



## Garden Fresh Edible Flower: A Floriculture Delight

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Since ancient times, the consumption of edible flowers has been well-documented across various cultures, from ancient Greece and Rome to Europe, Victorian England, the Middle East and Asian nations such as China and Japan, where their use has been recorded for millennia (Gupta *et al.*, 2024). Today, globalization and increased consumer awareness have contributed to a revival of traditional lifestyles, wherein edible flowers play a significant role. These plant parts represent a rich natural resource, with many containing phytochemicals that are believed to offer health benefits, garnering growing interest. Historically, edible flowers have been utilized in folk medicine for treating ailments, and recent studies have validated these traditional health claims. Additionally, research has focused on assessing the safety of commonly consumed edible flowers to ensure their safe usage and appropriate dosages across various industries (Koike *et al.*, 2015).

There are many edible flower species in the world, but very few have been fully investigated. Therefore, in order to increase their acceptability as food ingredients and reduce any potential hazards, more thorough research on this natural resource is necessary. Flowers must be non-toxic and have nutritional value in order to be considered edible, however not all flowers meet these requirements. Certain species possess anti-nutritional or toxic substances such as alkaloids, cyanogenic glycosides, oxalic acid, hemagglutinins, and trypsin inhibitors. These flowers must therefore be regarded as inedible and kept out of the human diet.

Edible flowers, as their name implies, are blossoms that can be safely ingested, and they have been cherished throughout history. The enticing colors, exotic fragrances, and delectable flavors of edible flowers make them readily accessible for various purposes. Edible flowers have captivated attention across the globe, and their usage dates back to ancient civilizations like Greece and Rome, persisting and evolving even in modern times. These versatile botanical wonders can serve a wide range of culinary purposes.

Edible flowers can be consumed directly, integrated into dishes, or simply used as eye-catching garnishes thanks to their diverse and appealing colors. Today, the utilization of edible flowers in cuisine and beverages has surged in popularity, especially as the global population seeks healthier dietary options to bolster their immunity during a global pandemic. In addition to their applications in food, edible flowers have found a place in non culinary domains. They serve as essential raw materials for producing fragrances, natural dyes, and cosmetic products, demonstrating their significance beyond the kitchen.



**Table 1: Some edible flowers with their uses**

Common name	Botanical name	Uses
<b>Pot marigold</b>	<i>Calendula officinalis</i>	The petals are for edible decorative purposes; an alternative for saffron.
<b>Tea Plant</b>	<i>Camellia sinensis</i>	As vegetables in the meal.
<b>Butterfly Pea</b>	<i>Clitoria ternatea</i>	The petal used as a colorants.
<b>Rose</b>	<i>Rosa chinensis</i>	In fruit preserves and infusions.
<b>Garden nasturtium</b>	<i>Tropaeolum majus</i>	Ingredient in salad, drinks, and meals.
<b>Jasmine</b>	<i>Jasminum sambac</i>	In infusions and porridge
<b>Roselle</b>	<i>Hibiscus sabdariffa</i>	Ingredient in jams, fermented drinks, herbal drinks, cakes, chocolates, etc.
<b>Bauhinia</b>	<i>Bauhinia variegata</i>	Flowers and buds as vegetables and pickles.
<b>Red silk cotton</b>	<i>Bombax ceiba</i>	Buds and flowers are cooked and pickled.
<b>Palash</b>	<i>Butea monosperma</i>	Flowers are used along with milk with sugar to make coolant drink.
<b>Butter tree</b>	<i>Madhuca longifolia</i>	Eaten raw, and used in local drinks. Sun-dried flowers are used as a sweetener.

**Calendula (*Calendula officinalis*)** :- *Calendula officinalis*, commonly known as pot marigold, is a versatile and beloved herbaceous plant celebrated for its vibrant golden or orange blossoms. Native to Southern Europe, this annual or perennial herb belongs to the Asteraceae family (de Lima Franzen *et al.*, 2019). The petals of this vibrant blossom add both color and flavor to a range of dishes. Sprinkle fresh Calendula petals on salads to add a burst of color and a mildly peppery taste. They pair well with mixed greens, tomatoes and cucumber.

**Rose (*Rosa* spp.)** :- Roses (*Rosa* spp.) stand as timeless symbols of beauty, love, and grace in gardens around the world. This diverse genus encompasses a multitude of species, each boasting its unique charm and characteristics. Typically, deciduous shrubs, roses are known for their thorny stems, pinnate leaves and of course, their exquisite and fragrant flowers. The blooms, with their wide range of colors and captivating fragrances have transcended mere ornamentation to become integral players in various cultural, romantic, and culinary contexts. Beyond their visual and symbolic appeal, certain species of roses, particularly heirloom varieties, offer edible petals that open a realm of culinary possibilities. Whether infused in syrups, used in jams, or simply adorning salads and desserts, the petals of *Rosa* spp. showcase the multifaceted nature of this beloved plant, making it a perennial favorite not only in the garden, but also at the dining table (Nowak *et al.*, 2014). Extract rosewater by steeping fresh rose petals in water. This aromatic liquid can be used to flavor beverages like lemonades, teas, or cocktails. Preserve the beauty of rose petals by candying them. Dip the petals in egg whites and sugar, allowing them to dry for an elegant and edible decoration for cakes and pastries.

**Hibiscus (*Hibiscus rosa-sinensis*)** :- *Hibiscus rosa-sinensis*, commonly known as the Chinese hibiscus or shoeblack plant, is a tropical and evergreen shrub that has captured hearts with its dazzling, trumpet-shaped flowers (Shruthi *et al.*, 2016). Native to East Asia, this plant is renowned for its ornamental beauty and cultural significance in various regions. Making a cool herbal tea with hibiscus blossoms is one of the most common applications. In certain cultures, it is also referred to as "hibiscus tea" or "sorrel." It can be consumed hot or cold and can be sweetened with honey or other natural sweeteners. Toss fresh hibiscus flowers into coleslaw, fruit salads, or mixed greens to add a pop of color and a tart touch.

**Marigold (*Tagetes* spp.)** :- The Marigold plant, belonging to the *Tagetes* genus, is a dazzling and versatile annual that has established itself as a garden favorite worldwide. With a

distinctive and somewhat citrusy scent, Marigold flowers are known to be edible, bringing a unique flavor to salads, teas and various culinary creations. Beyond their ornamental and culinary applications, Marigolds are celebrated for their ability to repel certain pests in gardens, making them a popular companion plant. Add fresh marigold petals to salads to add a splash of color and a tart, somewhat lemony taste. They go nicely with other salad items including mixed greens. Add finely cut petals to softened butter. You may use this butter with flowers to give bread, spaghetti, or steamed veggies a special taste. Candy marigold petals to preserve them. To add a sweet and artistic touch to delicacies, dip the petals in sugar syrup and allow them to dry.

## Conclusion

Depending on the kind eaten, edible flowers can offer a range of nutrients. Numerous edible flowers are high in vitamins, including vitamin A, which is necessary for healthy skin and eyes, and vitamin C, which boosts immunity and functions as an antioxidant. *Viola arvensis* Murray, *Hibiscus rosa-sinensis*, *Matricaria chamomilla*, *Tagetes* spp., *Rosa* spp., *Viola odorata*, and *Borago officinalis* are notable examples of edible flowers, each of which offers distinct tastes, scents, and nutritional advantages. The abundance of vitamins, minerals, antioxidants, and other bioactive compounds in these blooms contributes to their capacity to improve health. Evaluating precise values for each flower species' edibility will be crucial in the future.

## References

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