

[研究文章 Research Article]

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福州山植綫蟎相初探

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摘要: 本研究為臺北市福州山公園內之植綫蟎相初探，於 6 種植物上調查到了 3 屬 6 種，共 35 隻植綫蟎個體。

關鍵詞: 植綫蟎、生物資源調查、福州山公園

前言

植綫蟎科(捕植蟎)全世界已記錄超過 90 屬 2,700 種 (Moraes et al., 2004; Chant & McMurtry, 2007; Demite et al., 2017)。普遍發生於各種植物上，如雜草、農作物、低矮的灌木及高聳的喬木等，亦有發生於植物花器部位，以及棲息於枯枝、落葉堆或土壤中之種類 (McMurtry et al., 2013)。部分種類常作為生物防治之捕食性天敵，能捕食田間植食性的小型害蟲，如葉蟎、粉蝨、節蟬、蚜蟲及薊馬等，對農業生態系提供重要的貢獻 (Moraes et al., 2004; McMurtry et al., 2013)。由於植綫蟎具生物防治的潛力逐漸受到重視，因此自 1960 年代起，許多以植綫蟎為題材的研究紛紛出現。為能使其更有效的應用，基礎分類學的研究是不可或缺的。福州山位於臺北市大安區，隸屬南港山的尾稜，向西一路低降的稜線至此僅剩百餘公尺高，自日治時期即為重要的彈藥庫所在，屬不對外開放的軍事用地，故植被環境保存尚稱完整，為臺北市民難能可貴的都市森林公園之一，而踏查、釐清本地之生物相實乃分類學研究之必要工作，亦能幫助民眾了解其生活環境並留下資料供有關單位、研究後續使用。本研究針對福州山公園之步道區進行植綫蟎相調查，共發現 3 屬 6 種，合計 35 隻植綫蟎個體。

材料與方法

本研究之採集方法以直接目視或透過 15 倍放大鏡檢視植物葉片與枝條等植綫蟎可能棲息之處。將帶有蟎體之植株攜回實驗室鏡檢。並以 Hoyer's medium 進行玻片製作。依循 Chant & McMurtry (2007) 之分類系統，玻片標本利用光學顯微鏡 (Olympus BX51) 鏡檢。形態分類術語依據 Chant & McMurtry (2007)、Wu et al. (2009)、Denmark & Evans (2011) 等研究。然部分特徵術語來自不同研究，背毛與腹毛相分別參考 Rowell et al. (1978) 與 Chant & Yoshida-Shaul (1991; 1992)。而背面、腹面孔腺命名參照 (Beard, 2001)；腹板、交尾囊形狀、雄性擔精趾各部位命稱參照 De Leon (1961)。

本研究檢查之標本存放於國立臺灣大學昆蟲學系 (National Taiwan University, Taipei, Taiwan)。

結果

植物綫蟎科 Phytoseiidae Berlese

鈍綫蟎亞科 Amblyseiinae Muma

真綫蟎屬 *Euseius* Berlese

血桐真綫蟎

Euseius macaranga Liao & Ho, 2017

Euseius macaranga Liao & Ho, 2017

標本檢查：

Fujhoushan Park (25°00.957' N, 121°33.291' E, 80 m), 6♀2♂ from *Macaranga tanarius* (Euphorbiaceae), 17.x.2016, J. R. Liao.

分布：臺灣。

卵圓真綫蟎

Euseius ovalis (Evans, 1953)

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Typhlodromus ovalis Evans, 1953: 485.

Typhlodromus (Amblyseius) ovalis.—Chant, 1959: 68.

Amblyseius (Typhlodromalus) ovalis.—Muma, 1961: 288.

Amblyseius (Amblyseius) ovalis.—Ehara, 1966: 24.

Amblyseius (Euseius) ovalis.—Ehara & Amano, 1998: 43.

Euseius ovalis.—Gupta, 1978: 335; Liao *et al.*, 2017: 220.

