



# 香港常見的蕨類植物

## Common Ferns of Hong Kong

香港的蕨類植物甚為豐富，總數多達220多種，生於多種不同的生境。蕨是一類不開花的維管束植物，多為小型草本，也有呈樹型的，外形獨特，容易辨認。

蕨葉形態繁多，常用作裝飾。有些蕨葉分叉，有些呈掌狀，另一些羽狀，也可有一至多回的羽裂。更有些種類在同一株生出兩種形態不同的葉(二型葉)，即營養葉及孢子(能育)葉。蕨葉不論多肉或革質，幼嫩時均呈獨特的拳莖型。

而孢子囊群則為蕨類一大特色，它集合了產生孢子的孢子囊，孢子囊常由一稱為囊群蓋的瓣狀結構所保護，囊群蓋可呈腎形、盾狀、膜質或長條形，也有些由能育葉的反折葉緣所保護。一些蕨類，尤其屬水龍骨科的，孢子囊沒有囊群蓋掩護，另一些蕨在幼嫩時卻有傘形的鱗片去保護正在發育的孢子囊。



停留在蕨葉上的飛蛾 A moth on a fern frond 蘇鐵蕨 *Cycad fern (Brainea insignis (Hook.) J. Sm.)*



蕨類植物也見於多種生境中。蕨類雖只帶不同深度的綠色，種類也不及顯花植物繁多，但它們卻充滿了不適合其他植物生長的地方，並作為其他草食性生物(例如飛蛾)的食糧，在大自然中有它的重要性。大部份蕨類植物都有橫走淺根的莖，這不單使它們廣佈大片面積，更有助防止侵蝕泥土。

Hong Kong is rich in diversity of ferns. For the diverse local habitats, more than 220 species of ferns and fern-allies (Pteridophytes) have been recorded. Pteridophytes, commonly called ferns and fern-allies, are non-flowering vascular plants. Ranging from small herbs to large tree-ferns, ferns bear characteristic appearance that can be easily recognised. They are diverse both in morphology and in their habits.

Well-known for ornamental use, fern fronds are usually divided in various fashions, typically being dichotomous, palmate, pinnate, bipinnate or even tripinnate. In some species, dimorphous fronds, of two different morphology, are borne for vegetative and reproductive functions. The lamina of fronds may be fleshy or leathery, depending on the species. The crozier-like form of fronds ("fiddlehead") while young is a unique feature.

Unique in ferns, the sorus is a group of sporangia which are structures producing unicellular reproductive spores. Sporangia are often protected by a flap-like structure called the indusium. The indusium may be kidney-shaped (reniform), shield-like (peltate) or elongated and membranous. Some are protected by the reflexed margins of the fertile frond. In some ferns especially those in the family Polypodiaceae, the sporangia are not protected at all (thus termed naked). Some may have umbrella-shaped scales to protect the developing sporangia when young.

Ferns also occupy a variety of habitats. Although ferns are limited to different shades of green and less abundant than flowering plants, they fill spaces unsuitable for other plants to grow and provide food for herbivores such as moths, thus playing a significant role in the nature. Most of them possess horizontal stems and shallowly rooted. These enable them not only to spread over a wide area, but also to help prevent soil erosion.



蕨 Mangrove fern (*Acrostichum aureum* L.)



樹蕨 Tree fern (*Alsophila spinulosa* Tryon)

## 蕨葉的齒裂 Modes of Frond Dissections



單葉  
Simple



羽狀  
Pinnate



掌狀  
Palmate



分叉  
Dichotomous



二回羽狀  
Bipinnate



三回羽狀  
Tripinnate

## 孢子囊群的形態 Variety of Sorus



盾狀  
Peltate  
e.g. *Pseudocyclosorus*



反折葉緣  
Reflexed Margins  
e.g. *Adiantum*



長條形  
Elongated  
e.g. *Allantodia*



螺旋排列  
Spiral  
e.g. *Lygodium*



腎形  
Reniform  
e.g. *Nephrolepis*



無囊群蓋  
Naked  
e.g. *Pronephrium*

這裡介紹多種常見的蕨類植物，希望有助您理解和欣賞它們變化萬千的優美形態。  
Describing here are some common local species for your understanding and appreciation of their diversity.

