

A gynandromorph of *Microterys ishiii* Tachikawa (Hymenoptera : Chalcidoidea : Encyrtidae)

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Abstract : This note reports the occurrence of gynandromorphism in *Microterys ishiii* Tachikawa in China. General aspects and photograph of the insect are presented. The gynandromorph was reared from *Pulvinaria aurantii* collected in Ya Xian, Zhejiang Province. All the specimens studied are housed in Institute of Zoology, Chinese Academy of Sciences.

Key words : Hymenoptera ; Encyrtidae ; *Microterys ishiii* ; gynandromorphism ; China

1 INTRODUCTION

Within Chalcidoidea (Hymenoptera), gynandromorphs have been recorded in ten species, six of which are encyrtids (Table 1). The origin of this phenomenon is not completely known, but it is generally attributed to developmental anomalies (Pereira *et al.*, 2003). Wilson (1962) indicated that in *Ooencyrtus submetallicus* (Hymenoptera : Encyrtidae) temperature

determines whether progeny are male, female, or gynandromorphic.

This scientific note reports the occurrence of gynandromorphism in *Microterys ishiii* Tachikawa (1963) and contributes to the knowledge of this still insufficiently known species. Little has been known about *M. ishiii* concerning its biology, and reports on its morphological anomalies, such as gynandromorphism, have not been available.

Table 1 Gynandromorphism in Chalcidoidea

Family/species	References
Agaonidae	
<i>Blastophaga psenes</i> (Linnaeus)	Pereira <i>et al.</i> , 2003
<i>Pegoscopus tonduzi</i> (Grandi)	Pereira <i>et al.</i> , 2003
Chalcididae	
<i>Hockeria rubra</i> (Ashmead)	Halstead, 1988
Encyrtidae	
<i>Anicetus ceroplastis</i> Ishii	Tachikawa, 1963
<i>Comperiella unifasciata</i> Ishii	Taylor, 1935 ; Tachikawa, 1963
<i>Copidosomopsis</i> (= <i>Pentalitomastix</i>) <i>plethorica</i> (Caltagirone)	Caltagirone, 1970
<i>Ooencyrtus submetallicus</i> (Howard)	Wilson, 1962
<i>Rhopus acaetes</i> (Walker) (= <i>Pholidoceras jarli</i> Kryger)	Kryger, 1943 ; Tachikawa, 1963
<i>Tropidophryne melvillei</i> Compere	Doutt and Smith, 1950 ; Tachikawa, 1963
Pteromalidae	
<i>Nasonia vitripennis</i> (Walker)	Beukeboom and Kamping, 2006 ; Kamping <i>et al.</i> , 2007

In June 1964, one gynandromorphous adult, 4 normal female adults (Figs. 1, 2) and 2 normal male adults (Fig. 3) of *M. ishiii* were reared from

Pulvinaria (= *Chloropulvinaria*) *aurantii* collected in Ya Xian, Zhejiang Province by Chen Tai-Lu. These specimens were stored in Institute of Zoology, Chinese

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Academy of Sciences. In dorsal position, the body of the gynandromorphous adult is divided symmetrically in length, presenting male external features on the right and female ones on the left (Figs. 4, 5). Sexual

dimorphism occurs in its antennae, wings (Figs. 6, 7) and legs (shape, size, and color). However, it shows general male characteristics in genitalia (Fig. 8).



Figs. 1 – 8 *Microterys ishii* Tachikawa

1 : Female, lateral view ; 2 : Female, dorsal view ; 3 : Male, dorsal view ; 4 – 8 : Gynandromorph : 4 : Head in front view ; 5 : Body (excluding head) in dorsal view ; 6 : Fore wing (left) ; 7 : Fore wing (right) ; 8 : Gaster in ventral view.

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石井花翅跳小蜂(膜翅目 : 跳小蜂科)的雌雄同体个例

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摘要 : 报道了石井花翅跳小蜂的雌雄同体一例 , 并提供了其形态特征图。研究标本育自柑橘绵蜡蚧 , 采集地为浙江省衢县 , 保存在中国科学院动物研究所动物标本馆。

关键词 : 膜翅目 ; 跳小蜂科 ; 石井花翅跳小蜂 ; 雌雄同体 ; 中国

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