

## **Lectotype designation for the type species of *Collossopus*, *C. grandidieri* Saussure, 1899 (Orthoptera: Tettigoniidae: Conocephalinae).**

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### **Abstract**

The male syntype of *Collossopus grandidieri* Saussure, 1899 preserved in the Museum d'Histoire Naturelle, Geneva (MHNG) is designated as the lectotype of this species. A supposed female syntype of this species in the Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt (SMFD) is identified as a specimen of *Oncodopus zonatus* Brongniart, 1897 and is shown not to be part of the type series.

### **Keywords**

Orthoptera, Tettigoniidae, Conocephalinae, *Collossopus grandidieri*, *Oncodopus zonatus*, Madagascar, lectotype designation.

We have been working on a taxonomic revision of the endemic Madagascan genera *Oncodopus* Brongniart, 1897 and *Collossopus* Saussure, 1899 for several years. One of us (G.W. Beccaloni) collected a good series of specimens of *Collossopus* and *Oncodopus* in the southern half of Madagascar in both 2004 and 2007, and the other author (M. Ünal) has studied the specimens of these genera preserved in European museums, including the types. In the course of our study we have become aware that there is a problem regarding the putative syntypes of *Collossopus grandidieri* Saussure, 1899.

Saussure, describing the genus *Collossopus* and its type species *Collossopus grandidieri*, gave a description of both sexes but did not give any information about the number of syntypes or where they were preserved (Saussure, 1899: 627-628). We have found seven putative syntypes of *C. grandidieri* in three museums: one male and two females in the Museum d'Histoire Naturelle (MHNG), Geneva; three females in the Muséum National d'Histoire Naturelle, Paris (MNHN); and one female in the Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt (SMFD). The problem is that there are two species represented amongst these supposed syntypes. The male and two females in Geneva and the three females in the Paris agree exactly with Saussure's original description of *C. grandidieri* and his illustrations of this species (Saussure, 1899: 628 & Taf. 38: Figures 24-27), but, the single female in Frankfurt is a different species, which can easily be identified as *Oncodopus zonatus* Brongniart, 1897. It is clear that Saussure did not describe the characters of this female in the original description of *C. grandidieri*; for example, this species has a simple spine (with a single point) on the head, whilst the description of *Collossopus* Saussure, 1899 clearly states it has a trifid (three pointed) spine on the head. Furthermore, Saussure studied both sexes of both *O. zonatus* and *C. grandidieri* in the same paper (Saussure, 1899: 626-628 and Taf. 38, Figures 23-27). In fact, he described the female of *O. zonatus* for the first time (Saussure, 1899: 626-627). Therefore, it is difficult to believe that Saussure regarded the specimen preserved in Frankfurt as a syntype of *C. grandidieri*.

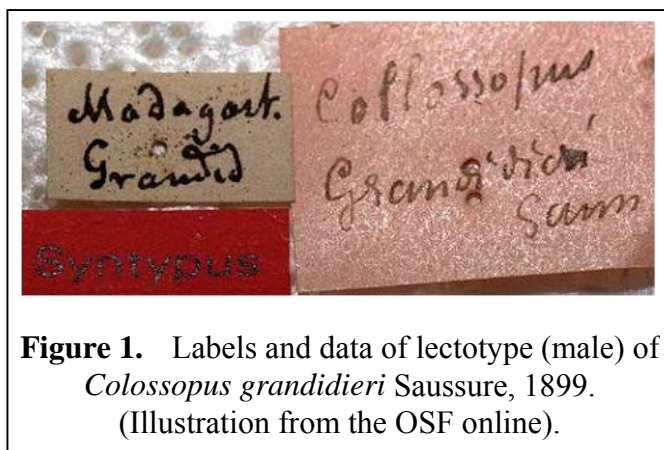
The data labels pinned under the syntypes preserved in Geneva and Paris, are identical to each other (as in fig. 1), but differ from the data labels of the female *O. zonatus* in Frankfurt (fig. 2). The female *O. zonatus* in Frankfurt has an identification label which reads "*Dynatopus grandidieri*" (fig. 2), whilst the other syntypes have identification labels which read "*Collossopus grandidieri*" [sic] (as in fig. 1). These labels are written in a different style. We therefore reject the notion that the female *O. zonatus* in Frankfurt is a syntype and in order to ensure nomenclatural stability we select the single male syntype in Geneva as the lectotype of *Collossopus grandidieri* Saussure, 1899.

### *Colossopus grandidieri* Saussure, 1899

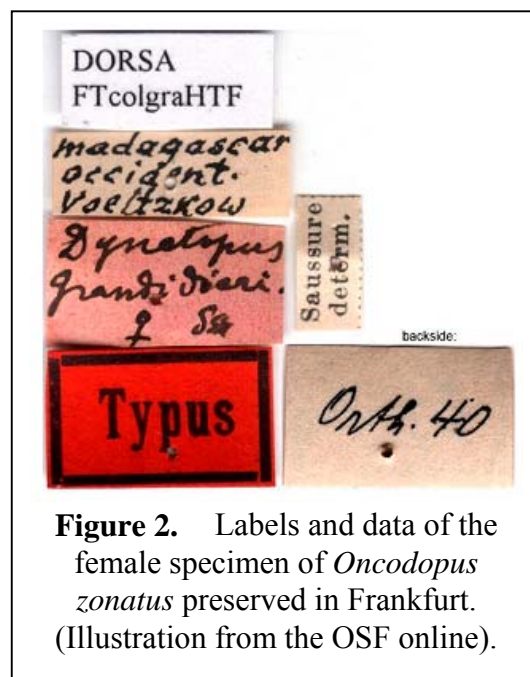
*Colossopus grandidieri* Saussure, 1899: 628, Taf. 38: figures 24-27.

Lectotype: ♂ (MHNG) [here designated] Madagascar, leg. Grandidier. Paralectotypes (5♀♀): 2♀♀ (MHNG) Madagascar, leg. Grandidier; 3♀♀ (MNHN) Madagascar, leg. Grandidier.

Data labels from the lectotype are shown in fig. 1.



**Figure 1.** Labels and data of lectotype (male) of *Colossopus grandidieri* Saussure, 1899. (Illustration from the OSF online).



**Figure 2.** Labels and data of the female specimen of *Oncodopus zonatus* preserved in Frankfurt. (Illustration from the OSF online).

### *Oncodopus zonatus* Brongniart, 1897

*Oncodopus zonatus* Brongniart, 1897: 207-208, figs 38-39.

Material: 1♀ (SMFD) Madagascar, occident, leg. Voeltzkow.

This is labelled as "*Dynatopus grandidieri*" and was supposed to be one of the syntypes of *C. grandidieri* (Eades & Otte, 2008; Systax, 2003). The DORSA database actually states that it is the holotype of *C. grandidieri*, which is clearly incorrect since no holotype was designated by Saussure (1899), and at least one male and one female specimen were described by Saussure in the original description (Systax, 2003). *Dynatopus* is not a published name in Orthoptera; Saussure may have intended to describe it as a new genus and species. It is possible that this female *O. zonatus* specimen was examined by Saussure and described (as *O. zonatus*) in his 1899 paper. Data labels for this specimen are shown in fig. 2.

### References

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