

MULTICOLOURED PERENNIAL HERBACEOUS TULIP OF GARDEN FLOWER IS MONOCOT PLANT BELONGS TO LILIACEAE FAMILY

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DOI: <https://doi.org/10.5281/zenodo.20664860>

How to cite this Article: Subhajit Samanta* and Dr. Dhruvo Jyoti Sen (2026). Multicoloured Perennial Herbaceous Tulip of Garden Flower is Monocot Plant Belongs to Liliaceae Family. European Journal of Pharmaceutical and Medical Research, 13(6), 864-868.

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Article Received on 05/05/2026

Article Revised on 25/05/2026

Article Published on 01/06/2026

ABSTRACT

A tulip is a spring-blooming, perennial herbaceous plant that grows from an underground bulb. Botanically, it belongs to the genus *Tulipa* within the lily family, Liliaceae. Tulips are highly recognizable by their large, usually cup or bell-shaped flowers, which typically consist of six petals and sit atop a single, mostly leafless stem. They are native to Central Asia and Turkey, but are now globally cultivated as popular garden flowers and cut blossoms.

Key facts about this flower include

Growth Cycle: They are herbaceous geophytes that persist through winter as underground bulbs.

Varieties: There are over 75 wild species and more than 3,000 cultivated varieties, including single, double, fringed, and parrot shapes.

Colors: They bloom in nearly every color except true blue, and can be solid or striped.

Care: They require a period of cold dormancy to bloom, and are best planted in the fall.

Toxicity: While beautiful, tulip bulbs and leaves are toxic to pets like dogs and cats.

KEYWORDS: tulip, garden flower, monocot, bulb.

INTRODUCTION

In India, the classic spring Tulip is known as Gulalala in Hindi and Urdu, while the English name "Tulip" is also widely understood. Because true tulips require cold winters to bloom, they are primarily cultivated and celebrated in the Himalayan regions, most famously at the Indira Gandhi Memorial Tulip Garden in Srinagar, Jammu & Kashmir.

If you are thinking of other fiery, cup-shaped flowers that share the name in India, you might be referring to

- African Tulip Tree (*Spathodea campanulata*): Known in Malayalam as Fountainmran or locally in Hindi as Rugtoora. It is a tall, tropical tree with large, bright orange-red blooms.
- Indian Tulip Tree (*Thespesia populnea*): Known in Hindi as Paras Pipal and in Tamil as Poovarasu. This coastal evergreen tree produces bright yellow flowers.



Figure-1: Netherlands Tulip Garden & Kashmir Tulip Garden.

Tulips are spring-blooming perennial herbaceous bulbiferous geophytes in the *Tulipa* genus. Their flowers are usually large, showy, and brightly coloured, generally red, orange, pink, yellow, or white. They often have a different coloured blotch at the base of the tepals, internally. Because of a degree of variability within the populations and a long history of cultivation, classification has been complex and controversial. The tulip is a member of the lily family, Liliaceae, along with 14 other genera, where it is most closely related to *Amana*, *Erythronium*, and *Gagea* in the tribe Liliae.

Taxonomy:

Kingdom: Plantae

Clade: Angiosperms

Clade: Monocots

Order: Liliales

Family: Liliaceae

Subfamily: Lilioideae

Tribe: Liliae

Genus: *Tulipa* L.

Type species: *Tulipa gesneriana* *Tulipa gesneriana*, the Didier's tulip or garden tulip, is a species of plant in the lily family, cultivated as an ornamental in many countries because of its large, showy flowers. This tall, late-blooming species has a single blooming flower and linear or broadly lanceolate leaves. This is a complex hybridized neo-species, and can also be called *Tulipa gesneriana*. Most of the cultivars of tulip are derived from *Tulipa gesneriana*. It has become naturalised in parts of central and southern Europe and scattered locations in North America.

The □ (tulip) universally symbolizes perfect, deep love and rebirth. Because they are among the first blooms to emerge after winter, they represent a fresh start and the return of warmth.



Figure-2: Persian Tulip Garden & Amsterdam Tulip Garden.

Cultural Significance: Beyond their beauty, tulips carry deep symbolism. They are the 11th wedding anniversary flower and generally symbolize deep love, rebirth, and cheerfulness. Historically, they were designated as imperial symbols in the Ottoman Empire and represented paradise on earth.

