Application Feature and



善用濕地植物 Wise Uses of Wetland Plants

水生植物包括完全淹浸於水中的植物以及 紮根於水份飽和土壤的植物。我們日常生 活中,不少食物、藥物及日用品都是水生 植物或其加工製品。

Aquatic plants are plants that grow totally under water or those rooted in water-saturated soil. In our daily life, lots of food, medicine and groceries are made of aquatic plants.



塱原的農民利用濕耕農地種植蕹菜 Farmers use wet farmland to plant Water Spinach



稻米田 Paddy field

食物 Food

自古以來,人類多選擇在鄰近河流、湖泊、沼澤等濕 地定居,以便獲取穩定的淡水供應。人類也懂得就地 取材,採摘住處附近的水生植物為食物。他們更開墾 耕地,廣泛種植各種水生農作物。

中國南方及東南亞人民的主要食糧中,有不少都是來 自濕地。我們經常吃的米飯,是稻穗經除殼後所剩餘 的部份。蕹菜、西洋菜、慈姑、薏苡、蓮子和蓮藕等 都是我們日常食用的水生植物。

現今的香港,大部份食物都是從中國內地或其他國家 入口,耕種在本港已今非昔比,不過在新界北部上水 一帶,仍然有少數的農地在運作。

Historically, man chose to settle close to wetlands such as rivers, lakes and marshes as there is a stable supply of freshwater. Apart from taking advantage of freshwater supply, man also found that many aquatic plants could be used as food. They developed farmlands for mass production of wetland crops.

Rice, a staple food in southern China and countries in Southeast Asia, is a wetland crop. The rice we eat are rice grains with husks removed. In addition, Water Spinach, Watercress, Taro, Myotonin (seed of Job's Tears), Lotus's seed and Lotus's root are common wetland plants that we use for making Chinese dishes.

In Hong Kong, our daily food supply relied on imports from Mainland China and other countries. Agriculture is less important in Hong Kong, but we can still find wetland agriculture in the northern New Territories including Sheung Shui.



將稻穗(上圖)的殼去除,便是我們日常食用的白米(下圖) The rice we eat is rice grains which their husks were removed



西洋菜是日常食用的蔬菜之一 Watercress is a common aquatic plants used in Chinese dishes



日常食用慈姑(左圖)的球莖部份(右圖) The corms of Chinese Arrow-head are edible

促進漁業生產

Promote Fisheries

水生植物在生態系統中,擔當著生產者的角色,同時亦為水生動物提供庇護和育幼場所。因此,在植被茂密的濕地環境,往往亦盛產具有經濟價值的水產。

「基圍」是利用環繞在河口生長的紅樹而建成的水產養殖場。基圍內,紅樹是生產者,基圍蝦、蟹及魚類等消費者直接或間接依靠紅樹供應食物,無需額外加入飼料。水產就在這個自給自足的環境下成長,這是可持續發展及善用水生植物的最佳例子。可惜大部份基圍已經停止運作或荒廢。目前仍運作的基圍只有數個位於米埔自然護理區內。

Aquatic plants are primary producers in the ecosystem. They provide shelters and serve as nursery for aquatic animals. Therefore, a wetland environment with flourishing aquatic plants may produce a good harvest of fishery products.

Gei wai is a type of aquaculture that is developed around mangroves (aquatic plants grow in estuarine areas). Here, mangroves as producers in the ecosytem produce nutrients directly or indirectly to gei wai shrimps, crabs and fishes, so that these grow to a marketable size in the self-sustained environment without the need of applying additional feed. It is an outstanding example of sustainable development and wise use of aquatic plants. Nowadays, only a few gei wais are still being operated in the Mai Po Nature Reserve.





