.**, reactivation, replacement names

Introduction

The impetus for this contribution was a comment in an unpublished compilation of the world Muscidae by Pont (Pont personal communication) that the list still contains some homonyms that still need work. Among the affected species are two Afrotropical species of the subfamily Phaoniinae, *Dichaetomyia suffusa* van Emden, 1942 and *Phaonia capensis* Zielke, 1971, for each of which a replacement name is still needed.

Dichaetomyia suffusa van Emden originating from South Africa was listed as a valid species without further comments in the Catalogue of Afrotropical Muscidae (Pont 1980). However, on the website of Systema Dipterozum (Evenhuis & Pape 2022) the species is considered as homonym of *Dichaetomyia suffusa* Malloch, 1929, described from Indonesia. The South African species *Phaonia capensis* Zielke, 1971 (Zielke, 1971) was already in the Catalogue of Afrotropical Muscidae (Pont 1980) positioned as primary junior homonym of *Phaonia capensis* described by Curran (1938) and which itself is a synonym of *Phaonia flavicornis* Stein, 1903. All three

taxa originate from South Africa, but *Phaonia flavicornis* is also known from several other countries of the Afrotropical Region (Pont 1980). A similar classification of both *Phaonia capensis* species is also found on the website of Systema Dipterozum (Evenhuis & Pape, 2022). *Phaonia capensis* Zielke is listed in the Catalogues of Life (Bánki et al., 2022) as synonym of *Phaonia brunneivittis* Emden, 1943, from Uganda. However, these two species can be clearly distinguished from one another on the basis of the original characterisations of the species. Therefore, the strong evidence for treating *Phaonia capensis* as a separate species is detailed below.

Results

Resurrection of *Phaonia capensis* Zielke, 1971

A detailed description of *Phaonia brunneivittis* van Emden does not exist. The introduction of *P. brunneivittis* to science was limited to a short characterisation of the species presented in the couplets

of van Emden's identification key (1943) to the Afrotropical species of *Phaonia*. However, the majority of the few mentioned taxonomic features of *P. brunneivittis* differs clearly from the corresponding characteristics of *Phaonia capensis* Zielke. The main differences between the two species are listed below, with the characteristics of *P. capensis* shown in brackets.

Pre-alar seta shorter than the second notopleural seta or at most of the same length (pre-alar seta much longer than the posterior notopleural seta); costal spine as a rule indistinct (costal spine well-developed and about as long as cross vein r-m); fore tibia with a posterior seta (fore tibia without a posterior seta); hind tibia with one anterodorsal seta (hind tibia with two anterodorsal setae); dark paired spots on abdominal segments 2 and 3 conspicuous, the fourth segment with a brown median vitta (abdomen with the tergites uniformly grey dusted), body length 5.3 mm (body length 8 mm).

These differences document, that *Phaonia capensis* Zielke and *Phaonia brunneivittis* van Emden have to be recognised as two different species.

Replacement name for *Dichaetomyia suffusa* van Emden, 1942

There are no questions with regards to synonymy to be clarified thus only the homonym has to be resolved for *Dichaetomyia suffusa* described by van Emden (1942) from South Africa. Since the name is preoccupied by *Dichaetomyia suffusa* Malloch, 1929 from Indonesia the replacement name *Dichaetomyia adamskae* **nom. nov.** is herewith given to *Dichaetomyia suffusa* van Emden, 1942.

Etymology: The new epithet of the species refers to Kinga Adamska from the Nicolaus Copernicus University, Toruń, Poland in recognition of the careful review of the Muscidae compilation thus bringing the still unsolved homonyms back to attention.

Replacement name for *Phaonia capensis* Zielke, 1971

As has been shown above, *Phaonia capensis* Zielke has to be recognised as a good species. Since its name is preoccupied by *Phaonia capensis* Curran, 1935 the replacement name *Phaonia necapensis* **nom. nov.** is herewith given to *Phaonia capensis* Zielke, 1971.

Etymology: The new epithet of the species “*necapensis*” is an adjective and refers to the fact that the species is not (= ne) anymore a “*capensis*”.

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