香港的茄科

Solanaceae of Hong Kong

Herbarium Leaflet 植物標本室單張

才大科是被子植物中的一個大科,共有約95 屬2000餘種,主要分布於熱帶和亞熱帶地區,以中、南美洲的種類最多。茄科植物大部分為草本和藤本植物,也有一些是灌木,只有少數為喬木。

香港植物標本室於2012年出版的《香港植物名錄》共記錄茄科植物13個屬和33個種及變種。它們大多數是栽培的作物或觀賞植物,以及已歸化的雜草品種,僅有6種為原生種(紅絲線、苦蘵、毛茄、龍葵、野茄及刺天茄)。由於近年引進了更多具觀賞性的品種和變種(例如金杯藤),可以在香港找到的品種數目亦應有所增加。

● 金杯藤具有非常大的花朵,直徑 達10厘米或以上 Cup of Gold (*Solandra maxima*) has very large flowers measuring 10cm or

Solanaceae, or Nightshades, which is a large family of angiosperms with about 95 genera and more than 2000 species, are found mainly in tropical and subtropical regions. The greatest diversity is found in Central and South America. The family consists mainly of herbs and vines, with some shrubs and a few tree species.

Thirteen genera and 33 species or varieties of Solanaceae are recorded in the *Checklist of Hong Kong Plants 2012* published by the Hong Kong Herbarium. Most of them are cultivated crops or ornamental plants as well as naturalized weedy species. Only six species are native (*Lycianthes biflora, Physalis angulata, Solanum lasiocarpum, S. nigrum, S. undatum, S. violaceum*). The number of species that can be found in Hong Kong should have increased due to introduction of more ornamental species and varieties in recent years, such as Cup of Gold (*Solandra maxima*).

一般特徵 General Characteristics

毛和刺 Hairs and Armatures

茄科品種可以無毛或被毛(簡單不分枝或分枝);可具刺,通常生長於莖、葉片和花萼。毛及刺的形態是鑑定許多品種的重要特徵,尤其是茄屬品種。

Solanaceae species can be glabrous or pubescent (with simple unbranched or branched hairs). Armatures may be present and often occur on the stems, leaves, and calyxes. The morphology of hair and armature is an important diagnostic character for many species, in particular *Solanum* species.



▲ 假煙葉樹的花梗和花萼密被短絨毛 Peduncles and calyxes of Wild Tobacco (Solanum erianthum) are densely tomentose (covering with short soft hairs)



▲ 毛茄的漿果被黃褐色的毛覆蓋著 Berry of Hairy Nightshade (*Solanum lasiocarpum*) is covered with tawny hairs



▲ 牛茄子的枝、葉和果柄具皮刺 Poisonous Tomato (*Solanum capsicoides*) has prickles on its branches, leaves and fruiting pedicels



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花 Flowers

花通常是雙性,輻射對稱或僅輕度左右對稱。通過昆蟲授粉。花被和雄蕊一般等基數(具相同數目的部分),通常為五的倍數(有時4或6)。

花萼合萼(萼片連接在一起),從管狀到深裂。 花萼宿存及通常在花期後仍繼續生長。合瓣花冠 是茄科的一個明顯特徵,花瓣或多或少聯合一 起。花朵形狀通常是輪狀、鐘狀、星狀、罎狀或 管狀(從短管到漏斗狀)。

▲ 苦蘵的黃色花瓣聯合一起。 授粉後,花萼會繼續生長和 膨大,形成紙質結構覆蓋它 的果實 Yellow petals of Ground Cherry (*Physalis angulata*) are fused together. The calyx continues to grow and expand to form a papery structure covering over

its fruit after pollination

Flowers are usually bisexual and actinomorphic (radially symmetrical) or only slightly zygomorphic (bilaterally symmetrical). Pollination is entomorphilous (pollinated by insects). The perianth and androecium whorls generally are isomerous (having an equal number of parts), usually in multiples of 5 (sometimes 4 or 6).

The calyx is synsepalous (with sepals joining together), ranging from tubular to deeply cleft. It is persistent and often accrescent (continuing to grow after flowering). One obvious feature of Solanaceae is sympetalous corolla, where the petals are fused to some degree. Flower shapes are usually rotate, campanulate, stellate, urceolate, or tubular (ranges from short tube to funnel-shaped).



