

ANAIS DO X ENCONTRO SOBRE ABELHAS
RIBEIRÃO PRETO



FUNPEC-Editora

Dados Internacionais de Catalogação na Publicação (CIP)
(Câmara Brasileira do Livro, SP, Brasil)

Encontro sobre Abelhas (10. : 2012 : Ribeirão Preto, SP)
Anais do X Encontro sobre Abelhas. -- Ribeirão Preto, SP :
FUNPEC Editora, 2012.
Vários organizadores.

1. Abelhas - Congressos.

12-08896

CDD-595.79906

Índices para catálogo sistemático:

1. Congressos : Abelhas : Zoologia 595.79906

Anais do X Encontro sobre Abelhas. Ribeirão Preto. 2012
Simões, Z.L.P.; Bitondi, M.M.G.; Bomtorin, A.D.; Nascimento, F.S.

Número de páginas.
533



FUNPEC-Editora

R. Floriano Peixoto, 2444 - Alto da Boa Vista - 14025-220 Ribeirão Preto, SP

Tel.: (16) 3620-1251 · Fax: (16) 3621-1991

www.livrariafunpecrp.com.br - livros@funpecrp.com.br

FILAMENTOUS FUNGUS GROWS INSIDE BROOD CELLS OF *Melipona Bees* AND IS EATEN BY LARVAE.

Autores: Kamila de Sousa Leão^{1*}, Cristiano Menezes², Joyce Caroline da Silva Teixeira³, Juliane Brito da Silva³.

Instituição: ¹*Universidade Federal do Pará, ²Embrapa Amazônia Oriental, ³Universidade Federal Rural da Amazônia.

Contato: Rua Augusto Corrêa 01, Guamá. CEP 66075-110. Caixa postal 479. Belém, PA, Brasil.

Email: kamilabelha@gmail.com

Stingless bee colonies are inhabited by a high diversity of microorganisms, but most of them are still unknown. Recently, filamentous fungus of *Monascus* genus was found inside brood cells of *Scaptotrigona depilis* and they are ingested by the larvae. The aim of this study was to test whether this fungus occurs in other stingless bee species and if they are also ingested by the larvae. The occurrence and the quantity of fungus in brood cells with different larval stages were verified in colonies of *Melipona flavolineata*, *M. fasciculate* and *M. seminigra*. Recently built brood combs containing eggs and larval stages were collected and 50 brood cells were opened and verified. This was repeated with three colonies of each species. The fungus was present in seven out of the nine studied colonies. They were not found in two colonies of *M. seminigra*. In colonies where they occurred, they were not found in cells containing recently laid eggs. They proliferated in cells containing eggs which were about to hatch or in cells with one day old larvae. The largest amount of fungus was found in cells containing two and three days old larvae. In cells with older larvae the amount of fungus was much smaller and disappeared in cells with six days old larvae. In colonies of *M. fasciculate* the fungus proliferated earlier than in other studied species. The present study shows that *Monascus* sp. also occur in other stingless bee genus and is also ingested by the larvae. Contrary to *S. depilis* larvae, which need to eat fungus to survive, *M. seminigra* seems to not depend on this fungus, since two studied colonies did not have any fungus and these colonies were healthy.

Apoio: Embrapa; Capes.

Palavra chave: Stingless bees - Filamentous fungus - larvae - microorganisms – colonies.