



Study of Tai Po Kau Nature Reserve (Epiphytes)

Background information:

Epiphytes are defined as plants growing on other plants non-parasitically. Many fungi, algae, lichens, liverworts, mosses, ferns and flowering plants are epiphytic. Epiphytes are not evenly distributed, some hosts have very dense epiphytes, some host only have sparse epiphytes. There are many factors affecting the growth of epiphytes, including physical characteristics and chemistry of the host surface material, host identity, maturity, body size, light intensity, wind speed, wind direction, air temperature, humidity, etc..

Task:

Design and carry out a quantitative investigation on the distribution of epiphytes in Tai Po Kau Nature Reserve, and the factors affecting their distribution. Use appropriate method to count the number of epiphyte species on individual host plants and the density of each species. You may choose to use a different topic of investigation and design the plan accordingly. Write a full report for your investigation work and your findings.

Available equipment and material:

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| 1. Clipboard | 2. Magnifying glass |
| 3. Anemometer | 4. Compass and light nylon thread |
| 5. Light meter | 6. Thermohygrometer |
| 7. Counter | 8. Measuring tape (1.5 m) |
| 9. Wildlife Pictorial Guide (Book) | 10. Common epiphytes in Tai Po Kau (Identification sheet) |

Some items listed above may not be useful, students should decide what to be used. Additional equipment or material can be provided upon request, as long as the request item is available.

Procedure and time arrangement:

1. Group discussion and formulation of investigation plan - 50 mins
2. Distribution of equipment - 10 mins
3. Field work - 90 mins
4. Laboratory work - 60 mins
5. Group discussion and interpretation of results - 90 mins
6. Write up the full report