## 擬蕨類 (Fern-allies)

### 鋪地蜈蚣 (燈籠草) Nodding Clubmoss

*Palhinhaea cernua* (L.) A. Franco & Vasc. (*Lycopodium cernuum* L.)

(石松科 *Lycopodiaceae*)

本種在本地十分常見，生於灌叢及草坡。攀援藤本，莖綠色，節如鐵線，密被鱗片。葉甚細小，螺旋地排列在莖上，孢子囊生於下垂的孢子囊穗內，成熟時呈亮黃色，甚雅致。

This species is common in Hong Kong, frequently found among shrubs and grasses on hillslopes. It is a climbing plant with wiry and scaly green stem. The leaves are very small, arranged spirally along the stem and branches. The hanging strobilus contains the sporangia and appears yellowish when mature, giving the plant a pleasing appearance.



這是本地最常見的一種卷柏。它生於林下，在溼潤泥土上，生如一張藍綠色的厚氈。莖平臥橫走，多回分枝，禾秆色，有很長、在末端生根的根枝。葉片共兩種；在上面有兩列橢圓形小葉、而在下面有另外兩列較大的卵形葉，在莖或枝的兩邊散開。孢子囊穗生在末回枝上，孢子葉螺旋排列，在葉腋生兩種孢子囊。同屬的深綠卷柏也十分常見。

This species is the most common clubmoss locally, usually grows under shade on moist soils as a blue-green carpet. The straw-coloured creeping stem is prostrate and profusely branched, producing long rhizophores bearing roots at their tips. Leaves of two types: small leaves oval-shaped, in 2 rows on the upper surface; large leaves egg-shaped, in two rows on the lower surface, spreading on both sides of the stem or branches. Strobilus is found on the ultimate branches, with sporophylls spirally arranged, bearing two types of sporangia at axils. *Selaginella doederleinii* is another species common in Hong Kong.



深綠卷柏 *S. doederleinii*



翠雲草 *S. uncinata*

## 蕨類 (Ferns)



鐵線蕨屬名源於希臘神話的“Adiantos”，解作乾燥，顯然是指葉片不沾濕的特性，露珠能在表面急速地滑去；中文名則指明它那圓滑且堅韌的葉柄。這種常見蕨十分堅韌，能抵受長期乾燥，生於陽光充足的山邊，是酸性土指示植物。外形獨特，憑它扇狀及幼嫩時呈現的紅棕色澤已能輕易的辨認。葉柄多毛、粗大、由根莖簇生出來，長度不一。構成蕨葉片的五至六塊羽片由中肋上同一點生出，稍呈二形，營養葉較寬大，小羽片無柄，近菱形。孢子囊群成列的生在能育小羽片的邊緣，由反折的新月形葉緣保護。

The generic name *Adiantum* is derived from a Greek god Adiantos, meaning dry, obviously referring to the non-wettable character of the leaves which allow the rain drops to be removed quickly. The Chinese name refers to the cylindrical stipes of similar toughness as metallic wires. This common fern is quite tough and is able to withstand extended periods of drought. Naturally found on exposed hillslopes, this species is an indicator of acid soil. The fronds are readily recognized as being fan-shaped and with a reddish brown tinge when young.

Stipes are hairy, stout and arising as a cluster from the rhizome. Fronds are composed of five to six pinnate branches arising from a point on the rachis; slightly dimorphic, sterile pinnae more expanded. Pinnules are sessile and almost rhombic in shape. Sori are located in rows along the top edge lobes of fertile pinnules, protected by the reflexed crescent-shaped portion of the leaf margins.



烏毛蕨 **Oriental Blechnum**

*Blechnum orientale* L.

