A new species of *Chaerilobuthus* Lourenço & Beigel, 2011 from Cretaceous Burmese amber (Scorpiones: Chaerilobuthidae)

Uma nova espécie de *Chaerilobuthus* Lourenço & Beigel, 2011 do ambar Crétacico de Myanmar (Scorpiones: Chaerilobuthidae)

Wilson R. Lourenço [1]

Scorpions are rare among the arthropods fossilised in amber in general and in Cretaceous amber in particular. For this reason, fragments are also considered for the description of new species, genera and even families (Lourenço, 2002, 2003).

The first Burmese Cretaceous amber scorpion to be described was *Palaeoburmesebuthus grimaldii* Lourenço, 2002 (Lourenço, 2002). Because of the incompleteness of the specimen used in the description, it was placed as *incertae familiae*. This was followed by the description of *Electrochaerilus buckleyi* Santiago-Blay, Fet, Soleglad & Anderson, 2004 which was accommodated in a new subfamily, Electrochaerilinae, of the extant family Chaerilidae Pocock, 1893 (Santiago-Blay et al., 2004). More recently two new families, genera and species were described from Cretaceous Burmese amber: *Chaerilobuthus complexus* Lourenço & Beigel, 2011, family Chaerilobuthidae and *Palaeotrilineatus ellenbergeri* Lourenço, 2012, family Palaeotrilineatidae (Lourenço, 2012; Lourenço & Beigel, 2011). For more details on the Cretaceous Burmese amber scorpions refer to Lourenço & Beigel (2011) and Lourenço (2012).

In this note, a new species associated to the genus *Chaerilobuthus* is described, based on a very incomplet specimen.

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MATERIAL AND METHODS

The fragments of the specimen investigated are preserved in a very clear block of yellowish amber that measures 26 x 14 x 9 mm. These correspond to metasomal segments II to V and telson and are surrounded by several blackish inclusions. The schematic drawings provided are an interpretation of what was observable. Illustrations and measurements were produced with the aid of a Wild M5 stereomicroscope equipped with a drawing tube (camera lucida) and an ocular micrometer. Measurements follow Stahnke (1970) and are given in mm.

SYSTEMATIC DESCRIPTION OF *CHAERILOBUTHUS LONGIACULEUS* SP. N.

Family Chaerilobuthidae Lourenço & Beigel, 2011
Genus *Chaerilobuthus* Lourenço & Beigel, 2011
Chaerilobuthus longiaculeus sp. n.

DIAGNOSIS

General morphology of metasoma and telson shows similarities with that of the genus *Chaerilobuthus* Lourenço & Beigel, 2011. For this reason, the new species is assigned to this genus. A few distinct details on the morphology of the metasoma and telson can, however, distinguish the new species from *C. complexus* Lourenço & Beigel, 2011: (i) a more globular vesicle; (ii) a very long aculeus with the base strongly enlarged: (iii) dorsal aspect of metasomal segments II to V, smooth and shallow, without any depression.

HOLOTYPE — probably parts of a juvenile's exuvia (sex unknown).

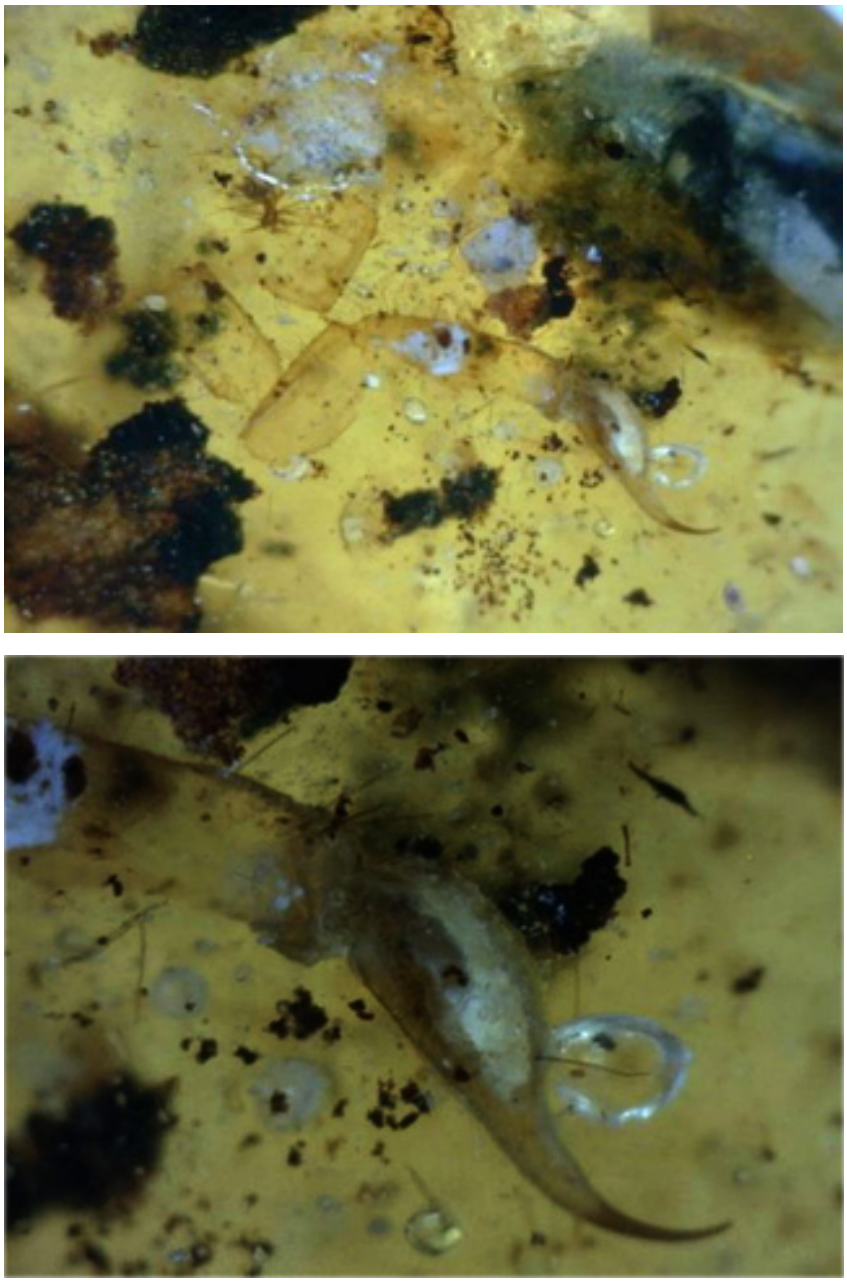
TYPE LOCALITY AND HORIZON — Myanmar (Burma), Kachin; precise locality unknown; Lower Cretaceous.

