

常見水生植物的園藝應用

水生植物一般指於水中生長的植物，這些植物具特殊適應能力，能於水生環境進行氣體交換、光合作用、水分平衡、養分吸收和生長繁殖。水生植物在水中亦可發揮各種生態作用，包括提供食物、棲息地與氧氣，改善水質及保存水土。

水生植物按其生長位置和形態，可分為以下幾類：挺水植物、浮葉植物、沉水植物和漂浮植物。

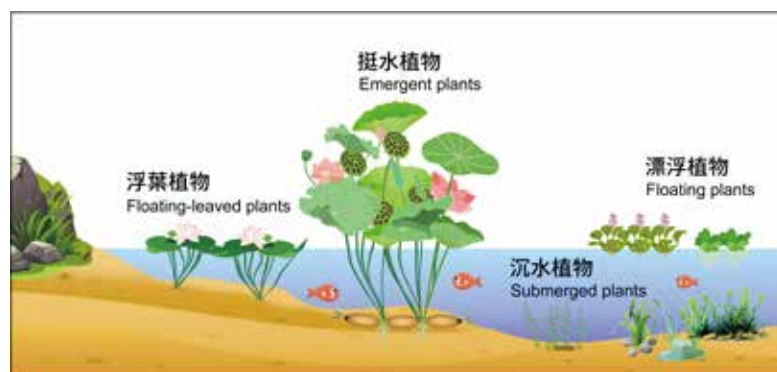


挺水植物：生長在水下泥土之中，莖葉挺出水面，植株直立挺拔。常見品種包括蓮(荷花)、千屈菜、黃菖蒲、水蔥、再力花、蘆竹、香蒲、澤瀉、風車草和蘆葦。

浮葉植物：生長在水下泥土之中，其葉柄細長，莖細弱不能直立，葉片漂浮在水面上。常見品種包括王蓮、睡蓮、萍蓬草、芡實和荇菜。

沉水植物：紮根在水下泥土之中，有個別品種的莖亦生長在泥土下，整株沉浸水中。由於水下空氣極匱乏，故植株的通氣組織特別發達，以利交換氣體。葉多呈狹長或絲狀。常見品種包括菹草、龍舌草(水車前)、苦草、金魚藻和眼子菜(異匙葉藻)。

漂浮植物：莖葉漂浮於水面，根系懸垂於水中，以吸收養分，惟因不紮根泥土而漂浮無定。常見品種包括大藻、浮萍和鳳眼藍(大水萍)。



Horticultural Applications of Common Aquatic Plants

Aquatic plants grow in water. Such plants play various ecological roles in the water, such as the provision of food, habitats and oxygen; the improvement of water quality and the conservation of soil.

Aquatic plants can be grouped into the following categories based on their habitats and structures: emergent plants, floating-leaved plants, submerged plants and floating plants.

Emergent plants

Emergent plants stand upright in water, with stems and leaves protruding through the surface. Common examples include *Nelumbo nucifera* Gaertn. (Indian Lotus), *Lythrum salicaria* L. (Purple Loosestrife), *Iris pseudacorus* L. (Yellow Flag), *Schoenoplectus tabernaemontani* (C.C.Gmel.) Palla (River Club-Rush), *Thalia dealbata* Fraser ex Roscoe (Powdery Alligator Flag), *Arundo donax* L. (Giant Reed), *Typha orientalis* C. Presl (Bulrush), *Alisma plantago-aquatica* L. (Common water-plantain), *Cyperus involucratus* Rottb. (Umbrella Plant) and *Phragmites australis* (Cav.) Trin. ex Steud. (Common Reedgrass).



王蓮 Giant Water Lily
Victoria species

Floating-leaved plants

These plants grow in soil underwater, with a slender leafstalk, delicate stems that cannot stand upright, and leaves floating on the water surface. Common examples include *Victoria* species (Giant Water Lily), *Nymphaeae* species (Water Lilies), *Nuphar pumila* (Timm) DC. (Yellow Pond-lily), *Euryale ferox* Salisb. (Fox Nuts) and *Nymphoides peltata* (S. G. Gmel.) Kuntze (Yellow Floating Heart).

Submerged plants

These plants take root in soil underwater, with stems that grow in the sedimentary layer and wholly submerged in water. Given the scarcity of air underwater, these plants have specially adapted tissues to enable gas exchange to take place underwater. Their leaves often look elongated or thread-like. Common examples include *Potamogeton crispus* L. (Curly Pondweed), *Ottelia alismoides* (L.) Pers. (Water Plantain), *Vallisneria spiralis* (L.) L. (Eel Grass), *Ceratophyllum demersum* L. (Coontail) and *Potamogeton distinctus* A. Bennett (Bog Pondweed).

Floating plants

These plants have floating stems and leaves on the water surface, with roots hanging in water for nutrient absorption. Not taking root in soil, they drift freely without anchoring themselves. Common examples include *Pistia stratiotes* L. (Water Lettuce), *Lemna minor* L. (Lesser Duck-weed) and *Eichhornia crassipes* (Mart.) Solms (Water Hyacinth).

水生植物在園藝上的應用十分廣泛，在泳池中種植水生植物，可提升外觀美感，亦可吸引蜂蝶，雀鳥和水中生物，增加生物多樣性。在水缸容器中種植水生植物，可改善水質，提供氧氣，防止水藻過度生長，亦可為魚類提供食物和棲息地，在水中締造生態系統，小中見大。若於家中放置花盆種植水生植物，則有助降低室溫，減少水份蒸發；既可為其他植物提供濕潤環境，亦使室內生色不少，並確保空氣濕潤清新。



金魚藻 Coontail
Ceratophyllum demersum L.