It's meaning shifts slightly based on the flower's colour

- Red: Deep romance, passion, and true love.
- Yellow: Cheerful thoughts, sunshine, and bright friendship.
- Pink: Affection, caring, and good wishes.
- White: Purity, forgiveness, and respect.
- Purple: Royalty, abundance, and steadfast devotion.

The tulip is a globally beloved spring flower celebrated for its dramatic history, unique growth habits, and striking symmetry. Originating in the harsh mountains of Central Asia, it has captivated cultures for centuries. They keep growing in a vase: Tulips are one of the few cut flowers that continue to grow and elongate in water. They will also twist and wind their stems toward sources of sunlight.

Exceptional colour variety: Tulips come in nearly every colour of the rainbow—from soft pastels to deep, almost-black purples—with the exception of true blue.

Edible petals: The colourful petals of certain tulip varieties are safe to consume and are used in culinary traditions as a sweet, peppery garnish for salads and desserts.

Geometric perfection: Unlike many flowers that bloom irregularly, tulip buds are known for being perfectly symmetrical.

Their history sparked the first economic bubble: During the 17th-century Dutch "Tulip Mania," the flower became a hyper-coveted luxury item. At the height of the craze, a single rare bulb was worth more than a house.

Viral patterns: Some of the most famous, historically sought-after striped tulips got their unique "broken" coloration from a harmless aphid-transmitted virus.

Care Tips: To get the most out of your tulips, place them in cold water within a tapered vase (which supports their stems) and keep them out of direct sunlight to prevent them from dropping their petals too quickly. During the 1630s in the Netherlands, the tulip was briefly worth more than gold. This phenomenon, known

as "Tulip Mania," was an economic bubble where rare, virus-infected bulbs were traded for the equivalent of a canal-side mansion or 10 times a skilled craftsman's annual salary.

For context on the most expensive commodities and flowers

- Tulips (17th Century): At the peak of the market in 1637, a single bulb of the highly coveted Semper Augustus variety sold for up to 10,000 guilders (roughly equivalent to \$130,000 today). The market subsequently crashed, treating the speculative contracts like gambling debts.
- Saffron (Modern Day): If you are looking for a flower that is currently worth more than its weight in gold, it is the *Crocus sativus*, which produces saffron. Harvested by hand from delicate purple petals, it remains one of the world's most expensive spices.

Tulips are widely considered lucky flowers. Across many cultures, they symbolize abundance, prosperity, and new beginnings. Planting them in your yard, keeping them in your kitchen, or carrying one on your person is believed by many to attract good fortune and positivity.

The good luck and meaning associated with tulips vary by colour and tradition

Yellow Tulips: Known for happiness and hope. Planting them in your garden is believed to bring luck and prosperity to your home.

White Tulips: Associated with fresh starts, purity, and new beginnings, making them a great good-luck gift for someone starting a new chapter.

Persian & Ottoman Lore: Historically, the tulip was a powerful good luck charm in the Middle East. Persian folklore suggests that wearing a tulip protects you from evil and brings prosperity.



Figure 3: Verities of Colorful Tulip.

Keukenhof literally translates to "Kitchen Garden" in Dutch (derived from **keuken** meaning kitchen and **hof** meaning courtyard or garden). Today, it is renowned as the Garden of Europe and is one of the world's largest and most famous spring flower gardens. Tulips are classified into several broad colour categories based on their primary hues, patterns, and pigment combinations. Broad solid classifications include self-coloured (solid hues), broken (streaked or variegated), and bicolor (distinct base and petal tip colours). Solid Colours (Self-

Colours) Tulip pigments are determined by two interacting components: a base colour (white or yellow) and a secondary pigment.

Classic: Red, yellow, white, pink, and orange.

Planting and growing tulips successfully requires careful attention to location, timing, and soil preparation to mimic their native cold-winter environments. The tulip is the national flower of a few countries. Most notably, it is

the unofficial national flower of the **Netherlands** and the official national symbol of **Turkey**. It is also the national flower of **Afghanistan** and **Hungary**. **Quick Summary & Checklist:**

Timing: Plant in late autumn when average night-time temperatures drop into the 40°F (around 5°C to 10°C).

