ENTOMOTROPICA
Vol. 20(2): 113-114. Agosto 2005.

ISSN 1317-5262

Observations on some teratological Braconidae (Hymenoptera, Ichneumonoidea) from Brazil

Angélica Maria Penteado-Dias[1], Juliano Fiorelini Nunes[2], Eduardo Mitio Shimbori[2]

[1]*Universidade Federal de São Carlos, Departamento de Ecologia e Biologia Evolutiva. CP 676, CEP 13 565-905, São Carlos, SP, Brasil. E-mail: angelica@power.ufscar.br*

[2]*Programa de Pós-Graduação em Ecologia e Recursos Naturais. Universidade Federal de São Carlos, SP, Brasil.*

Abstract

Penteado-Dias AM, Fiorelini Nunes J, Mitio Shimbori E. 2005. Observations on some teratological Braconidae (Hymenoptera, Ichneumonoidea) from Brazil.. Entomotropica 20(2): 113-114.

Three teratological specimens of Braconidae, one female of *Orgilus* sp. (Orgilinae), one male of *Bracon* sp. (Braconinae) and one female of *Donquickeia* sp. (Doryctinae), all from Brazil and deposited in the collection of the Departamento de Ecologia e Biologia Evolutiva da Universidade Federal de São Carlos (DCBU) in São Carlos, SP, Brasil, present malformations in one of the antennae and in one of the compound eyes; these are illustrated.

Additional key words: Insecta, malformations, morphology, teratology.

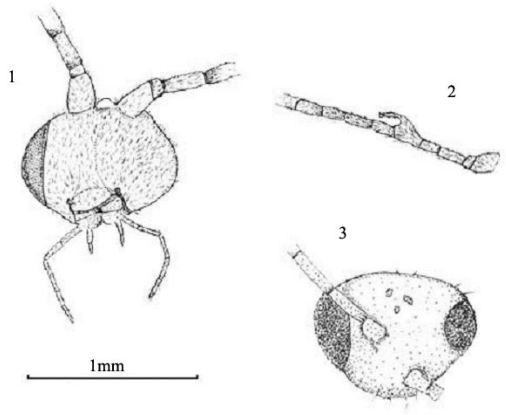
Resumo

Penteado-Dias AM, Fiorelini Nunes J, Mitio Shimbori E. 2005. Observações sobre alguns Braconidae teratológicos (Hymenoptera, Ichneumonoidea) do Brasil. Entomotropica 20(2): 113-114.

Três espécimens de Braconidae teratológicos, uma fêmea de *Orgilus* sp. (Orgilinae), um macho de *Bracon* sp. (Braconinae) e uma fêmea de *Donquickeia* sp. (Doryctinae), todos do Brasil e depositados na Coleção do Departamento de Ecologia e Biologia Evolutiva da Universidade Federal de São Carlos (DCBU) em São Carlos, SP, Brasil, apresentam malformações em uma das antenas e em um dos olhos compostos que são aqui ilustrados.

Palavras-chave adicionais: Insecta, malformações,morfologia, teratologia.

Teratological studies in insects are recent the last century produced some papers about the abnormalities in this invertebrate group. Balazuc is one that has published some work trying to explain the factors that may produce teratology. Following Angulo (1974, *apud* Savini & Furth 2004) Coleoptera is the group with the highest number of studied cases. Taxonomists should consider malformations, because some of them can give informations about the environment and its influence on the teratological cases. The references about the occurrence of teratological individuals in Hymenoptera are based on Balazuc (1957), Borderá & Tormos (1986), Tussac & Balazuc (1991) and Tussac (1994) who have given an account of some monstruosities on ocelli and eyes of Braconidae (*Leiophron* sp.) and Bethylidae (*Epyris niger* Westwood, 1832; *Pseudisobrachium subcyaneums* (Haliday, 1838). To Speicher (1934) the absence of eyes is due to a recessive factor. The papers about the subject dont say how the malformations are produced in nature (Borderá & Tormos, 1986). Tussac (1994) presented an anomalous antenna in *Abia sericea* (Linnaeus, 1767) (Hymenoptera, Cimbicidae), where one female of that species hads a double left antenna and some deformations on the front. Balazuc (1957) and Michel (1985) cited other occurrences of anomalies in Symphyta.



Figures 1-3. 1. *Orgilus* sp. (Braconidae, Orgilinae), head (frontal view). 2. *Bracon* sp. (Braconidae, Braconinae), right antenna. 3. *Donquickeia* sp. (Braconidae, Doryctinae), head (frontal view).

Descriptions of the malformations:

1. Female of *Orgilus* sp. missing its left eye (Figure 1) The specimen is totally normal in other characteristics and was collected in amazonian forest at Manaus, AM, Brazil in 28.iv.1979.

2. Male of *Bracon* sp. with an anomaly of an antennal flagellomere (Figure 2), which. is duplicated in the right antenna. The specimen is totally normal in other characterístics and was collected in São Carlos, SP, Brazil in 12.v.1993.

3. Female of *Donquickeia* sp. with the left eye much smaller than the rigth one, and an abnormal position of the left antenna (Figure 3). The specimen is totally normal in other characteristics and was collected in atlantic rain forest at Nova Iguaçu, RJ, Brazil, on 12.iii.2002 (BIOTA/FAPESP Program).

Acknowledgments

To CNPq (Conselho Nacional de Desenvolvimento Científico e Tecnológico) and FAPESP (Fundação de Amparo à Pesquisa do Estado de São Paulo) for financial support.

References

Balazuc J. 1957. The tératologie des Hyménopteroides. Ann Soc Entomol Fr 126: 167-203.

Borderá S, Tormos J. 1986. Un bracónido y tres ichneumónidos teratológicos (Hym., Ichneumonoidea). Boletin Asoc esp Entomol 10: 335-338.

Michel B. 1985. Observations d'un cas de schistomélie antennaire chez *Tenthredosis stigma* F. (Hym., Tenthredinidae). L'Entomologiste 41 (5): 241-242, figure.

Savini V, Furth D. 2004. Teratologia en Coleoptera: un caso en *Gioia bicolor* (Blake 1969) (Chrysomelidae, Alticinae) de Jamaica. Entomotropica 19 (3): 165-167.

Speicher BR. 1934. The temperature effective period in development of "eyeless" in *Habrobracon*. Amer Nat 68(714): 70-71.

Tussac H. 1994. Une anomalie antennaire chez un Hyménoptère Symphyte. L'Entomologiste 50(5): 313-314.

Tussac H, Balazuc J. 1991. Anomalies de l'appareil visuel chez des Hyménoptères Apocrites. L'Entomologiste 47 (1): 49-52.