

## Reassessment of *Clytocyterus* Eaton, 1904 (Diptera: Psychodidae) based on a recently discovered type species designation by Malloch in 1907, with a checklist of world species

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**Abstract.** The genus *Clytocyterus* Eaton, 1904 and its subgenera are reassessed based on a recently-found type fixation by Malloch in 1907 that is earlier than that by Tonnoir in 1920. The results make the Holarctic subgenus *Boreoclytocyterus* Duckhouse, 1978 congeneric with *Clytocyterus* Eaton, 1904, **n. syn.** and the Afrotropical *Synseoda* Enderlein, 1937 is resurrected from synonymy with *Clytocyterus* s. str. as a valid nominal subgenus, **n. stat.**

### INTRODUCTION

*Clytocyterus* Eaton is a genus of psychodid flies that occurs in the Holarctic and Afrotropical regions and currently comprising 39 species and 2 subgenera (Evenhuis & Pape 2022). In his paper on new European genera of Psychodidae, Eaton (1904: 59) proposed the genus *Clytocyterus*, giving it a few diagnostic characters to make the name available there, but did not include any species. The proposal of the genus was at the end of his paper, which said “(to be continued)”, as the Rev. Eaton had stated in his introduction he was to be away for a few months and would get back to this. He never did.

Hence, *Clytocyterus* was proposed without included species. A type species would need to be designated from the first nominal species expressly included in the genus. It was believed that *Clytocyterus* remained without a type species until Tonnoir (1920: 137) described the new species *Clytocyterus africanus*, which would have made it the type species by subsequent monotypy. Although Eaton (1904) had intended his new genera in that work to be for European species, with Tonnoir’s (1920) designation, the typical species of *Clytocyterus* was instead Afrotropical. Where the type species originated was of no consequence since the genus was well-known throughout the Palaeartic, Africa, and North America. As such, this designation was followed in the regional Diptera catalogs for the Nearctic (Quate 1965), Afrotropical (Duckhouse *in* Duckhouse & Lewis 1980), and Palaeartic (Wagner 1991) regions.

Having a hunch that 16 years between a proposal of a fairly widespread genus and its first inclusion of species was a bit long, a search was initiated for a possible earlier inclusion of species and an earlier type species designation for *Clytocyterus*. The results were the finding of two publications earlier than Tonnoir (1920) that included species in the genus. One was by Tonnoir (1919: 11) and included *Psychoda ocellaris* Meigen, 1818 and *P. dali* Eaton, 1893 with the phrase “De même que les deux espèces précédentes [*ocellaris* and *dali*] appartient au groupe pour lequel Eaton a proposé ... de former le genre *Clytocyterus* caractérisé par le pinceau de poils ondulés sur le 3<sup>e</sup> articles des antennes du”. Since there were two included species, a type would have to be designated based on one of the two.

However, an even earlier inclusion of species in *Clytocyterus* was found in Malloch (1907: 43), who discussed a list of psychodids found in Dumbartonshire [Scotland] in 1906.

In that work he simply listed a single species as “*Clytocerus \*ocellaris*, Mg.” [the asterisk indicating it was not on any previous list of Dumbartonshire species]. No other works were found earlier than Malloch that included species in *Clytocerus*. The result of this finding makes *Psychoda ocellaris* Meigen, 1818 the type species of *Clytocerus* Eaton, 1904 by subsequent monotypy, but doing so changes the status of some subordinate subgenera of *Clytocerus*.

Enderlein (1937: 92) proposed the nominal genus-group name *Synseoda* (also spelled *Synseodais*) for his new Afrotropical species, *Synseoda flavitaris*. Duckhouse in Duckhouse & Lewis (1980: 95) treated this as a junior synonym of the nominate subgenus *Clytocerus*. Duckhouse (1975: 428) proposed the new subgenus *Notoclytocerus* for his new Afrotropical species *Clytocerus tauricornis*. This too was treated by Duckhouse in Duckhouse & Lewis (1980: 95) as a junior synonym of the nominate subgenus *Clytocerus*. A few years later, Duckhouse (1978: 307), in a review of Afrotropical non-phlebotomine psychodids, proposed the subgenus *Boreoclytocerus* for the Palaearctic species and designated *Psychoda ocellaris* Meigen, 1818 as the type species. As a result of the finding in this current study of *Psychoda ocellaris* being the type species of *Clytocerus* Eaton, *Boreoclytocerus* Duckhouse becomes its objective junior synonym, **n. syn.** The other consequence of the change in type species of *Clytocerus* is that the Afrotropical species are no longer in the nominate subgenus and are here moved to the next available name in synonymy, *Synseoda* Enderlein, 1937, which is here treated as a valid subgenus of *Clytocerus*, **n. stat.**