在家居種植水生植物，宜選擇適合家居環境的水生植物，例如睡蓮；忌選種需要佔用大量空間和光線的水生植物，例如蓮（荷花）、黃菖蒲和蘆葦。按植物大小和生長習性，應選用尺寸深淺適中的容器，亦須注意其材質和透氣程度；切忌選用有毒或不穩定的材料。留意為水生植物提供優質清水，以無氯無鹽無污染為佳，亦須定期換水，並添加適量肥料，以增加水中養分；切忌施用過量或不合適的肥料，以免水質惡化，引至水藻過度生長。此外，應為水生植物提供充足光線，例如將容器置於陽光充足之處，又或使用人工照明，以促進水生植物的光合作用和生長。切忌照以過強光線，以免曬傷植物；惟若光照過弱，植物則會萎縮枯死。最後，大家不要忘記適時為水生植物進行修剪，去除枯



睡蓮 Water Lilies
Nymphaeae species



蓮（荷花） Indian Lotus
Nelumbo nucifera Gaertn.

There are extensive uses of aquatic plants in horticulture. Grown in ponds, aquatic plants can beautify environments and attract birds and insects to visit, thereby enhancing biodiversity. Aquatic plants can also be grown in containers, and can improve water quality, serve as a source of oxygen, prevent excessive algal growth and provide food and habitats for fish, creating an ecological microcosm in water. Grown in pots, aquatic plants can help reduce indoor room temperature and evaporation. As such, the plants can create a pleasant, moist environment for other plants; beautify homes, and keep the air fresh.

When growing aquatic plants at home, it is advisable to choose plants that are suitable for growth in indoor home environments, such as Pygmy Water-lily. It is advised to avoid growing aquatic plants that require lots of space and sunlight, such as Indian Lotus, Yellow Flag and Common Reedgrass. Containers, including ponds, tanks and pots, should be selected based on the size and growth habits of the plants. Attention must be paid to the container materials and their level of aeration. Toxic or unstable materials must not be used. It is advised to provide clean water for aquatic plants, preferably free of chlorine, salt and pollutants. Please remember to change water regularly and add fertilisers as appropriate to increase the levels of nutrients in water. Excessive or unsuitable fertilisers, however, would lead to deteriorating water quality or rapid growth of algal. It is also necessary to put the containers in places with abundant sunlight or using artificial lighting, so as to allow photosynthesis to take place for plant growth. Nevertheless, overly strong sunlight exposure is discouraged to prevent sun scorch, though inadequate sunlight exposure causes plants to wither and die. Last but not least, please do not forget to prune aquatic plants regularly, removing dead leaves and clearing excessive foliage, flowers and roots, to ensure healthy growth. Such practice also prevents overgrowth of plants that would lead to competition amongst species, thereby affecting growth of other plants and water quality.



大藻 Water Lettuce
Pistia stratiotes L.



再力花 Powdery Alligator Flag
Thalia dealbata Fraser ex Roscoe



風車草 Umbrella Plant
Cyperus involucreatus Rottb

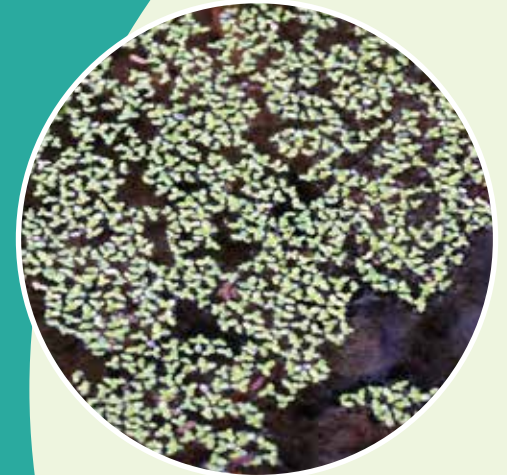
葉、病葉或生長過盛的葉片、花朵和根莖，以確保其健康生長，亦可防止水生植物過度生長，造成物種競爭，損及其他植物的生長和水質。

水生植物以其獨特形態美、意境美及多樣性見稱，在園林設計的作用不小，於園藝上應用十分廣泛。要在家居種植水生植物，就須選用合適種類的容器，提供優質清水，照以充足光線，並適時修剪。水生植物美觀耐看，可讓生活更添情趣。

水生植物既具觀賞價值，亦可淨化水體，是生態系統的重要部分，亦是箇中物質和能量迴圈轉化的中介，可見選種適當的水生植物，何其重要。我們亦須認識各類常見水生植物的習性，再根據實際環境栽種，以締建水上生態空間，為公園、屋苑園藝和其他園境布置添色增彩。

Renowned for their artistic beauty and diversity, aquatic plants play crucial roles in garden design and have extensive uses in horticulture. To grow aquatic plants at home, it is essential to select suitable containers and provide clean water, while giving adequate lighting and pruning in a timely manner. Such plants can add colour and charm to our lives.

Offering ornamental value and purifying bodies of water, aquatic plants are integral to ecosystems and pivotal in playing the role of intermediaries in material and energy cycles, underscoring the importance of growing suitable aquatic plants. It is imperative to know more about the characteristics of common aquatic plants and decide where to grow based on actual conditions in the creation of aquatic habitats, adding a touch of charm to parks, landscaped features in residential areas and other garden settings.



浮萍 Lesser Duck-weed
Lemna minor L.



鳳眼藍 (大水萍) Water Hyacinth
Eichhornia crassipes (Mart.) Solms

