

生物策略格式

KJC, 2019/10/21

類別	生物策略 (Strategy)	
生物策略 STRATEGY	分泌物使蜂巢防水 (Secretion waterproofs nest)	
生物系統 LIVING SYSTEM	玻璃紙蜂 <i>Colletes inaequalis</i> (Cellophane Bee)	
功能類別 FUNCTIONS	#保護免受過多液體危害 #保護免受微生物危害 #Protect from excess liquids #Protect from microbes	
作用機制標題	玻璃紙蜂的杜氏腺體透過分泌天然聚酯來保護蜂巢避免水患 (The Dufour's gland of plasterer bees protects their nests from water by secreting a natural polyester.)	
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)		
<p>分舌花蜂 (<i>Colletes</i>) 和面花蜂 (<i>Hylaeus</i>) 是最原始的蜜蜂成員；牠們在中空的樹枝或地洞裡建立其繁殖室，用口部分泌物製成壁紙襯在巢穴壁上。這種液體會硬化成類似玻璃紙的防水薄膜；既可防止所收集的花蜜滲漏到周圍物質中，又可避免潮濕和黴菌危害。 (Pallasmaa 1995: 37)</p> <p>“The plasterer bees (<i>Colletes</i>) and yellow-faced bees (<i>Hylaeus</i>) are among the most primitive bees; they build their breeding chambers in hollow twigs or holes in the ground, lining the walls of their nest cavity with wallpaper made of an oral secretion. This fluid hardens into a waterproof film resembling cellophane; the lining both prevents their collected nectar from leaking into the surrounding material and keeps away dampness and mold.” (Pallasmaa 1995: 37)</p>		
參考文獻清單與連結 (REFERENCE LIST)		
Arndt, I. (2014). <i>Animal architecture</i> . Harry N. Abrams.		
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/Colletes>

文章貢獻/編修者與日期:

張硯宇翻譯 (2019/04/27) ; 朱天愛編修 (2019/12/19) ; 吳皓編修 (2020/01/04) ;
譚國銜編修 (2020/05/26) ; 紀凱容編修 (2020/11/26) ; 施習德編修 (2020/12/26)

AskNature 原文連結

<https://asknature.org/strategy/secretion-waterproofs-nest/>