(烏毛蕨科 **Blechnaceae**)



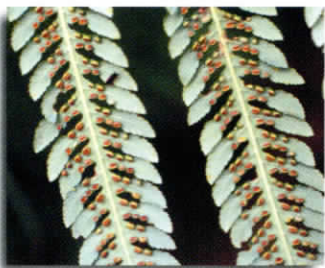
烏毛蕨是本地常見的大型陸生耐石生蕨，生在向陽的斜坡及樹林邊。幼葉呈紅棕色。葉柄粗大堅韌，可超過1米。葉片一回羽狀，革質，長3米；全緣的羽片窄長，頂端尖銳，無柄，中肋明顯；孢子囊沿羽軸兩旁生長。

This is a large terrestrial epilithic fern which is very common locally, and can be found growing on exposed slopes, earth banks and at the edge of forests. Young fronds are usually reddish brown in colour. Stipes are stout and may reach over 1 m. The fronds are usually pinnate, leathery in texture, to 3 m long. Pinnae are undivided, long and narrow, sessile with acute tips and prominent rachis. Sporangia borne alongside the costa.

金毛狗 **Lamb of Tartary**

*Cibotium barometz* (L.) J. Sm.

(蚌殼蕨科 **Dicksoniaceae**)



這種大型陸生蕨具有平展的葉片。常見於向陽山坡的酸性泥土之上，葉上面深色及亮澤，但下面淺綠色。根莖木質，密被金棕色的毛；因看似一頭金髮小狗而得其中文名稱。葉片三回羽狀半裂，葉緣具淺齒，中肋及羽軸均有毛；葉乾時革質。棕色的孢子囊群蓋堅韌，成兩瓣狀仍如蚌的兩殼，以保護幼嫩的孢子囊。

This is a very large terrestrial fern with spreading fronds, commonly growing on acid soil of exposed hillsides. Easily recognised by its leaves which are dark and shiny above but light green below. Its rhizome is very woody, densely covered with golden-brown hairs; looks like a golden brown dog, hence the Chinese name. The fronds are tripinnatifid, with shallowly toothed margins and hairy rachis and costae, becoming leathery when dry. The indusium is stiff, brown with two flaps like the two halves of a clam to protect the young sporangia.



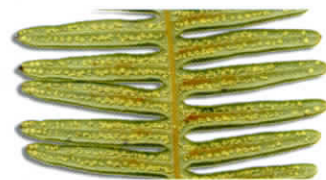
華南毛蕨 *C. parasiticus*



漸尖毛蕨 *C. acuminatus*

這是在香港最常見的一種毛蕨，不論蔭下或向陽的地方，林緣或路旁，隨處可見。蕨葉長達1米或以上，十分柔軟，二回羽狀半裂，滿佈小毛，本種的特徵包括：(1)基部的斜生羽片；(2)生在小羽片基部的葉脈上的孢子囊群數目，大部份只有一兩對，但有些卻生5至6對。同屬的漸尖毛蕨也很常見，其葉片頂端有一長而窄的尖頭。

This is the most common *Cyclosorus* species locally, usually found in shade and in exposed places near wooded areas or roadside. The fern fronds reach 1 m or longer, soft, bipinnatifid and hairy. This species is characterised by (1) the deflexed basal pinnae; (2) the number of sorus on the pinnules, where mostly one to two pairs on the basal veins though some bear 5 to 6 pairs. *Cyclosorus acuminatus* is also common in Hong Kong but differs in having a sharp, elongated apex.