The checklist below summarizes the resulting allocations of species and current taxonomic status of the subgenera of *Clytocerus*. All species in the nominate subgenus are apparently restricted to the Holarctic region and the subgenus *Synseoda* is restricted to the Afrotropical region. Although not the initial intention of the type species search in this study, it is a nice happenstance that the current type species for *Clytocerus* brings the typical species back to Eaton’s original intention of it being European.

## CHECKLIST

### Genus *Clytocerus* Eaton

***Clytocerus*** Eaton, 1904: 59. Type species: *Psychoda ocellaris* Meigen, 1818, by subsequent monotypy (Malloch, 1907: 43).

***Boreoclytocerus*** Duckhouse, 1978: 92 (as subgenus of *Clytocerus*). Type species: *Psychoda ocellaris* Meigen, 1818, by original designation. **New synonymy.**

### Subgenus *Clytocerus* Eaton

**aegeicus** Vaillant, 1983: 352.

**americana** (Kincaid, 1901: 194) (*Pericoma ocellaris* var.).

*variegata* (Kincaid, 1899: 33) (*Pericoma*) [preoccupied Macquart, 1826].

*interrupta* Banks, 1907: 150) (*Psychoda*).

*satellitica* Dyar, 1927: 163) (*Pericoma*).

**crispus** Vaillant, 1983: 347.

**dalli** (Eaton, 1893: 125) (*Pericoma*).

**grusinicus** Wagner, 1981: 48.

**huminensis** Krek, 1987: 198.

**intermedius** Sarà, 1951: 2.

**kabylicus** Wagner, 1987: 14.  
**longicorniculatus** Krek, 1987: 195.  
**microlimnetes** Curler & Moulton, 2012: 191.  
**ocellaris** (Meigen, 1818: 105) (*Psychoda*).  
     *variegata* (Macquart, 1826: 167) (*Psychoda*).  
**orientalis** Wagner, 1994: 80.  
**pulvereus** Vaillant  
     **pulvereus pulvereus** Vaillant, 1983: 354  
     **pulvereus balkanicus** Vaillant, 1983: 355.  
**rivosus** (Tonnoir, 1919: 11) (*Pericoma*).  
**saccai** Sarà, 1953: 2.  
**siculus** Sarà, 1953: 5.  
**sordescens** Feuerborn, 1922: 83.  
**splendidus** Ježek & Hájek, 2007: 244.  
**tetracorniculatus** Wagner, 1978: 161.  
**thracicus** Wagner & Koç, 2013: 157.  
**wollastoni** Satchell, 1955: 107.  
**xylophilus** Vaillant, 1983: 355.  
**zonzae** Wagner, 1993: 408.

#### **Subgenus *Synseoda* Enderlein**

**Synseoda** Enderlein, 1937: 92 (as genus). Type species: *Synseoda flavitarsis* Enderlein, 1937, by original designation. **New status.**  
*Synseodais* Enderlein, 1937: 90, 92 (incorrect original spelling of *Synseoda*) [First Reviser Neave (1950: 263).]  
*Synseodaid*: Rapp & Cooper, 1945: 256 (misspelling of *Synseodais*).  
*Notoclytocerus* Duckhouse, 1975: 428 (as subgenus of *Clytocerus*). Type species: *Clytocerus tauricornis* Duckhouse, 1975, by original designation.

**africanus** Tonnoir, 1920: 137.  
**cabonarius** Tonnoir, 1939: 62.  
**chyuluensis** Satchell, 1955: 62.  
**constrictus** Duckhouse, 1975: 443.  
**corniculatus** Duckhouse, 1975: 438.  
**divaricatus** Duckhouse, 1975: 440.  
**duckhousei** Wagner & Andersen, 2007: 303.  
**excelsior** Duckhouse, 1987: 280.  
**fasciatus** Tonnoir, 1939: 59.  
**flavitarsis** Duckhouse, 1937: 59.  
**haeselbarthi** Wagner, 1989: 186.  
**inaequalis** Duckhouse, 1975: 433.  
**palliolutus** Duckhouse, 1975: 441.  
**tauricornis** Duckhouse, 1975: 431.  
**zuluensis** Duckhouse, 1975: 434.

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