▲ 大花茄的星狀合瓣花,會從藍色逐漸褪為白色 Sympetalous and star-shaped flowers of Brazilian Potato-tree (*Solanum wrightii*) gradually fading from blue to white

靠合的花藥(如環狀聚合在花柱周圍,但是實際 上並沒有結合)是許多茄科植物的特徵,特別是 茄屬的品種。

Connivent anthers (converging around the style like a ring but not actually fused) are characteristics of many Solanaceae, in particular *Solanum* species.



▲ 乳茄(五代同堂茄) Nipple Fruit (Solanum mammosum)



▲ 蕃茄 Tomato (Lycopersicon esculentum)



少花龍葵 Shining-fruit Nightshade (Solanum americanum)





葉 Leaves

葉通常互生,單葉或二葉雙生;全緣、分裂或爲複葉; 無托葉。

Leaves are usually alternate, solitary or paired; simple to lobbed or compound; and without stipules.

▶ 夜香樹的葉子互生 Alternate leaves of Night Jessamine (Cestrum nocturnum)



果實 Fruits

絕大多數茄科的果實為漿果(例如番茄),或開裂(乾燥時裂開)的蒴果(例如曼陀羅屬),較少是核果。

The fruits of the great majority of Solanaceae are berries (e.g. tomato) or dehiscent (breaks open upon drying) capsules (e.g. *Datura*) and less often drupes.

▲ 番茄的漿果 Berries of tomato (*Lycopersicon esculentum*) ■ 洋金花(白花曼陀羅)的帶刺蒴果 Armed capsule of Hindu Datura (*Datura metel*)

作物 Crops

許多茄科的成員都是食用植物,包括了重要的經濟作物如馬鈴薯、番茄、茄子和辣椒。這些都是市場上很受歡迎的蔬菜和香料,本地亦有廣泛種植不同品種的辣椒、番茄和茄子。

Many members of Solanaceae are food plants, which include important economic crops like potatoes (Solanum tuberosum), tomatoes (Lycopersicon esculentum), eggplants (S. melongena) and peppers (Capsicum annuum). They are popular vegetables and spices and different varieties are available in local markets. Various varieties or cultivars of peppers, tomatoes and eggplants are also widely cultivated locally.

本地種植的不同品種的茄子(上)和辣椒(右)
Locally grown cultivars of eggplants (above) and peppers (right)

觀賞植物 Ornamentals

有不少的茄科植物被栽培作為觀賞植物,如碧冬茄屬、藍英花屬和曼陀羅屬等。它們具有色彩鮮明和吸引的管狀或輪狀花,可以是紅、橙、黄、綠、藍、紫,或白色。有些品種則長有吸引的果實,如辣椒和乳茄(五代同堂茄)。然而,由於部份茄科品種含有對人和動物有毒的生物鹼,毒性由輕度刺激性至少量也能致命不等,因此切勿隨意觸摸、採摘或食用。

Various Solanaceae species are cultivated as ornamental plants such as *Petunia*, *Browallia*, and *Datura*. They have colourful and attractive tubular or rotate flowers that can be red, orange, yellow, green, blue, purple, or white. Some species are grown for their attractive fruits such as Pepper and Nipple Fruit. However, as some Solanaceae species are rich in alkaloids, which can be toxic (from mildly irritating to fatal in small quantities) to humans and animals, touching, picking or eating these plants should be avoided.



▲ 大鴛鴦茉莉芬芳的花朵會逐漸從紫色變為白色
Fragrant flowers of Brazil Raintree (*Brunfelsia calycina*) change from violet to white gradually







- ▲ 紫色艷麗的紫水晶花 Showy violet flowers of Browallia (*Browallia* speciosa)
- 碧冬茄(矮牽牛)的 花有各種各樣的顏色 Flowers of Garden Petunia (*Petunia hybrida*) have a wide range of colours





★曼陀羅屬有喇叭狀花朵 Brugmansia species have trumpet-shaped flowers

▲ 乳茄(五代同堂茄)因其獨特的果實被栽培作觀賞植物 Nipple Fruit (*Solanum mammosum*) is grown as an ornamental plant for its unusual fruits





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