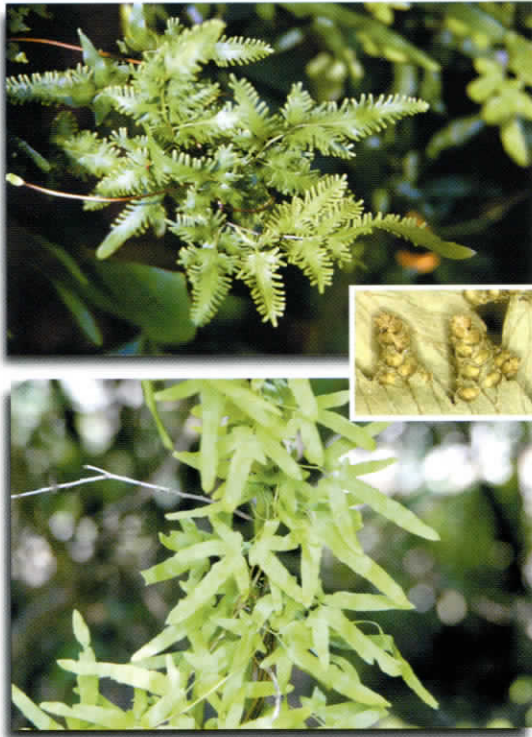


這種旱生蕨多長在燒焦山坡，是防止泥土侵蝕的先鋒植物，它更可忍受極度的乾旱。它也許是冬季裏唯一可見的蕨。本種易認，外形仿如魚骨，加上獨特的分枝狀態，令它可以覆蓋大片面積。被密毛的芽生於二叉之間。葉片淺綠色，堅韌；小羽片修長，針狀，由羽軸成對長出；葉頂鈍。孢子囊群兩排，沿小羽軸生長，無蓋。它可作草藥用。

This terrestrial sun fern is among the first to colonise burnt patches on hillsides. A pioneer preventing soil erosion, this species is able to tolerate extremely dry conditions, and perhaps the only ones visible in winter. Easy to recognise, it has a characteristic pattern of branching enabling it to scramble over a large area. A densely-haired bud is present at the forks between the branches. Leaves are light green and tough in texture. Pinnules elongated, needle-like and each pair is parallel to one another, with blunt tips. Naked sori form two rows along costule.

海金沙 Climbing Fern  
*Lygodium japonicum* (Thunb.) Sw.

(海金沙科 *Lygodiaceae*)



這攀援草本是最常見的一種海金沙，多生於路旁。它能忍受猛烈的陽光，及覆蓋廣闊的面積。特徵是甚細的卵形能育裂片，葉緣有無數螺旋排列的孢子囊。淺棕色的纏繞莖質地堅硬。枝生一回羽狀的蕨葉，每片具三裂片；短枝生二回羽狀或甚至三回羽狀的蕨葉，裂片數目不定。

This climbing plant is the most common *Lygodium* species locally which can be found on roadsides. It can tolerate bright light and can scramble over a wide area. It is characterised by the very small fertile, egg-shaped lobes which carry numerous spirally-arranged sporangia. The light brown, long twining stem is stiff. Pinnate fronds on primary branches are trilobed; secondary branches produce bipinnate or even tripinnate fronds having variable number of lobes.

單葉新月蕨 Simple Pronephrium  
*Pronephrium simplex* (Hook.) Holttum

(金星蕨科 *Thelypteridaceae*)



這種是香港最常見的新月蕨，生於樹林中的濕泥及山礫的土坡上。祇有一單生的蕨葉長在長柄上。葉片二型：不育葉單一，披針形，葉緣波狀，基部心形，由多毛的中肋生出眾多平行的葉脈；小脈互相連接；能育葉特別細小，葉柄長兩至三倍，高高的長在不育葉之上，孢子囊群成熟時，全葉彌蓋深棕色的孢子囊。

The most common *Pronephrium* species in Hong Kong, this species is usually found on wet soil, in woods and also along banks of ravines. This simple fern contains only a single frond on a long stipe. Fronds are dimorphous: sterile fronds are simple, lanceolate with a cordate base, with a wavy margin and numerous parallel veins arise from the hairy rachis, the veinlets being joined with the neighbouring ones; fertile fronds are much smaller in size and arising high above the sterile fronds on stipes two to three times longer. At maturity, the whole lamina of fertile fronds is covered with sporangia, forming a dark mass.