DERIVATIO NOMINIS — the specific name refers to the structure of the aculeus.

DEPOSITORY — The type specimen is presently in the personal collection of Dr. Jörg Wunderlich, Hirschberg, Germany. It should subsequently be deposited in the collections of the Senckenberg Museum, Frankfurt.

DESCRIPTION

Coloration — the scorpion metasoma is yellow to reddish-yellow; telson reddish-yellow; tip of the aculeus reddish.



Figs. 1-2. *Chaerilobuthus longiaculeus* sp. n., holotype. 1, fragments, showing metasomal segments II to V (above) and telson. 2, telson in detail (bellow).

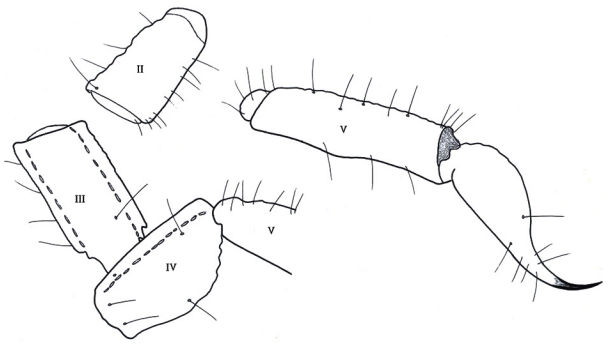


Fig. 3. *Chaerilobuthus longiaculeus* sp. n., holotype. Schematic drawing showing the same elements as in figure 1.

Metasomal segments II to V almost smooth with weakly marked carinae; segments II to IV with dorso-lateral carinae; segment V rounded with vestigial ventral carinae; ventral carinae on segments II to IV inconspicuous; dorsal aspect of segments II to V not depressed; setation on segments II to V strongly marked. Telson with a globular vesicle, not flattened dorso-ventrally, as in *C. complexus*; weakly granular to smooth; aculeus very long and weakly curved; base of aculeus strongly enlarged.

Some morphometric values of the holotype of *Chaerilobuthus longiaculeus* sp. n. are as follow: metasomal segments II: length 1.1, depth 0.6; III: length 1.1, width 0.6; IV: length 1.2, width 0.7; V: length 1.8, depth 0.7. Telson length 1.5. Vesicle: length 0.8, depth 0.8.

SUMMARY

A new species, *Chaerilobuthus longiaculeus* sp. n., is described from Cretaceous Burmese amber of Myanmar. This is the second species of the genus *Chaerilobuthus* and the sixth scorpion specimen to have been found and described from Burmese amber.

KEYWORDS: scorpion; fossil; new species; Cretaceous; Burmese amber.

RÉSUMÉ

Une nouvelle espèce, *Chaerilobuthus longiaculeus* sp. n., est décrite de l'ambre Crétacé de Myanmar. Elle correspond à la deuxième espèce du genre *Chaerilobuthus* et au sixième spécimen de scorpion découvert et décris de l'ambre de Myanmar.

Mots-clés: scorpion; fossile; nouvelle espèce; Crétacé; ambre de Myanmar.

RESUMO

Uma nova espécie, *Chaerilobuthus longiaculeus* sp. n., é descrita do ambar Crétacico de Myanmar. Ela corresponde à segunda espécie do gênero *Chaerilobuthus* et ao sexto exemplar de escorpiao descoberto e descrito do ambar de Myanmar.

PALAVRAS-CHAVE: escorpião; fossil; nova espécie; Cretaceo; ambar de Myanmar.

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