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# The Genus *Zele* of Taiwan (Hymenoptera : Braconidae)[1]

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Abstract : Three species of the genus *Zele* Curtis (Hymenoptera : Braconidae : Meteorinae), *Z. admirabilis* Maeto, *Z. deceptor* (Wesmael) and *Z. niveitarsis* (Cresson), are recognized for the first time from Taiwan in this paper. A key to the Taiwanese species of the genus *Zele* is given.

Key words : *Zele,* Braconidae, Hymenoptera, Taiwan.

The genus *Zele* Curtis (Braconidae : Meteorinae) is characterized by the following combination of characters : vein r-m of fore wing present ; cell R1 of hind wing widened apicad ; first metasomal tergum petiolate, widened apicad ; at least apical half of third and following terga densely setose. Twenty-three species have been known to occur in the world [1,2,4,5], none of them is previously reported from Taiwan. In this paper 3 species are recorded from Taiwan for the first time. The terminology used here mainly follow Huber and Sharkey (1993). The specimens used in this study are deposited in the Insect Collection of the Taiwan Agricultural Research Institute, Taichung, Taiwan, ROC.

## Key to species of *Zele* from Taiwan

1. Metasomal tergum 1 about 4.0 times as long as wide apically ; second tergum evenly setose ..... *admirabilis* Maeto
-. Metasomal tergum 1 2.4-2.9 times as long as wide apically ; second tergum glabrous at least in basal half ..... 2
2. Vein 1cu-a of fore wing antefurcal; length of ovipositor sheath longer than vein C+Sc+R of fore wing ..... *niveitarsis* (Cresson)
-. Vein 1cu-a of fore wing postfurcal or interstitial ; length of ovipositor sheath distinctly shorter than vein C+Sc+R of fore wing ..... *deceptor* (Wesmael)

## *Zele admirabilis* Maeto

*Zele admirabilis* Maeto, 1986, Kontyu, 54 : 250.

Specimen examined : Nantou : Sungkang 2,100m, 1♀, X.1985 (K.S. Lin).
Distribution : Taiwan (new record) and Japan.

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Host: Unknown.

## *Zele deceptor* (Wesmael)

*Perilitus deceptor* Wesmael, 1835, Nouv. Mem. Acad. Brux. 9:26.
*Perilitus pallitarsis* Cresson, 1872, Can. Ent. 4:81.
*Meteorus (Zemiotes) rufulus* Thomson, 1895, Opusc. ent. 20:2149.
*Meteorus maximus* Muesebeck, 1923, Proc. U.S. natn. Mus. 63:13.
*Meteorus reticulatus* Muesebeck, 1923, Proc. U.S. natn. Mus. 63:14.
*Meteorus romani* Fahringer, 1930, Ark. Zool. 21A:8.
*Meteorus (Zemiotes) separandus* Fischer, 1957, Opusc. zool. 3:3.
*Zele albiditarsus* Curtis (p.p.): van Achterberg, 1979, Tijdschr. Ent. 122:376.
*Zele deceptor* (Wesmael): van Achterberg, 1984, Ent. Berich. 44:110. — Maeto, 1986, Kontyu, 54:255. — Chen, He & Ma, 1987, Wuyi Sci. J. 7:95.

Specimens examined: Hualien: Tayuling 2,560m, 4♀,2♂, 9-16.IX.1980 (K.S. Lin & C.H. Wang). Taichung:Lishan 1,900m, 1♀, 26.VI.1979 (K.S. Lin & L.Y. Chou). Chiai: Alishan 2,400m, 1♀, 17-20.VIII.1982 (K.C. Chou & C.C. Pan). Nantou: Meifeng 2,150m, 1 ♂, 2-4.VI. 1980 (L.Y. Chou & C.C. Chen) ; 1♂, 5-9.X.1980 (C.C. Chen & C.C. Chien); 1♀, 28-29.VIII. 1981 (L.Y. Chou & S.C. Lin); 1♀, 19-21.IV.1983 (K.C. Chou & S.P. Huang); 1♀, VIII, & 1 ♀, X.1984 (K.S. Lin & K.C. Chou). Sungkang 2,100m, 1♀, X, & 1♀, XI. 1984 (K.S. Lin & K.C. Chou); 2♀, X, & 5♀, XI. 1985 (K.S. Lin); Tsuifeng, 1♀,1♂, 21.VI. 1979 (K.S. Lin & B.H. Chen); 2♂, 1-3. VIII. 1981 (T. Lin & W.S. Tang); 1♀, 23-25.VI.1983 (K.S. Lin & S.C. Lin); 1♀, IV, 2♀, 1♂, VIII, 1♀,2♂, IX, 5♀, X, & 2♀, 1♂, XI. 1984 (K.S. Lin & K.C. Chou ); 1♀, 5.VIII.1984 (K.S. Lin) ; 1♂, 15-16.VIII. 1984 (K.C. Chou) ; 3♂, 12-14.IX.1984 (K. S. Lin & S.C. Lin) ; 1♀, IX, 3♀, 4♂, X, & 1♀, XI. 1985 (K.S. Lin).

Distribution : Taiwan (new record), Mainland China Holarctic Region.

Host : Mainly Geometridae[1,2].

## *Zele niveitarsis* (Cresson)

*Perilitus niveitarsis* Cresson, 1872, Can. Ent. 4:81.
*Meteorus peronatus* Shestakov, 1940, Ark. Zool. 32A:16.
*Zele niveitarsis* (Cresson): van Achterberg, 1979, Tijdschr. Ent. 122:368. — Maeto, 1986, Kontyu, 54:251. — Chen, He & Ma, 1987, Wuyi Sci. J. 7:94.

Specimens examined: Hualien: Tayuling 2,560m, 1♂, 10-15.IX.1980 (K.S. Lin & C.H. Wang). Nantou: Meifeng 2,150m, 2♂, 26.VIII.1980 (K. S. Lin & C.H. Wang); 2♂, IX, & 1 ♀, X. 1984 (K.S. Lin & K.C. Chou); Sungkang 2,100m, 1♂, IX, & 1♀,3♂, X.1984 (K.S. Lin & K.C. Chou); 2♂, IX, & 1♀, X.1985 (K.S. Lin).

Distribution: Taiwan (new record), Mainland China, Japan, East Siberia, Sumatra, Nearctic Region.

Host: Mainly Pryalidae[1].

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# 臺灣產賽繭蜂屬 (膜翅目：小繭蜂科)[1]

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## 摘 要

賽繭蜂屬 (*Zele* Curtis) 隸膜翅目、小繭蜂科、方室繭蜂亞科 (Meteorinae) 乃鱗翅目幼蟲之寄生性天敵。全世界已知之種類約23種，臺灣過去無記載，本文首次記錄 *Z. admirabilis* Maeto, *Z. deceptor* (Wesmael)及 *Z. niveitarsis* (Cresson) 3種賽繭蜂分布於臺灣。

**關鍵詞**：賽繭蜂屬、小繭蜂科、膜翅目、臺灣。

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