本種容易辨認，它的羽片前向的一邊完整無缺，但基向那邊卻分支成羽狀半裂，因此得其中文名。草本，甚常見，多沿山溪林蔭及向陽處生長。葉柄栗棕色，有角突，光滑，由根莖成束生出。葉片一回羽狀，三角形，長達60厘米；紙質，具細致的鋸齒葉緣；上部的羽片羽狀半裂而末端羽片長而尖。孢子囊群沿能育葉緣生。

This species is easy to recognise because its pinnae are unbranched on the front side but branched with segments pointing towards the base, and hence its specific epithet. It is common in Hong Kong and is abundant along hillsides in shade and in exposed areas. Stipes brownish and angular, naked, arising in a cluster from rhizome. The pinnate lamina is deltoid, up to 60 cm long, with a papery texture and finely toothed margins. The upper pinnae are pinnatifid whereas the terminal one is long and pointed. Sori are found along margins of fertile fronds.



本種可能是香港最常見的一種鳳尾蕨。它可在石隙、石面、石牆、乾土及路旁生長。多長在酸性土上而能耐甚乾旱的生長條件。特徵是生成一束一回羽裂的蕨葉，具尖而薄的羽片。羽片多毛，基部兩側呈耳形，邊緣具鋸齒。

This is probably the most common species of *Pteris* locally, growing on rock crevices and surfaces, walls, dry soil and roadsides. It grows in acid soil and can withstand very dry conditions. It is characterised by having a cluster of pinnate fronds with pointed and thin pinnae. Pinnae are hairy, with auricled bases and finely toothed margins.



貼生石韋 Tongue Fern  
*Pyrrhosia adnascens* (Sw.) Ching

(水龍骨科 Polypodiaceae)

本種的屬名解作火，表示在蕨葉下面的無蓋孢子囊仿如火舌。

本種是甚常見的耐石生及耐生草本蕨類，常在高處地生長。特徵是有披針形、厚而肉質及近直立的葉片。葉柄甚短，有規律的間隔生出。葉片二型，淺綠色及肉質，幼時兩面均被星狀毛；營養葉橢圓形，細小，長2至6厘米；主脈明顯而其餘的成網狀但難見；能育葉舌狀披針形，較長，長8至15厘米而寬5毫米，全緣。一如水龍骨科的其他成員，孢子囊群無蓋。孢子囊群在小脈的頂端，眾多，而最終滿佈蕨葉下面的上半部。



The generic name of this species means fire because the naked sori on the lower frond surface resemble tongues of fires.

This herbaceous species is commonly seen on surface of rocks and other plants on higher grounds. The outstanding character is its lanceolate, thick fleshy fronds which are nearly erect. The stipes are very short, arising regularly from the rhizome. Lamina is dimorphous, light green and fleshy, with star-shaped hairs on both surfaces when young.

Sterile fronds are oval-shaped, 2-6 cm long, with linear and prominent main vein but others anatomosing and obscure. Fertile frond is lanceolate and longer, 8-15 cm long, 5 mm wide, with entire margins. Similar to other species of the Polypodiaceae, the sori are naked. Numerous sori can be found near the tips of small veins and ultimately cover the upper half of the lower frond surface.

石韋 Japanese Felt Fern  
*Pyrrhosia lingua* (Thunb.) Farw.

(水龍骨科 Polypodiaceae)



這種石韋多耐石生或耐生樹上，緊密地簇生。葉稍呈二型，葉片披針，厚革質、全緣；淺綠色，除主脈外，其餘的脈不明顯；幼時兩面均被星狀毛；營養葉稍寬大。孢子囊群眾多，在葉脈之間成行排列，幾乎完全鋪滿了能育葉下面。在乾燥的冬季，所有葉均向內捲以保存水份，待春季來臨時展開。

This species is epilithic or epiphytic, growing in dense clusters. Leaves slightly dimorphous, lanceolate with a tapering tip, thick, leathery in texture, light green in colour, main veins prominent while others obscure; both surfaces with stellate hairs when young; sterile fronds slightly broader. Sori are numerous, in regular rows between the veins, covering the entire lower surface of the fertile fronds. During the dry winter months, all fronds roll inwards to conserve water and would unroll when spring comes.

圖文：葉國樑、蘇培生、梁智穎(香港植物標本室)  
Text & Photos: K. L. Yip, P. S. So, C. W. Leung (Hong Kong Herbarium)