

蝴蝶公園中蝴蝶與蜜源植物之關係探討

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摘要：1993年1月至12月間，在台北盆地南邊台北動物園之蝴蝶公園中，依1/500等高線圖經緯方格中之區塊，選擇一蝶相調查穿越線，穿越線涵蓋22個不同生態環境之銜接區塊，每一區塊之面積為 $50 \times 50 \text{ m}^2$ 。每週各一次，於晴天上午10至12時段，以穿越線調查法穿越選定區塊，記錄蝴蝶種類、數量及吸食花蜜行為。研究期間計完成32次有效穿越線調查，共記錄10科、130種、6367隻次蝴蝶，其中計有8科65種蝴蝶有訪花行為，受訪之蜜源植物計有26科46種。蝴蝶公園中蝴蝶與蜜源植物之關係，以鳳蝶和馬鞭草科及茜草科植物最為密切。蜜源植物喜愛指數(PPI)最高的前三名依序為馬纓丹、南美蟛蜞菊及繁星花。花序種類則以頭狀花序受訪頻率較高，其他依序為聚繖花序、繖房花序、總狀花序、繖形花序、圓錐花序、穗狀花序，而單花則受訪頻率較低。花色則以黃色花受訪頻率最高，其他依序為紅、紫、白、綠色花，而PPI較高之花色都以黃、紅色系為主，因此多數蝴蝶對黃紅色系蜜源植物較為偏好。鳳蝶偏好紅色花，粉蝶有較高比例吸食紫色花，蛺蝶科較偏好白色花，其餘多數蝴蝶種類以黃色花為造訪對象。PPI較高之蜜源植物多屬園藝性作物。

關鍵字：台北盆地、蝶相、蜜源植物、植物喜愛指數(PPI)。

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The relations between butterflies and nectar plants in butterfly park at Taipei Zoo

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Abstract : The study started from January of 1993 and ended in December of the same year. 22 linking blocks of 50 * 50 m² covering various topographic and ecological structures were selected in southern slope of Taipei Basin for study. All the blocks were in the area of 1/500 contour and divided by meridian and parallel lines. Once a week on nice days, walking through each selected blocks Transect counts, recorded the species of butterflies, numbers of each species and their visiting flowers behaviors. During the study period, 32 valid Transect counts were made and resulted in the record of 10 families, 130species and 6367 individual counts of butterflies. The butterflies visiting nectar plants came from 65 species in 8 families, there were 46 species of nectar plants from 26 families. Papilionidae were closely related to Verbenaceae and Rubiaceae nectar plants. The highest three Plant Popularity index (PPI) went to Lantana camara, Wedelia trilobata and Pentas lanceolata. The butterflies would like to touch flowers with capitulum inflorescence better than flower with cyme, corymb, raceme, umbel, panicle or spike inflorescence in order. The solitary were not touched as frequently as other flowers. For colors, yellow flowers were butterflies` first choice, then the red, the purple, the white, and the green. All flowers with high PPI are mostly yellow or red. As a result, most butterflies prefer yellow-red nectar plants. The nectar plants with high PPI were cultivated plants in the park.

Key words: Taipei Basin 、 butterfly fauna 、 nectar plant 、 PPI

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