

## First records of *Phaenocarpa* Foerster, 1862 (Hymenoptera: Braconidae: Alysiinae) from Brazilian Atlantic forest.

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### Abstract

GONÇALVES AROUCA R, PENTEADO-DIAS AM. 2004. First records of *Phaenocarpa* Foerster, 1862 (Hymenoptera: Braconidae: Alysiinae) from Brazilian Atlantic forest. *Entomotropica* 18(3): 153-154.

Three species of *Phaenocarpa* Foerster were collected in Brazilian Atlantic forest: *P. hyalina* is recorded for the first time for São Paulo state; *P. cratomorpha* and *P. pericarpa* are new records to Brazil.

**Additional key words:** Alysiini, Neotropical fauna, new records, parasitoid wasp.

### Resumo

GONÇALVES AROUCA R, PENTEADO-DIAS AM. 2004. Primeiros registros de *Phaenocarpa* Foerster, 1862 (Hymenoptera: Braconidae: Alysiinae) da floresta Atlântica brasileira. *Entomotropica* 18(3): 153-154.

Três espécies de *Phaenocarpa* Foerster foram coletadas na Mata Atlântica: *P. hyalina* é nova ocorrência para o estado de São Paulo; *P. cratomorpha* e *P. pericarpa* são registradas pela primeira vez para o Brasil.

**Palavras chaves adicionais:** Alysiini, fauna Neotropical, novas ocorrências, vespa parasitóide.

### Introduction

*Phaenocarpa* Foerster 1862, is a large cosmopolitan genus, which is most diverse in the Holarctic region. Members have been reared from nine different families of cyclorrhaphous Diptera, most frequently from Anthomyiidae and Scathophagidae, often associated with decaying organic matter (e.g., dung or fungi; Wharton, 1997). According to Braet & van Achterberg (2003), eleven species are recognized in the Neotropical region; in Brazil (Santa Catarina state) only one species has been reported, *P. hyalina* Trostle 1999.

This study is part of the "Richness and Diversity of Hymenoptera from Atlantic forest" project of the Biotá/FAPESP program, which is surveying the biodiversity of the Brazilian Atlantic forest.

### Materials and Methods

The Alysiinae fauna was surveyed in nine fragments of Atlantic forest at five Brazilian states. The sampling was made during the rain season of 2000 (December), 2001

(October) and 2002 (January and March); and during the dry season of 2001 (April, July and August) and 2002 (April and May).

The specimens were collected using Malaise trap, yellow pan-trap and sweeping the vegetation. All the specimens were deposited in the collection (DCBU) of Universidade Federal de São Carlos, Departamento de Ecologia e Biologia Evolutiva, São Carlos, São Paulo, Brazil and Museu de Zoologia da Universidade de São Paulo (MZUSP), São Paulo, São Paulo, Brazil.

### Results and Discussion

Three species of the genus *Phaenocarpa* Foerster were collected during this study: *P. hyalina* Trostle, 1999; *P. cratomorpha* Wharton, 1999 and *P. pericarpa*, Wharton & Carrejo, 1999. *Phaenocarpa hyalina* is recorded for the first time for São Paulo state, *P. cratomorpha* and *P. pericarpa* are new records for Brazil (Table I).

*P. cratomorpha* (Table 1) showed the largest distribution area to north from 24°31'06"S (Estação Ecológica da Juréia, Peruíbe, SP) to 11°21'03"S (Reserva Ecológica

Table 1. Distribution of *Phaenocarpa* Foerster (Braconidae: Alysiinae) in Atlantic forest, Brazil.

Species	Region	Stream's coordinates	Altitude	Trap	Period	Specimen
<i>P. hyalina</i>	CEPA–Rugendas (São Bento do Sul, SC)	26°19'25"S 48°40'49"W	High	Sweeping vegetation	December / 2000	03 males
	Parque Estadual de Intervalos (Barra Grande, SP)	24°18'18"S 48°21'55"W	High	Sweeping vegetation	April / 2001	11 males
	Estação Biológica de Boracéia (Salesópolis, SP)	23°31'56"S 45°50'47"W	High	Yellow pan-trap	October / 2001	01 male
<i>P. cratomorpha</i>	Estação Ecológica da Juréia (Peruíbe, SP)	24°31'06"S 47°12'06"W	Low	Sweeping vegetation	April, May / 2002	08 males
	Parque Estadual de Intervalos (Barra Grande, SP)	24°18'18"S 48°21'55"W	High	Malaise and yellow pan-trap	December / 2000	06 males
	Reserva Biológica do Tinguá (Nova Iguaçu, RJ)	22°45'33"S 43°27'04"W	Low	Malaise and yellow pan-trap	March / 2002	14 males
	Estação Ecológica Pau Brasil (Porto Seguro, BA)	16°23'33"S 39°10'99"W	Low	Sweeping vegetation	May / 2002	03 males
	Reserva de Sapiranga (Mata São João, BA)	12°58'16"S 38°30'39"W	Low	Sweeping vegetation	July / 2001	02 males
	Reserva Ecológica do Crasto (Santa Luzia do Itanhy, SE)	11°21'03"S 37°26'54"W	Low	Sweeping vegetation, Malaise and yellow pan-trap	July, August/ 2001	17 males
<i>P. pericarpa</i>	Pq Estadual Serra do Mar Núcleo Picinguaba (Ubatuba, SP)	23°20'10"S 44°50'15"W	Low	Sweeping vegetation	January / 2002	01 male

Low = 0-200 meters; High = more 200 meters.

Crasto, Santa Luzia do Itanhy, SE). The others two species are distributed only in Santa Catarina and São Paulo states up the 23°20'10"S (Parque Estadual Serra do Mar, Ubatuba, SP). The species were collected during the most time of the year, in the dry and rain seasons.

The biology of *P. hyalina* and *P. cratomorpha* are unknown (Trostle et al. 1999; Wharton 1994); *P. pericarpa* has been reared from puparia of *Anastrepha disticta* Greene in pods of guama (*Inga* sp.: Fabaceae) (Wharton 1994).

### Acknowledgements

We thank to FAPESP (Fundação de Amparo à Pesquisa do Estado de São Paulo-BIOTA Project) and CNPq (Conselho Nacional de Desenvolvimento Científico e Tecnológico) for their financial support.

### References

- BRAET Y, VAN ACHTERBERG C. 2003. New species of *Pambolus* Haliday and *Phaenocarpa* Foerster (Hymenoptera: Braconidae: Pambolinae, Alysiinae) from French Guyana, Suriname and Panama. *Zool Meded Leiden* 77:153-179, figs 1-62.
- TROSTLE M, CARRERO NS, MERCADO I, WHARTON RA. 1999. Two new species of *Phaenocarpa* Foerster (Hymenoptera: Braconidae: Alysiinae) from South America. *Proc Entomol Soc Washington*. 101(1): 197-207.
- WHARTON RA. 1994. New genera, species and records of new world Alysiinae (Hymenoptera: Braconidae). *Proc Entomol Soc Washington*. 96(4):630-664.
- WHARTON RA. 1997. Subfamily Alysiinae, p. 84-116, figs 1-88. In: Wharton, R.A., P.M. Marsh & M.J. Sharkey (eds). *Manual of the New World genera of the family Braconidae* (Hymenoptera). *Spec Publs Int Soc Hym* 1:1-439.