## SCIENTIFIC NOTE

# Association of *Ceracis cornifer* (Mellié) (Coleoptera: Ciidae) with the Bracket Fungus *Pycnoporus sanguineus* (Basidiomycetes: Polyporaceae)

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Associação de *Ceracis cornifer* (Mellié) (Coleoptera: Ciidae) com o Fungo *Pycnoporus sanguineus* (Basidiomycetes: Polyporaceae)

RESUMO - Duas novas coletas de *Ceracis cornifer* (Mellié) na Região Sudeste do Brasil são relatadas, descrevendo a associação dessa espécie com o fungo orelha-de-pau *Pycnoporus sanguineus*. A associação de outras espécies do grupo *Ceracis furcifer* Mellié com esse fungo é discutida.

PALAVRAS-CHAVE: Ciinae, micetobionte, basidiocarpo

ABSTRACT - Two new records of *Ceracis cornifer* (Mellié) in the Southeast Region of Brazil are presented here, describing the association of this species with the bracket fungus *Pycnoporus sanguineus*. The association of other species of the *Ceracis furcifer* Mellié group with this fungus is discussed.

KEY WORDS: Ciinae, mycetobiont, basidiocarp

Ciids are minute fungus-feeding beetles, which live in close association with some macrofungi (Lawrence 1971, Lopes-Andrade 2002). These minute beetles are considered mycetobiont because all instars depend upon the fungus for food and shelter (Scheerpeltz & Höfler 1948, Navarrete-Heredia 1991). The host preference of the Nearctic and Japanese ciids is well known (Lawrence 1973, Kawanabe 1995), but there are few data on the Neotropical species (Navarrete-Heredia & Burgos-Solorio 2000). Some ciids are associated with various fungi species, but some seem to prefer a specific fungus (Lawrence 1973; Kawanabe 1995, 1996, 1998, 1999). *Ceracis cornifer* (Mellié) is known only from Brazil, but there are close related species occurring throughout the New World. Mellié (1848) mentioned the type locality of *Cer. cornifer* as "Brésil", with no reference to the host fungi. This species is also known from other two localities (MZ/USP, labels: "BRASIL, SP, Ilha de Victoria; Dec. 1963; det. J. Lawrence"; and "BRASIL, SP, Raiz da Serra; 28/IX/1907; H. Luderwaldt leg."), but there is no available information about the species of fungi to which they were associated.

Recently, specimens of *Cer. cornifer* and their host fungus *Pycnoporus sanguineus* (L. ex Fries) Murrill (Basidiomycetes: Polyporaceae) were collected twice in Southeastern Brazil (Ubá, MG, Fazenda Córrego do Pari, Gumier-Costa leg.; Oct. 2000 & Feb. 2002). In the first sample the fungal fruiting bodies of *P. sanguineus* were not yet sporulating, but despite this, more than 100 *Cer. cornifer* adults were obtained. In the second collection eight basiodiocarps of the fungus with developed fruiting bodies were observed. In both cases, the ciids were breeding in the living host fungi.

There are three New World species that are known to breed in *P. sanguineus*: *Cer. monocerus* Lawrence, *Cis creberrinus* Mellié and *Cer. minutus* Dury. The two latter species are known from other host fungi, but *Cer. monocerus* is only known from *P. sanguineus*. *Strigocis opacicollis* Dury (one record) and *Cer. punctulatus* Casey (two records) may also be related to *P. sanguineus*, but these records were based on museum-preserved material only (Lawrence 1973). Neotropical relatives of *Cer. cornifer*, such as *Cer. furcifer* Mellié and *Cer. ruficornis* (Pic), are known from various *Coriolus* and *Lenzites* fungi. Within the *Cer. furcifer* group (*sensu* Lawrence 1967), *Cer. monocerus* is the species closest related to *Cer. cornifer*, and this probably indicates that these species share a common ancestor which might have bred in *P. sanguineus*.

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