Four lectotypes designation and new data on synonymy in the family Sepsidae (Insecta: Diptera)

Обозначение лектотипов 4 видов и новые данные о синонимии в семействе Sepsidae (Insecta: Diptera)

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КЛЮЧЕВЫЕ СЛОВА: Diptera, Sepsidae, новые синонимы, лектотипы.

ABSTRACT. The following 5 new synonyms for Sepsis punctum (Fabricius, 1994) are established: Sepsis geniculata Bigot, 1892; Sepsis himalayensis Brunetti, 1910; Sepsis rufibasis Brunetti, 1910; Sepsis major Brunetti, 1910; Sepsis obscuripes Brunetti, 1910. Also 3 new synonyms are established for Sepsis igniventris Thomson, 1869: Sepsis glabra Duda, 1926; Sepsis polychaeta Duda, 1926; Sepsis satoshii Iwasa, 1996. Lectotypes are designated for 4 species: Sepsis himalayensis Brunetti, 1910; Sepsis indica Wiedemann, 1824; Sepsis nitens Wiedemann, 1824; Pandora orientalis Hendel, 1934.

РЕЗЮМЕ. В статье обозначены 5 новых синонимов для Sepsis punctum (Fabricius, 1994): Sepsis geniculata Bigot, 1892; Sepsis himalayensis Brunetti, 1910; Sepsis rufibasis Brunetti, 1910; Sepsis major Brunetti, 1910; Sepsis obscuripes Brunetti, 1910. 3 новых синонима обозначены для Sepsis igniventris Thomson, 1869: Sepsis glabra Duda, 1926; Sepsis polychaeta Duda, 1926; Sepsis satoshii Iwasa, 1996. Обозначены лектотипы 4 видов: Sepsis himalayensis Brunetti, 1910; Sepsis indica Wiedemann, 1824; Sepsis nitens Wiedemann, 1824; Pandora orientalis Hendel, 1934.

During the studying of the material on Sepsidae received from Natal Museum, Pietermaritzburg, Republic of South Africa (NMP) my attention was involved with *Sepsis oligochaeta* Soós, 1962. This species is included into group "igniventris" on the structure of male fore legs and genitalia and well differs from other species of group by the following: scutum completely greyish pruinose, katepisternum shining, except spot of greyish pollen on dorsal posterior corner, meron and metepimeron shining, metepisternum greyish pruinose. In total 54 specimens of *S. oligochaeta* have been investigated, all from the Republic of South Africa. During the study of the material it was discovered that a

part of specimens had one pair of dorsocentral setae, and the other (9 specimens) two pairs. This fact of variation of number of dorsocentral setae at *S. oligochaeta* has formed the basis to assume, that such alternation is typical for other species of *Sepsis*, and that has allowed to reconsider the status of some species of this genus and to reveal some new synonyms.

Lectotypes are designated for 4 species. The type material of this study is deposited in The Natural History Museum, London, U.K. (NHML), Zoological Museum, University of Copenhagen, Copenhagen, Denmark (ZMUC), Zoological Museum, University of Lund, Lund, Sweden (ZMUL).

Sepsis punctum (Fabricius, 1794) Figs 1–8.

Musca punctum Fabricius, 1794: 351. Sepsis geniculata Bigot, 1892: 278, Syn.n. Sepsis himalayensis Brunetti, 1910: 345, Syn.n. Sepsis rufibasis Brunetti, 1910: 348, Syn.n. Sepsis major Brunetti, 1910: 349, Syn.n. Sepsis rufibasis var. obscuripes Brunetti, 1910: 349, Syn.n.

