

## The enigmatic *Dacochile microsoma* Poinar & Brown: Tanyderidae or Bruchomyiinae?

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### Abstract

An examination of character states in a second Burmese amber specimen of *Dacochile microsoma* Poinar & Brown from the type locality confirms the original placement of this species in the family Tanyderidae and not the Bruchomyiinae, as proposed by Woodley (2005). Of special interest are a row of heavily sclerotized processes shaped like rose thorns and positioned on the inside of the hind tibiae and first two tarsal segments. These processes, which point upward towards the body, suggest that at least the females of *Dacochile* supported themselves from vegetation by their hind legs, similar to the behavior of some present-day tanyderids.

**Key words:** Diptera, Tanyderidae, Psychodidae, Bruchomyiinae, fossil, Burmese amber

### Introduction

The Burmese amber fly *Dacochile microsoma* Poinar & Brown (2004) was originally described in the family Tanyderidae; however, Woodley (2005) challenged this action and provided characters that he felt showed that the specimen was "certainly a member of the Bruchomyiinae" of the family Psychodidae.

Since the original description appeared, we have obtained a second Burmese amber specimen of *D. microsoma* from the type locality. This female is used here to substantiate, clarify, and introduce new characters of this enigmatic species, which could be a key fossil for interpreting the evolution of the lower Diptera.