Leisure and Cultural Services Department One Person, One Flower Scheme (2020/21)

Dianthus chinensis

Dianthus chinensis

Common Names:

Dianthus, Rainbow Pink, China Pink,

Chinese Pink or Indian Pink

Family: Caryophyllaceae

Genus: Dianthus

Place of Origin: China



Form and Characteristics

Distribution: Around the world

Cultivars: Available in a diverse range of cultivars and in varieties with multiple layers of petals

Colours: The single or bi-coloured flowers are in a wide variety of striking hues including red, pink, magenta and white.

Flowering Period: From October to April of the following year

Characteristic: A herbaceous perennial, though it is usually grown as an annual herb



Form and Characteristics

- ► Stands 10 to 20 cm in height with upright, slender, smooth and branched stems
- The leaves are opposite, linear-lanceolate, glabrous with entire margins, connate at base and stemclasping.
- either terminal or in clusters of paniculate cymose inflorescences
- The fragrant flowers with five petals are of single or double petals with irregularly lobed margins.
- Small black seeds can be found in the cylindrical capsule.



Growth Habits

- ► Favours cool weather, and is cold-resistant and intolerant of extreme heat
- Favours a well-ventilated environment and is sensitive to high temperature and excessive moisture
- Optimum growth temperature from 10°C to 25°C
- Thrives under full sun
- Grows best in well-drained sandy soil rich in organic matter



Care

- Preferably grows in partial shade in summer and avoids prolonged exposure to humid environment
- Timely watering is necessary to prevent the planting medium from being too dry, soggy or waterlogged.
- In addition to adequate application of base fertiliser, moderate fertilisation can be carried out once a month to promote healthy growth and flowering.
- When the main stem grows tall and flower buds begin to emerge, the new buds should be pinched to promote the growth of other lateral buds and keep the plant shapely.
- Deadheading with appropriate supplementation of fertiliser can promote further flowering.



Propagation – Seed Sowing

- Seeds should be sown for cultivation in autumn at an optimum temperature of 18 °C to 22 °C.
- Seeds can be scattered onto loose and moist soil, and after that they should be covered with a thin layer of soil.
- After sowing, keep the soil moist by watering. Germination takes place in about 1 week.
- Overwatering should be avoided to prevent the seedlings from drooping.
- If the seedlings are too crowded, remove the weaker ones.



Propagation – Cutting

- Cutting can be carried out from late autumn to spring of the following year.
- The rooting medium should be well-aerated, properly drained and clean sandy soil.
- Select healthy and sturdy branches at the middle of the mother stem as cuttings, each of which should be 5 to 8 cm long with at least 3 to 4 nodes and ideally short internodes.
- Strip all but the top 2 to 4 leaves and insert the bottom onethird to half of the cuttings into the medium.
- Water the mixture thoroughly. Then leave the cuttings in a partially shaded place at a temperature above 18°C for around 2 weeks before moving them to a brighter area under subdued light. Keep the medium moist throughout the period.
- Roots will develop in about 2 weeks. Cuttings with vigorous root development can be transplanted for establishment.



Potting mix (seed sowing / cutting)

Peat moss: Vermiculite: Perlite (1:1:1)

Subsoil: Peat moss: River sand (1:1:1)



Propagation – Plant division

- Usually old plants that have bloomed are used.
- Detach the parent plant from its pot, remove the soil and find the tillers (also known as suckers).
- Cut the suckers with roots from the parent plant and replant the new divisions into pots promptly.

Transplanting seedlings - Potting up

- The seedlings are ready for potting as soon as they grow to about 5 cm tall or when 4 to 6 pieces of leaves have developed.
- Fill each pot with potting mix up to half an inch from the top rim.

 Fertilisers may be added as a base fertiliser to support plant growth.
- Remove the seedlings from the germination tray with a small shovel.
 Do not damage the roots of the seedlings.
- 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.
- Remember to water the plant immediately after transplanting. Pinch the growing tips as necessary to promote the development of lateral buds and flowers.



Transplanting seedlings - Potting up

- 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.
- Fertilisers containing tiny amounts of the essential elements of nitrogen, phosphorus and potassium should be applied every month during the growth period.
- Pinch the growing tips once when the seedlings are established to promote branching and flower bud formation.
- It takes about 9 to 11 weeks for seeds to become seedlings. Dianthus generally flowers in approximately 45 days from establishment.



Potting mix (Plant division / Potting up)

Black top soil: Peat: Subsoil (2:1:1)

Peat moss: Perlite: Vermiculite (1:1:1)

Subsoil: Peat Moss: Perlite (2:1:1)

Subsoil: Peat Moss: Vermiculite (2:1:1)



moss

top soil

Prevention and Treatment of Pests and Diseases

- Dianthus is susceptible to many pests and diseases, particularly the latter, including damping off, leaf spot and rust, etc.
- For the prevention of diseases, healthy shoots should be selected for propagation by cutting. Infected seedlings must be removed once found and sprayed with disinfectant for soil sterilisation.
- The pests affecting the plant are mainly red spider mites, aphids and armyworms, etc.
- The best prevention is to place the plant in an environment with abundant sunlight, good ventilation and proper drainage.
- Water and fertilise moderately to encourage healthy plant growth.



Horticultural Application

- Dianthus is often used in landscape and floral bedding displays, etc.
- ► It is also suitable to be planted in container pots on the balcony or window side for appreciation.



For details on *Dianthus chinensis*, please visit:

https://www.lcsd.gov.hk/en/green/education/greeningschool/one.html