Sepsis punctum is a very common species in Holarctic. Pont [Pont & Meier, 2002] wrote about 1 (what is usual) or 2 pairs of dc in this species. Really, in Europe, and also in Siberia, Central Asia, on Kamchatka and in Northen America exemplaries with 2 or are very rare and, as a rule, theey are ugly creatures. It is conditionally possible to allocate two types on the color, the size and structure of male fore legs. The first type is characterized by large size (4.5–5.5 mm), mostly red-eyellow color of abdomenal syntergite 1+2 and legs, the presence of tubercles and strong spines/setae ventrally on the fore femora (Figs 5-8). Males of S. punctum of the second type are characterized by smaller (usually smaller than 4.0 mm), usually black body and tubercles with small setae ventrally on fore femora (Figs 1-4). Both types are common in Europe, Siberia and Kamtchatka. The flies of the second type are common in North America.

104 A.L. Ozerov

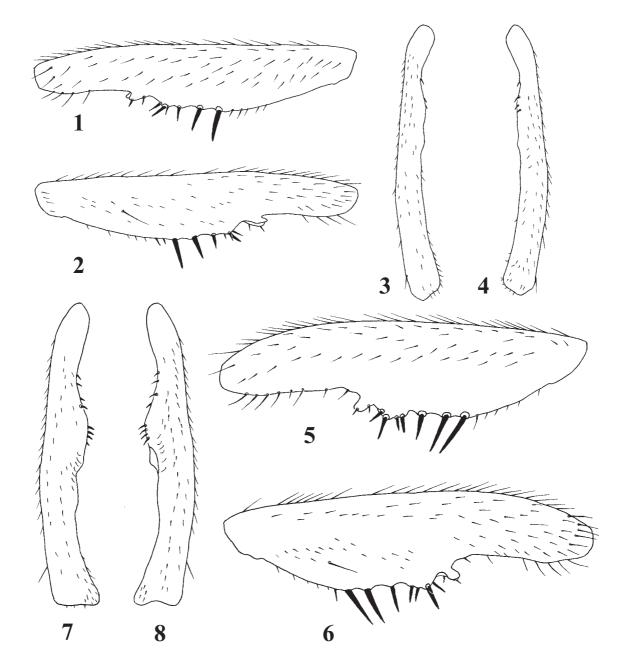


Fig. 1–8. Sepsis punctum, \circlearrowleft . 1, 5 — fore femur (left), posterior view; 2, 6 — same, anterior view; 3, 7 — fore tibia (left), posterior view; 4, 8 — same, anterior view.

Рис. 1-8. Sepsis punctum, \circlearrowleft . 1, 5 — бедро передней левой ноги, сзади; 2, 6 — то же, спереди; 3, 7 — голень передней левой ноги, сзади; 4, 8 — то же, спереди.

Sepsis geniculata was described from Canari Is. The holotype of S. geniculata is kept in UMO. It was examined by me in 1998. The specimen has 2 pairs of strong almost equal in size dc and doesn't differ by the other characters from S. punctum of the first type. In 2000 I studied 28 specimens from Canari Is., conspecific with S. geniculata, sent to me from Museo Nacional de Ciencias Naturales (MNCNM). Noting local distribution of this species and lacking of the specimens of S. punctum with 2 dc in North America, continental Africa and Europe, I have considered up to now S. geniculata and S. punctum as two separate good species. Now I think S. geniculata to be the new junior synonym of S. punctum. I looked through the literature,

but did not find, where this species had been synonymized with *S. punctum*. Some dipterologists mentioned this species as unrecognized species [Hennig, 1949] or nomen dubium [Zuska & Pont, 1984].

Sepsis himalayensis was described from an unspecified number of syntypes from India: Darjiling (West Bengal) and Pashoke (Sikkim). There are 9 syntypes in the NHML, of which I studied 1 ♂ and 3 ♀♀. The ♂ with labells "Lectotype", "Darjiling 6000 ft.[,] 24 IX [19]08[,] Brunetti", "Sweeping in grass and low herbage", "Recd. in exch. from Indian Museum Calcutta. 1910–14", "Received as Sepsis himalayensis Brun. from Indian Mus. E.E.A.", "S. himalayensis Brun. ♂ 2 dorso-

central bristles Cotype" I herewith designate as lectotype of S. *hymalayensis* to fix and stabilize the current concept of the name. The remaining \mathcal{P} were labelled as paralectotypes; all of them are with the same locality labels as lectotype.

