



## 共生世界多面睇 *The Symbiotic World*

姓名 Name

組別 Group

日期 Date

### 學習目標 Learning goals:

完成課程後，學生應能 After the course, students should be able to:

1. 描述和解釋生物之間的各種關係 Describe and explain different types of relationships between organisms;
2. 辨認和分類一些本港常見生物品種 Identify and classify some common species in Hong Kong;
3. 對生物行為和外外在特徵進行深入觀察 Do comprehensive observation of the external features and behaviours of living organisms;
4. 與他人合作進行考察和資料整理工作 Cooperate with others to carry out field investigation and data processing;
5. 製作簡單科學報告 Make simple scientific report;
6. 欣賞大自然之美和尊重生物 Appreciate the wonder of nature and respect living things.

### 儀器和工具 Equipment and tools

1 寫字夾板 Clipboard	2 平板電腦 / 數碼相機 Tablet computers / Digital camera	3 雙筒望遠鏡 / 微距望遠鏡 Binoculars / Macroscope	4 圖鑑 Pictorial guides
5 膠袋 Plastic bags	6 培養皿 Petri dishes	7 剪刀 Scissors	

### 前往考察位置 Going to the survey locations

請跟據考察位置咁的提示前往考察位置。在每個考察位置附近找出1種植物，從該植物開始尋找共生生物。  
Go to your survey locations following the hints of your card. Spot a plant at each of your survey locations, start looking for symbiotic organisms from the plants you spotted.

	考察位置一： Survey location 1:	考察位置二： Survey location 2:
附近植物的名稱 Name of a plant nearby		
生長形態（草本/灌木/喬木/攀援植物） Growth form (Herb/Shrub/Tree/Climber)		
是否正值花期？或果期？ Flowering? Or fruiting?		
有否出現咬痕、傷口、發育不正常等情況？ Any occurrence of bite marks, wounds, abnormal development, etc.?		

## 深入觀察共生生物 Comprehensive observation of symbiotic organisms

在你們的考察位置尋找和深入觀察 2 對共生生物，完成以下表格。在可行情況下，建議現場拍攝相片和影片。另外，你亦可收集適量樣本，利用實驗室的顯微鏡仔細觀察。

Find 2 pairs of symbiotic organisms and do comprehensive observation at your survey locations. Taking photos and video records in situ are recommended whenever possible.

Besides, you may also collect appropriate amount of samples for microscopic observation in the laboratory.

### 1. 第一對共生生物 The 1st pair of symbiotic organisms

涉及的生物名稱 Names of organisms involved	(i)	(ii)
各自的形態特徵和行為 Morphological features & behaviours of the organisms	(i)	(ii)
生物之間的關係概述： 哪方得益/受損/不受影響？過程？ Brief description of the relationship between the organisms: Who gain benefit, be harmed or not be affected? By what means?		
共生關係類型 Type of relationship		

### 2. 第二對共生生物 The 2nd pair of symbiotic organisms

涉及的生物名稱 Names of organisms involved	(i)	(ii)
各自的形態特徵和行為 Morphological features & behaviours of the organisms	(i)	(ii)
生物之間的關係概述： 哪方得益/受損/不受影響？過程？ Brief description of the relationship between the organisms: Who gain benefit, be harmed or not be affected? By what means?		
共生關係類型 Type of relationship		

## 詳細報告 A detailed report

詳細闡述和解釋兩對共生生物的關係。

Describe and explain the relationships of 2 pairs of symbiotic organisms in detail.