Soil: Loose, well-draining soil with a neutral to slightly acidic pH.

Depth: Dig holes about 6 to 8 inches deep, or 2-3 times the height of the bulb.

Spacing: Place bulbs 4 to 5 inches apart.

Orientation: Plant with the pointed end facing up and the flat, basal plate facing down.

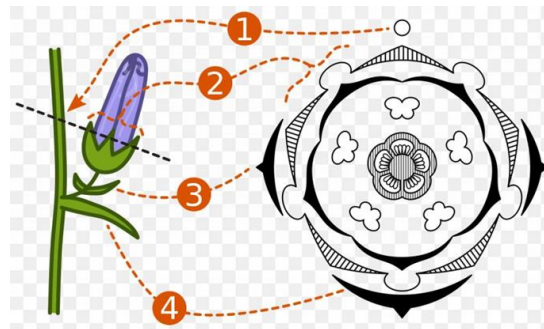
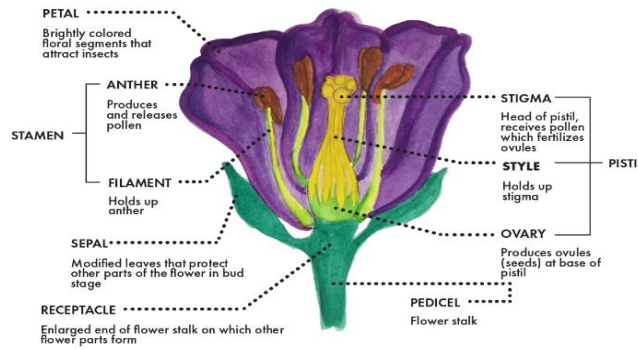


Figure 4: Floral Diagram of Tulip.

Rich Tones: Deep purple and dark maroon.

Black: Extremely dark, glossy maroon-purple.

Green: Flowers that bloom entirely green or with green tips.

Blue: True blue tulips do not exist naturally, but violets and blue-purple variants are often classed here.

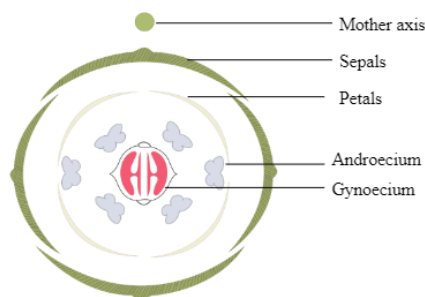




Figure 5: Floral Formula of Tulip.

Variegated and Patterned Classes

Variegated tulips are classified into specialized categories according to their markings.

Broken: Irregular, feathery streaks caused by a mild virus that uncovers the base colour. Rembrandt: Historical term for broken tulips with distinct white or yellow striping. Bizarre: Yellow base with markings of brown, purple, or red. White base with markings of red, pink, or purple.

Flame: A darker flame pattern bleeding up from the base of the petal.

Bicolour and Blends: Many tulip types are formally classed by how their colour transitions across the petals.

Fringed: Multi-colour edges with distinct serrated, crystalline edges.

Viridiflora: Green streaks combined with a second, contrasting colour on the same petal.

Multiflora: Single bulbs that produce several stems, often showing different colour gradients or matching shades.

CONCLUSION

Tulips are spring-blooming perennial herbaceous geophytes that belong to the lily family (Liliaceae) and the genus *Tulipa*. They grow from underground storage bulbs planted in the autumn, producing vibrant, cup-shaped flowers and thick, bluish-green leaves in the spring.

Plant Type: Bulbous perennial.

Native Region: Central Asia, Europe, and North Africa.

Foliage: Two to six fleshy, waxy, strap-shaped leaves clustered at the base.

Bloom Time: Early to late spring.

Single Early: Classic, cup-shaped flowers on strong stems.

Double Late: Heavy, multi-petal blooms that resemble peonies.

Triumph: Sturdy, wind-resistant stems perfect for cutting.

Fringed: Unique, lacy edges on the petals.

Although tulips are biologically perennials, centuries of hybridization have weakened many modern cultivars.

Because of this, many gardeners in regions with unfavourable climates treat them as annuals, planting fresh bulbs every year.

REFERENCES

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