生物策略表

類別	生物策略 (Strategy)
生物策略 STRATEGY	毛茸茸的苞片作為保溫之用 (Furry bracts serve as insulation)
生物系統 LIVING SYSTEM	半邊蓮屬 *Lobelia telekii* (Lobelia)
功能類別 FUNCTIONS	#保護免受溫度危害 #保護免受風危害 #Protect from temperature #Protect from wind
作用機制標題	蓬頭碩蓮透過細長毛髮狀的苞片保護花朵免受風吹和寒冷 (The bracts of *Lobelia telekii* protect its flowers from wind and cold via long, hair-like shape.)
生物系統/作用機制示意圖	 

作用機制摘要說明 (SUMMARY OF FUNCTIONING MECHANISMS)

文獻引用 (REFERENCES)

「半邊蓮屬植物會將它們的花朵密集包裹在從蓮座中心 (rosette) 長出的花序軸上。有一個物種在晚上會將其葉子包覆幼芽，為花提供了相當大的保護。但保持展開的蓬頭碩蓮屬植物必須要有一些額外裝置。在任何狀況之下，它的花朵從一根高達數英吋的花序軸 (column) 上長出來，遠遠超出葉子可覆蓋到的範圍。

蓬頭碩蓮保護花朵的方式與千里木 (tree-groundsel, *Dendrosenecio*) 保護樹幹中的樹液 (sap) 一樣─具有滯後性 (lagging)，但它不是利用枯葉，而是以圍繞在每朵花周圍非常長的毛髮狀苞片 (bract)，形成厚厚的毛皮保護結構。花本身比苞片短得許多而被隱藏在深處，所以太陽鳥 (sunbird) 要將其頭部深深埋進厚毛皮下，才能找到花蜜並為花朵授粉。」(Attenborough 1995: 263)

"The lobelias carry their flowers densely packed around a thick stem that rises from the centre of the rosette. The action of one species in folding its leaves over the bud at night also provides considerable protection for the flowers. But the lobelia species that remains open must

have some additional device. In any case, its flowers would be far beyond the reach of its leaves for they are produced around a column that rises several feet high.

It protects them in the same way as the tree-groundsel protects the sap in its trunk—with lagging, and it uses not dead leaves but exceptionally long hair-like bracts which grow around each flower and together forms a thick fur around the pillar. The flowers themselves are much shorter than the bracts and are almost hidden by them so that the sunbirds, which pollinate the flowers, have to thrust their heads deeply into the fur to find nectar." (Attenborough 1995:263)

參考文獻清單與連結 (REFERENCE LIST)

Attenborough, D. (1995). *The private life of plants.* BBC Books.

延伸閱讀

生物系統延伸資訊連結 (LEARN MORE ABOUT THE LIVING SYSTEM/S)

https://en.wikipedia.org/wiki/Lobelia
https://www.naturefootage.com/video-clips/OFE150121_0283/male-sunbird-possibly-scarlet-tufted-sunbird-feeds-on-giant-lobelia

撰寫/翻譯/編修者與日期

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AskNature 原文連結

https://asknature.org/strategy/furry-bracts-serve-as-insulation/