



三色堇 *Viola tricolor* (Pansy)

科屬及分布 Family and Distribution

三色堇，又名蝴蝶花、人臉花、貓臉花，隸屬堇菜科(*Violaceae*)的堇菜屬(*Viola*)，是二年生或短期多年生草本植物。三色堇原產歐洲北部，是冰島及波蘭的國花。

Viola tricolor, also known as Pansy, Viola or Violet, is a biennial or short-lived perennial herb under the genus *Viola* in the family *Violaceae*. Native to Northern Europe, the plant is the national flower of both Iceland and Poland.

形態及特徵 Form and Characteristics

三色堇高10至25厘米，全株光滑。地上莖較粗。葉片卵形，葉緣具疏圓齒或鈍鋸齒。花兩性，常有三色，直徑約3至5厘米，花瓣5片，頂瓣2片，側瓣2片及下瓣1片，側瓣及下瓣常有條紋。

Viola tricolor stands 10 to 25 cm in height with smooth and thick stem. The leaves are ovate with sparsely crenate margins. Flowers are bisexual and usually tri-coloured, each about 3 to 5 cm in diameter with 5 petals, i.e. 2 upper petals, 2 side petals and 1 lip petal. There are usually lines on the side and lip petals.



生長習性及護理 Growth Habits and Care

三色堇喜涼爽及光照充足的環境，忌高溫多濕，生長適溫為12℃至20℃。光照不足會影響植株生長及開花，每天最好有不少於4小時的日光照射。若持續高溫，植株或不能發芽或形成花瓣。種植時應保持通風良好，使溫度降低，以防植株枯萎。三色堇喜濕不耐旱，所以在生長期及開花時，應保持水分充足。植料以肥沃、排水良好、富有機質及酸鹼度介乎6至6.5的微酸壤土為佳。在幼苗生長期，應施以氮肥；臨近花期，則可追加磷肥；開花後，可停止施肥。宜薄肥多施。

Viola tricolor prefers a cool environment with adequate sunlight, and it is intolerant of high temperature and excessive moisture. The optimum temperature for growth is 12°C to 20°C. Since insufficient sunlight affects its growth and production of flowers, *Viola tricolor* should be exposed to sunlight for at least 4 hours every day. However, consistent exposure to high temperature will lead to failure in germination or formation of petals. During planting, a well-ventilated environment should be maintained to lower the temperature so as to prevent the plant from withering. As the drought-intolerant plant prefers a moist environment, sufficient moist should be kept during its growth and flowering periods. *Viola tricolor* thrives in rich, well-drained and slightly acidic soil with organic matters and a pH value between 6 and 6.5. Nitrogen fertilisers should be applied during the growing stage of the seedlings; phosphate fertilisers can then be added when approaching the flowering period. No fertilisers should be applied after flowering. Fertilisers should be applied at frequent intervals but in small quantities.



繁殖 Propagation

三色堇可用播種、扦插和分株的方法繁殖。發芽適溫為15℃至20℃，播種後必須保持植料濕潤，避光遮陰。扦插可在3至5月進行，剪取基部萌發的枝條，插入泥中，保持植料濕潤。插穗約15至20天發根，成活率高。分株多在開花後進行，把不定根的側枝或根莖處萌發的帶根新枝剪下，之後直接用盆栽種，並放在半遮陰處，待幼苗發根。

Viola tricolor can be propagated by seed sowing, cutting and plant division. The optimum temperature for germination is 15 °C to 20 °C. Keep the medium moist, avoid direct sunlight and provide adequate shading after sowing. Cutting can be carried out from March to May. Cut the branches grown at the base, insert them into the medium and keep the medium moist throughout the period. Roots will develop in about 15 to 20 days with a high survival rate. Plant division is usually carried out after flowering. Cut the lateral buds with adventitious roots or new branches with roots grown at the root part, replant the new divisions into pots and leave them in a partially shaded place for establishment.



防治病蟲害 Prevention and Treatment of Pests and Diseases

避免高溫潮濕的環境，加強通風，清理凋謝部分，適當澆水施肥，澆水後通風，都是預防病蟲害的最佳方法。如發現病葉、病花，應立即摘除。

Pests and diseases can best be prevented by avoiding hot and humid conditions, improving ventilation, removing withered parts of the plant, watering and fertilising moderately, and maintaining good ventilation after watering. If sick leaves and flowers are found, remove them immediately.

園藝應用及經濟價值 Horticultural Application and Economic Value

三色堇適宜在花壇、庭園和盆栽種植。三色堇的花可作食用，常用於裝飾甜點。三色堇也是藥用植物，能清熱解毒及殺菌。

Viola tricolor is suitable for planting in floral beds, courtyard and container pots. It is edible and often used for dessert decoration. It is also a medicinal herb which can be used to remove heat, detoxify the body and serve as bactericide.

一般護理 General Maintenance

繁殖及護理 Propagation and care		
最適溫度 Optimum temperature	發芽 Germination 生長 Growth	15°C - 20°C 12°C - 20°C
泥土酸鹼值 pH value	pH 6 - 6.5	
繁殖 Propagation	播種 Seed sowing 扦插 Cutting 分株 Plant division	

	春 Spring	夏 Summer	秋 Autumn	冬 Winter
日照 Sunlight				
澆水 Watering				
施肥 Fertilising				
換盆 Re-potting				

圖例 Key	
	日照充足 Abundant sunlight
	少許 Little
	中等 Medium

三色堇的生長過程 The Course of Growth of Pansy

種子 Seeds
幼苗 Seedlings
定植 Potting Up
結蕾 Bud Formation
開花 Blooming

移植幼苗 Transplanting Seedlings

步驟一 Step one :
把培養土放入花盆，直至泥土離盆頂半吋。培養土可加入有機質或緩效性化學肥料作為基肥，以供植株生長所需。
Fill each pot with potting mix up to half an inch from the top rim. Organic matter or slow-release chemical fertilisers may be added to the potting mix as a base fertiliser to support plant growth.

步驟二 Step two :
用小鏟子把幼苗移離播種盆，切勿弄斷幼苗根部。
Remove the seedlings from the germination tray with a small shovel. Do not damage the roots of the seedlings.

步驟三 Step three :
用小鏟子在花盆中央挖一個洞，其闊度和深度應與幼苗根部泥膽大小相若。把幼苗置於洞中，蓋上培養土，並輕輕壓平，讓培養土與泥膽接觸。切勿壓斷幼苗根部。移盆後切記馬上澆水，同時亦可摘心，促使幼苗萌發側芽，多長花蕾。
Dig a hole in the centre of each pot with a small shovel. The width and depth of the hole should be similar to those of the root ball of the seedling. Place the seedling in the hole and fill it with potting mix. Flatten the potting mix gently until it comes into contact with the root ball. Do not crush the roots of the seedling. Remember to water the plant immediately after transplanting. Pinch the growing tips as necessary to promote the development of lateral buds and flowers.

步驟四 Step four :
把移植後的幼苗置於半遮陰處，避免陽光直射。其後幼苗必須每天接受6至8小時日照，以促進生長和開花。花盆表土漸乾時便應澆水。
Place the transplanted seedlings in a semi-shaded area and avoid direct sunlight. Thereafter, the seedlings should be exposed to sunlight for 6 to 8 hours a day to encourage growth and flowering. Water them when the soil surface begins to dry out.