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## 臺大實驗林植綫蟻相初探 (蜉蟻亞綱：中氣門目)：I. 鳳凰自然教育園區

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**摘要:** 本研究為鳳凰自然教育園區植綫蟻相初探，於 8 種植物上調查到了 4 屬 6 種，共 37 隻植綫蟻個體。

**關鍵詞:** 植綫蟻、生物資源調查、鳳凰自然教育園區

### 前言

植綫蟻科(捕植蟻)部分種類能捕食田間植食性的小型害蟲，如葉蟻、節蟻、粉蝨、蚜蟲及薊馬等，常作為生物防治之捕食性天敵，對農業生態系提供重要的貢獻 (Moraes et al., 2004; McMurtry et al., 2013)。全世界已記錄超過 90 屬 2,700 種 (Moraes et al., 2004; Chant & McMurtry, 2007; Demite et al., 2017)。由於植綫蟻的生物防治潛力逐漸受到重視，為能使其更有效的應用，基礎分類學的研究是不可或缺的。然目前臺灣地區植綫蟻調查多侷限於農地或郊區，而森林生態系中的植綫蟻相仍有許多值得探討的地方。

國立臺灣大學生物資源暨農學院實驗林管理處位於南投縣，地跨鹿谷、水里、信義三鄉。海拔高低落差約 3,700 公尺，地形錯綜複雜，豐富多樣的生物資源，具備了亞熱帶、暖溫帶、涼溫帶、冷溫帶及亞寒帶之各種森林植物帶，為臺灣森林垂直分佈之縮影。鳳凰自然教育園區係屬國立臺灣大學生物資源暨農學院實驗林管理處，位於南投縣鹿谷鄉鳳凰村南側，東臨鳳凰谷鳥園，南倚鳳凰山脈盡端山麓，西、北俯視鳳凰村、永隆村台地、凍頂山及濁水流域城鄉區域，屬暖溫帶氣候，動、植物資源豐富，中海拔自然生態教育園區，可供為全國各級學校、社團作為推廣自然生態教育及全體國民休閒觀光旅遊絕佳場所。本系列研究預期調查實驗林轄區之各自然教育園區，藉此以了解臺灣森林生態系中的植綫蟻相。

### 材料與方法

採集、玻片製作和標本檢查方法同 Lee & Liao (2017)；樣本必要時使用伯氏漏斗分離。玻片標本利用光學顯微鏡 (Olympus BX51) 鏡檢，依循 Chant & McMurtry (2007) 之分類系統鑑定。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

本研究針對鳳凰自然教育園區進行植綫蟻相調查 (圖一)，於 8 種植物上調查共發現 4 屬 6 種，合計 37 隻植綫蟻個體。調查植物如下：野牡丹 (*Melastoma septemnerium*)、黃花風鈴木 (*Tabebuia chrysantha*)、白匏子 (*Mallotus paniculatus*)、葛藤 (*Pueraria lobata*)、山櫻花 (*Prunus campanulata*)、土肉桂 (*Cinnamomum osmophloeum*)、檸檬 (*Citrus limon*)、鵝掌藤 (*Schefflera arboricola*)。



圖一、於鳳凰自然教育園區進行植綫蟎相調查。

6 種植綫蟎如下列：

植物綫蟎科 Phytoseiidae Berlese  
鈍綫蟎亞科 Amblyseiinae Muma  
鈍綫蟎屬 *Amblyseius* Berlese

#### 江原鈍綫蟎

*Amblyseius eharai* Amitai & Swirski, 1981

*Amblyseius eharai* Amitai & Swirski, 1981: 60.  
*Amblyseius (Amblyseius) eharai*.—Wu et al., 2009: 210.

標本檢查：Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 5 ♀ 1 ♂ from *Melastoma septemnerium* (Melastomataceae), 6.vii.2017, J. R. Liao; Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 5 ♀ 4n from *Tabebuia chrysantha* (Bignoniaceae), 6.vii.2017, J. R. Liao; Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 2 ♀ from *Mallotus paniculatus* (Euphorbiaceae), 6.vii.2017, J. R. Liao.

#### 長尾鈍綫蟎

*Amblyseius herbicolus* (Chant, 1959)

*Typhlodromus (Amblyseius) herbicolus* Chant, 1959: 84.  
*Amblyseius (Amblyseius) herbicolus*.—Muma, 1961: 287.

標本檢查：Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 1 ♀ from *Tabebuia chrysantha* (Bignoniaceae), 6.vii.2017, J. R. Liao; Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 1 ♀ from *Pueraria lobata* (Fabaceae), 6.vii.2017, J. R. Liao; Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 1 ♂ from *Prunus campanulata* (Rosaceae), 6.vii.2017, J. R. Liao; Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 2 ♂ from *Cinnamomum osmophloeum* (Lauraceae), 6.vii.2017, J. R. Liao.

真綫蟎屬 *Euseius* Berlese

愛澤真綫蟎

*Euseius aizawai* (Ehara & Bhandhufalck, 1977)

*Amblyseius* (*Amblyseius*) *aizawai* Ehara & Bhandhufalck, 1977: 59.

*Amblyseius aizawai*.—Liang & Ke, 1983: 163.

*Amblyseius* (*Euseius*) *aizawai*.—Ehara, 2002: 36.

*Euseius aizawai*.—Moraes et al. 1986: 36.

標本檢查：Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 1 ♀ from *Cinnamomum osmophloeum* (Lauraceae), 6.vii.2017, J. R. Liao.

分布：中國、馬來西亞、臺灣、泰國。

卵圓真綫蟎

*Euseius ovalis* (Evans, 1953)

*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：Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 1 ♀ from *Tabebuia chrysantha* (Bignoniaceae), 6.vii.2017, J. R. Liao; Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 3 ♀ from *Citrus limon* (Rutaceae), 6.vii.2017, J. R. Liao.

分布：澳洲、中國、斐濟、夏威夷、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。

沖綫蟎屬 *Okiseius* Ehara

亞熱沖綫蟎

*Okiseius subtropicus* Ehara, 1967

*Okiseius subtropicus* Ehara, 1967: 77.

標本檢查：Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 1 ♀ from *Mallotus paniculatus* (Euphorbiaceae), 6.vii.2017, J. R. Liao; Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 1 ♀ from *Schefflera arboricola* (Araliaceae), 6.vii.2017, J. R. Liao.

分布：中國、日本、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：Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 1 ♀ from *Mallotus paniculatus* (Euphorbiaceae), 6.vii.2017, J. R. Liao; Fenghuang Nature Education Area (23°43.704' N, 120°47.281' E, 871 m), 5 ♀ 2 ♂ from *Pueraria lobata* (Fabaceae), 6.vii.2017, J. R. Liao.

分布：中國、香港、巴布新幾內亞、菲律賓、新加坡、臺灣、泰國。

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## **The Preliminary Faunistic Survey of Phytoseiid Mites (Acari: Mesostigmata) from the Experimental Forest of National Taiwan University. I. Fenghuang Nature Education Area**

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**Abstract.** The present paper provides a preliminary faunistic survey of phytoseiid mites from Fenghuang Nature Education Area in Nantou County, Taiwan. It comprised 37 specimens, 6 species in 4 genera on 8 different habitat plants.

**Key words:** Phytoseiids, faunistic survey, Fenghuang Nature Education Area