

濱海地區植被調查成果於屋頂綠化植栽之選擇(Selecting Green Roof Species
Based on the Results of Plantation Survey in Coastal Areas)

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摘要

Expanding urban development has inevitably resulted in a shrinking green space. The conflict between buildings development and the natural environment could be mitigated by green roof. In Taiwan, high temperature in summer could cause a harsh roof environment in which plants used for green roof must be highly tolerant. Since coastal plants are typical of high tolerance for high temperature, this study aims to conduct a survey of inventory by sampling plots on the coastal plants in Hsinchu, Taiwan—including the areas such as coastal hills, coastal plains, etc. By studying how the native plants that are drought-enduring, wind-resisting, high-temperature tolerance and expressive, can be better materials for green roofs and fit better into the local plantation. This study intends to make green roofs sky islands linked ecosystems and to reduce the effect of the urban heat island. The Braun-Blanquet's approach was applied to survey, classify, and rank the vegetation and plant species. This approach was carried out along the coastal areas in Hsinchu. The 50 forset sample plots (10m X 10m) and 10 herbs plots (1m X 1m) were set up in the coastal areas in Xinfeng, Jubei, and the foothills in Xiangshan. There were 25 plant species chosen for green roof plantation in Hsinchu and the neighboring area. A plan of green roof design (10m X 20m) of an RC structure roof was used as the site to demonstrate a roof garden with native plants.

關鍵字：green roof, Braun-Blanquet method, coastal areas, native plants