By analogy with *S. punctum*, it is possible to distinguish two types of males *S. hymalayensis* by the color, size and structure of male fore legs, but both with 2 *dc*. Large males with reddish abdominal syntergite 1+2 and with well developed tubercles and setae on fore femora ventrally doesn't differ from holotype of *S. geniculata*. Smaller males with black body, smooth ttubercles and not strong setae on fore femora ventrally differ from specimens of *S. punctum* of the second type only by the number of *dc*. So, *S. hymalayensis* is the new junior synonym of *S. punctum*.

The junior synonyms of *S. hymalayensis* become the synonyms of *S. punctum* by automatic.

Sepsis igniventris Thomson, 1869

Sepsis igniventris Thomson, 1869: 587. Sepsis glabra Duda, 1926a: 50, 1926b: 19, Syn.n. Sepsis polychaeta Duda, 1926a: 50, 1926b: 21, Syn.n. Sepsis satoshii Iwasa, 1996: 138, Syn.n.

The types of Sepsis igniventris Thomson, S. glabra Duda, and S. polychaeta Duda were studied. Resembling S. oligochaeta and S. punctum, S. igniventris has varying number of dc setae. I have seen also many specimens of S. igniventris with short and hair-like fore dc pair. I think that S. glabra Duda and S. polychaeta Duda are the new junior synonyms of Sepsis igniventris Thomson.

Complete description of *Sepsis satoshii* Iwasa with good figures undoubtedly shows that this species is the new junior synonym of *Sepsis igniventris* Thomson.

Sepsis indica Wiedemann, 1824

Sepsis indica Wiedemann, 1824: 57.

Described from an unspecified number of unsexed specimens from "India orient.", "in Museo regio".

There are two syntypes in the ZMUC, both are females. The female with original label "Sepsis indica W. Ind. or." was studied in 1966 by J. Zuska, who labelled it as lectotype. This designation has not been published. I herewith designate this $\[Phi]$ as lectotype of *S. indica* to fix and stabilize the current concept of the name. It is with a few tarsomeres missing, but is otherwise well preserved.

The remaining $\widehat{\lor}$ is without any original labels and was labelled as paralectotype; it is in a good condition, only mid and hind right legs missing.

S. indica is a good species of the genus Sepsis Fallén.

Sepsis nitens Wiedemann, 1824

Sepsis nitens Wiedemann, 1824: 57.

As previous species was described from an unspecified number of unsexed specimens from "India orient.", "in Museo regio".

There are tree syntypes in the ZMUC, all are females. The \cite{Q} with original label "Sepsis nitens W. Ind. or." was studied

and labelled in 1966 by J. Zuska as lectotype, but this designation was not published. It is in a good condition and I herewith designate this as lectotype of *S. nitens* to fix and stabilize the current concept of the name.

S. nitens is a good species of the genus Sepsis.

The remaining 2 \mathbb{Q} were without any original labels and after Zuska I have labelled these as paralectotypes. One of them has head and mid legs missing. I have determined this as $Sepsis\ indica$ Wiedemann. The second female is $Sepsis\ lateralis$ Wiedemann.

Saltella orientalis (Hendel, 1934)

Pandora orientalis Hendel, 1934: 4.

Described from 16 syntypes of both sexes taken at "N.O. Czechuan". There are 16 syntypes in the ZMUL. The \circlearrowleft in excellent condition with print labells "Kina[,] N.O. Czechuan", "Sven Hedins Exp. Cttr. Asien[,] Dr Hummel" I herewith designate as lectotype of P. orientalis to fix and stabilize the current concept of the name. The remaining 15 specimens (7 \circlearrowleft and 8 \hookrightarrow) with same labels as holotype I have labelled as paralectotypes.

P. orientalis is a good species of the genus *Saltella* Robineau-Desvoidy.

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