

## 雲林縣古坑鄉山峰社區蝴蝶資源調查

### Butterfly inventory in Shanfeng community of Gukeng Township, Yunlin County, Taiwan

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## 摘要

本研究主要目的在協助雲林縣古坑鄉山峰社區居民發展生態社區與瞭解蝴蝶資源，並為山峰國小轉型成實驗小學，推展環境教育，以探討當地蝴蝶之組成、結構與分布。因此，選定二坑、冷水

坑及金瓜坑等 3 條穿越線，自 2013 年 1 月至 12 月止，每月 1 次調查當地蝴蝶資源，計 12 次，共記錄 5 科 127 種 3,694 隻次成蝶。加上單帶弄蝶(*Parnara guttata*)和黑星弄蝶(*Suastus gremius*) 2 種於穿越線外所記錄之蝴蝶，總種數達 129 種。其中臺灣特有種 8 種，包括琉璃紋鳳蝶(*Papilio hermosanus*)、臺灣鳳蝶(*P. taiwanus*)、大波紋蛇目蝶(*Ypthima formosana*)、白條斑蔭蝶(*Penthema formosanum*)、埔里三線蝶(*Neptis taiwana*)、臺灣小紫蛺蝶(*Chitoria chrysolora*)、大黑星弄蝶(*Seseria formosana*)、細帶黃斑弄蝶(*Potanthus motzui*)，而黃裳鳳蝶(*Troides aeacus formosanus*)為其他應予保育類。比較各穿越線之蝴蝶種類數，結果以金瓜坑穿越線的 102 種為最高，冷水坑的 97 種居次，而二坑則為 95 種。黑點粉蝶(*Leptosia nina niobe*)共發現 261 隻次，且成蝶全年發生，為當地最優勢種蝴蝶。以豐富度而言，二坑 1,474 隻次為最高，金瓜坑則為 1,197 隻次居次，而冷水坑的 1,023 隻次最少。各月發現之蝴蝶種類數以 1 月種類數最低，僅有 7 種 29 隻次，其餘月份均高於 30 種，而以 8 月 77 種為最高。以生物多樣性指數 Simpson index 及 Shannon-Wiener index 分析各穿越線之差異，結果相差不大，然冷水坑穿越線的 Evenness 指數明顯較低，顯示該穿越線的旁邊受到的環境干擾較大。比較不同科別優勢種組成之幼蟲食草與當地的植被，結果大致相符，此外亦記錄當地成蝶蜜源植物計 12 科 20 種。本文亦建議社區居民規劃蝴蝶保育策略、監測及經營管理之方法。

## Abstract

This study is an inventory of butterflies in Shanfeng community of Gukeng Township, Yunlin County, Taiwan. The result can be useful for Shanfeng, Gukeng Township, Yunlin County to develop into an ecological community, the local elementary school to transform into an experimental forestry school, and promoting environmental education. Three transect lines were selected in Urkeng, Lengshuikeng and Genkakeng in a monthly investigation of butterfly composition, structure and distribution from January to December in 2013. From the 12 counts made during the investigation a total of 3,702 individuals, 127 species and five families were found. Skippers, *Parnara guttata* and *Suastus gremius*, were found beside transect lines with 129 species, among them eight were endemic species, namely *Papilio hermosanus*, *Papilio taiwanus*, *Ypthima formosana*, *Penthema formosanum*, *Neptis taiwana*, *Chitoria chrysolora*, *Seseria formosana*, and *Potanthus motzui*, as well as a rare and precious species by Cultural Heritage Preservation Act, *Troides aeacus formosanus*. Comparing the number of species found at each transect line, Genkakeng had the highest number of 102 species, followed by Lengshuikeng 99 species, and Urkeng 95 species. Comparison of the abundance of each transect line showed Urkeng had the highest count of 1,474 individuals, followed by Genkakeng 1,197 individuals and Lengshuikeng 1,023 individuals. Among them, *Leptosia nina niobe* was the most abundant species with 261 individuals counted throughout the studied period. Species richness fluctuated monthly and was the lowest with only 29 individuals of seven species in January, the highest 77 species in August, and more than 30 species in the other months. Simpson index and Shannon-Wiener index of each transect line showed insignificant