上圖:基圍是利用環繞在河口生長的紅樹而建成的水產養殖場 Top: Gei wai is a type of aquaculture that is developed around mangroves

下圖:基圍出產的基圍蝦和魚

Bottom: Shrimps and fishes harvested from gei wai

藥物 Medicine

中藥在中國有悠久的歷史。著於約二千年前的《黃帝內經》和明朝的《本草綱目》都是著名的中醫學典籍,當中提及有醫療作用的植物,有不少是水生植物。

時至今日,我們仍然廣泛使用這些有藥用價值的水生植物。例如:水龍據稱可治感冒發燒、燈心草可治療喉部不適,及薏苡對胃部有益等。

(註:使用各種草藥前應先諮詢醫師的意見)



燈心草莖部中央的軟組織可以作為中藥及油燈的燈芯 The soft tissue in stem of Common Rush is commonly used as Chinese medicine and wick of oil lamps

Chinese herbal medicine has a long history. "Huangdi Neijing" and "Bencao Gangmu" are remarkable writings that were written 2000 years ago and in the Ming Dynasty respectively. The application of herbs (including aquatic plants) as medicine was mentioned in both texts.

Nowadays, many species of aquatic plants are still being used to cure different diseases. For example, Water-dragon can cure influenza and fever, Common Rush can cure sore throat, Myotonin (seed of Job's Tear) is good for the stomach.

(Note: It is highly recommended to consult medical advice before using any herbs)



下圖:薏苡碾去外殼,去除外皮,成為薏苡仁,可以入藥 Bottom: The shell and fruit skin of Job's Tears is removed, the seed is used as medicine

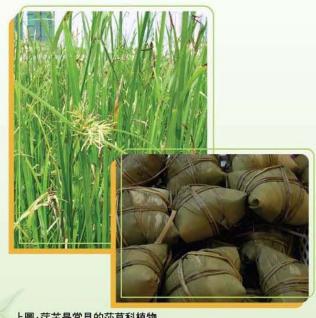
日常用品 Commodities

古時,很多傳統日用品都是從水生植物提煉或加工而成,例如用蘆葦葉編織而成的雨衣(簑衣),蘆葦的花穗 作為睡枕的填料、稻草加工而成的掃帚、以茳芏的莖作為編織草蓆及紥糉子的繩、以燈心草莖部的柔軟組織 作為油燈的燈芯等。還有,稻的葉和莖更可作覆蓋屋頂的物料,或者作為燃料。

上述提及的日用品,現時已被塑膠、金屬製成品或電器用品所取代。不過,在東南亞以及國內的偏遠地區, 當地人仍然保留其先祖留存下來、運用水生植物製作各種日用品的傳統。下次到這些地區旅遊時,不妨留意 一下他們善用資源的方法。

Many commodities in the past were made of wetland plants. Leaves of Reed were used for making traditional rain coats, while inflorescence of reed was used as pillow-filling materials. Rice straw was used for making brushes. The stem of Malacea Galingale was used for weaving mats and tying rice dumpings. The soft tissue in the stem of Common Rush was used as wick of oil lamp. Furthermore, leaves and stems of Rice were used as roofing materials, as well as fuels.

Most of these commodities nowadays have been replaced by electrical appliances, plastic and metal products. However, people in some rural areas of Southeast Asia countries and mainland China are still using wetland plant products. When you are travelling there, it may be a point of interest to learn how they use these plants.



上圖:茳芏是常見的莎草科植物 Top: Malacea Galingale is a common Sedge 下圖:其莖部能製成鹹水草,用作紮糭子 Bottom: Its stem can be made into natural string for tying rice-dumpings

■香港濕地公園的水生作物 Wetland crops in Hong Kong Wetland Park

我們特別在公園的濕地工作間,種植了多種濕地農產品。在春夏季有稻、芋、蓮、蕹菜等農作物。在秋冬季有西洋菜、薏苡和荸薺等。大家不妨到該區一遊,細心觀察一下這些水生作物。

If you want to see wetland crops, you may visit Wetlands at Work in the Hong Kong Wetland Park. The crops are planted seasonally. You will see Rice, Taro, Lotus and Water Spinach in spring and summer; and you will see Watercress, Job's Tears and Water Chestnut in autumn and winter.



香港濕地公園的濕地工作間展示各種濕地出產的食用植物 Wetlands at Work of the Hong Kong Wetland Park displayed a variety of wetland food crops



在濕地工作間,有不少食用植物由義工親手栽種 Volunteers support planting of aquatic food plants at Wetlands at Work



蕹菜 Water Spinach