標本檢查：Fujhoushan Park (25°00.957' N, 121°33.291' E, 80 m), 2 ♀ 1pn from *Morus alba* (Moraceae), 17.x.2016, J. R. Liao.

分布：澳洲、斐濟、夏威夷、中國大陸、香港、印度、印尼、日本、模里西斯、墨西哥、紐西蘭、巴布新幾內亞、菲律賓、臺灣。

擬植綫蟎屬 *Paraphytoseius* Swirski & Shechter

纖細擬植綫蟎

Paraphytoseius cracentis (Corpuz & Rimando, 1966)

Ptenoseius cracentis Corpuz & Rimando, 1966: 115.

Paraphytoseius cracentis.—Swirski & Golan, 1967: 226.

標本檢查：Fujhoushan Park (25°00.957' N, 121°33.291' E, 80 m), 2 ♀ from *Melastoma candidum* (Melastomataceae), 17.x.2016, J. R. Liao.

分布：中國大陸、香港、巴布新幾內亞、菲律賓、新加坡、臺灣、泰國。

植綫蟎亞科 Phytoseiinae Berlese

植綫蟎屬 *Phytoseius* Ribaga

柯氏植綫蟎

Phytoseius coheni Swirski & Shechter, 1961

Phytoseius (Dubininellus) macropilis (Banks) *coheni* Swirski & Shechter, 1961: 104.

Phytoseius (Phytoseius) macropilis coheni.—Ehara, 1966: 26.

Phytoseius (Phytoseius) coheni.—Moraes *et al.* (1986): 219.

標本檢查：Fujhoushan Park (25°00.957' N, 121°33.291' E, 80 m), 1 ♀ from *Morus alba* (Moraceae), 17.x.2016, J. R. Liao; Fujhoushan Park (25°00.957' N, 121°33.291' E, 80 m), 7 ♀ 1dn from *Mallotus paniculatus* (Euphorbiaceae), 17.x.2016, J. R. Liao; Fujhoushan Park (25°00.957' N, 121°33.291' E, 80 m), 1 ♀ from *Callicarpa formosana* (Verbenaceae), 17.x.2016, J. R. Liao.

分布：臺灣、香港、印度、菲律賓、夏威夷、美國。

香港植綫蟎

Phytoseius hongkongensis Swirski & Shechter, 1961

Phytoseius (Phytoseius) hongkongensis Swirski & Shechter, 1961: 99.

Phytoseius (Pennaseius) hongkongensis.—Ehara, 1966: 25.

標本檢查：Fujhoushan Park (25°00.957' N, 121°33.291' E, 80 m), 4 ♀ 5 ♂ from *Broussonetia papyrifera* (Moraceae), 17.x.2016, J. R. Liao.

分布：澳洲、中國大陸、香港、印尼、日本、肯亞、馬達加斯加、馬來西亞、巴布新幾內亞、南韓、臺灣、泰國。

微小植綫蟎

Phytoseius minutus Narayanan, Kaur & Ghai, 1960

Phytoseius minutus Narayanam, Kaur & Ghai, 1960: 391.

Phytoseius (Phytoseius) minutus.—Denmark, 1966: 48.

Phytoseius (Pennaseius) minutus.—Ehara, 1966: 25.

標本檢查：Fujhoushan Park (25°00.957' N, 121°33.291' E, 80 m), 1 ♀ from *Mallotus paniculatus* (Euphorbiaceae), 17.x.2016, J. R. Liao; Fujhoushan Park (25°00.957' N, 121°33.291' E, 80 m), 1 ♀ from *Callicarpa formosana* (Verbenaceae), 17.x.2016, J. R. Liao.

分布：印度、臺灣。

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The preliminary faunistic survey of phytoseiid mites (Acari: Mesostigmata) from Fujhoushan Park

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Abstract. The present paper gives a preliminary faunistic survey of phytoseiid mites from Fujhoushan Park in Taipei City. It comprised 35 individuals, 6 species in 3 genera on 6 different habitat plants.

Key words: Phytoseiids, Biocontrol, Fujhoushan Park