

應用 DNA 分子條碼鑑定蝙蝠品種

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摘要

蝙蝠為翼手目動物的通稱，翼手目是哺乳動物中種類僅次於齧齒目的第二大類群，全世界已發現超過 1400 種蝙蝠。臺灣目前已發現 37 種蝙蝠品種，一般是利用外觀特徵，例如臉部特徵、耳珠形狀等來區別蝙蝠品種。除利用外觀特徵進行品種鑑定外，現利用蝙蝠品種間基因序列的差異來區別蝙蝠品種的方式亦常被使用。本次應用聚合酶鏈鎖反應增幅 13 個蝙蝠品種的部分粒線體基因(cytochrome c oxidase subunit 1、NADH dehydrogenase subunit 1 及 cytochrome b)，並以其基因序列分析蝙蝠品種，來協助爾後實驗室進行蝙蝠品種的鑑定。

Identification of bat species by DNA barcoding

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Abstract

Bats belong to the order *Chiroptera*, which is the largest order of mammals next only to rodents (order *Rodentia*). More than 1,400 species of bats are identified in the world, and 37 bat species are identified in Taiwan till now. External features is commonly used to identify bat species, such as facial characteristic, outline of ear, shape of tragus. The molecular method called DNA barcoding, which uses short standardized DNA sequence of the host to distinguish the animal species is frequently used now. This study used polymerase chain reaction to amplify the partial mitochondrial DNA (cytochrome c oxidase subunit 1, NADH dehydrogenase subunit 1 and cytochrome b) of 13 bat species, and analyzed the mtDNA sequence to distinguish the species to improve the species identification of bat in laboratory in the future.