

On the taxonomic position of *Spondylis florissantensis* Wickham, 1920 (Coleoptera, Cerambycidae)

Francesco Vitali

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Spondylis florissantensis Wickham, 1920 is transferred to the genus *Neandra* Lameere, 1912 resulting in the following taxonomic change: *Neandra florissantensis* (Wickham, 1920) n. comb.

Key-words: Prioninae, Parandrini, Oligocene, fossil, taxonomy

Vitali Francesco. 7a, rue J. P. Huberty, L-1742 Luxembourg, Luxembourg. E-mail: vitalfranz@cerambycoidea.com

INTRODUCTION

Wickham (1917) described *Spondylis tertarius* from Oligocene shale of Florissant (Colorado, USA). Later, Wickham (1920) proposed *Spondylis florissantensis* as a substitute name, having noticed the homonymy with *Spondylis tertarius* Germar, 1849 (Miocene brown-coal of Orsberg, Rhineland-Palatinate, Germany). Linsley (1942) instituted for this species the genus *Protospondylis*; actually, a genus already introduced as hypothetical fossil by Lameere (1902: 334). *Protospondylis florissantensis* was cited without taxonomic changes (Linsley, 1961; Carpenter, 1992) until Vitali (2006) recognised its relationship with *Parandra* Latreille, 1802. This statement was not accepted by Santos-Silva & Shute (2009), who considered *Protospondylis* as “Cerambycidae incertae sedis”.

SYSTEMATIC PART

Cerambycidae Latreille, 1802

Prioninae Latreille, 1802

Parandrini Blanchard, 1845

***Neandra* Lameere, 1912**

***Neandra florissantensis* (Wickham, 1920) n. comb.**

(Figs. 1-2)

Spondylis tertarius Wickham, 1917: 469, pl. 39, fig. 2, *nec* Germar, 1849.

Spondylis florissantensis Wickham, 1920: 359, *nomen novum*

Protospondylis florissantensis: Linsley, 1942: 19; Linsley, 1961: 55-56; Carpenter, 1992: 312; Santos-Silva & Shute, 2009: 32.

Parandra floriossantensis: Vitali, 2006: 1-4, fig. 1-2; Molino-Olmedo 2017: 169.

Holotype

USA, Colorado, Florissant, Holotype No. 63448, National Museum of Natural History, Washington (USA).

REMARKS

Santos-Silva & Shute (2009) revalidated the genus *Protospondylis* as “Cerambycidae incertae sedis” stating that “it is impossible to establish, without doubt, that *Protospondylis* is synonymous with *Parandra*”.

They quoted my sentence “The conservation of this fossil makes it difficult to use the key to genera”, even if a discussion of nearly three pages highlighted unmistakable parandroid characters, which already Wickham (1917; 1920) and Linsley (1942) had evidenced.

The holotype, 18.25 mm long, shows parallel body, developed mandibles, short antennae with subdentate articles, neck absent and elytra apically rounded with wide epipleura. All these features can only be found in the superfamily Cerambycoidea. The tibiae longitudinally carinate, already remarked in the original description, are peculiar of the tribe Parandrini, among American cerambycids with analogue habitus.

The only uncertainties came from the uniform aspect of the members of this tribe and from the minute characters that differentiate extant genera, i.e. paraonychia and antennal pores. These features are obviously invisible in fossils preserved on stone, so that the evoked “discovery of further specimens” in order to “resolve the true taxonomic position of this taxon” (Santos-Silva & Shute, 2009) is merely surreptitious.

Nonetheless, shape of mandibles and genae exclude the African *Stenandra* Lameere, 1912 and the Asian *Archandra* Lameere, 1912, as the straight anterior margin of the pronotum

excludes the Neotropical *Acutandra* Santos-Silva 2002. In addition, the geonomy of extant species excludes these and other Australasian and African genera (Vitali, 2006).

Thus, *Parandra* Latreille, 1802, *Birandra* Santos-Silva 2002 and *Neandra* Lameere, 1912 remain the only possible candidates.

Now, the occurrence of *Birandra* and *Parandra* in the West-Indies implies that both genera widespread in the GAARlandia from South America before its drowning. This colonisation occurred during Late Oligocene - Mid Miocene (Iturralde-Vinent, 2006). Consequently, both genera were still confined in South America during the Early Oligocene and they were able to colonise Colorado only after the Pliocene collision of the American continents. The presence of the widespread *Parandra polita* Say, 1835 in the Boreal hemisphere is actually due to a Postpliocene colonisation.

Consequently, *Spondylis florissantensis* may be only classified as *Neandra*, still today the only North American endemic genus of Parandrini. Definitely, no serious reason can be invoked to differentiate this taxon from extant *Neandra*.

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Fig. 1. *Spondylis florissantensis* Wickham, 1920, Holotype

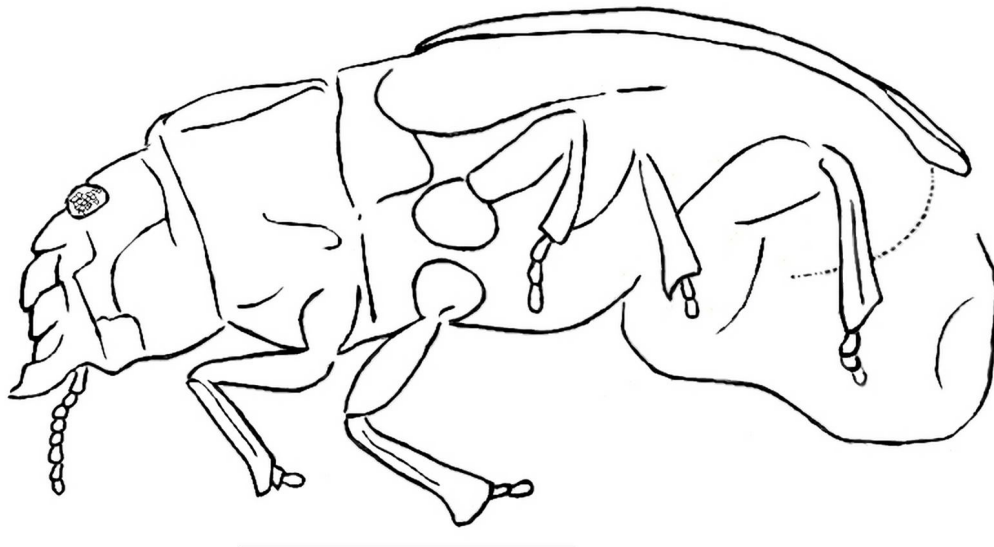


Fig. 2. *Spondylis florissantensis* Wickham, 1920, reconstruction

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