

Popular Article

Dry flower technology: An amelioration in floriculture industry

Shruti Mallikarjun Kolur, Karthik D. R. and Dr. R. Vasantha Kumari ¹ Ph.D. Scholar, Department of Horticulture, University of Agricultural Sciences, GKVK, ² Ph.D. Scholar, Department of Horticulture, University of Agricultural Sciences, GKVK, Bangalore (Karnataka) 560065 ³ Professor, Department of Horticulture, University of Agricultural Sciences, GKVK, Bangalore (Karnataka) 560065 ⁴ Ph.D. Scholar, Department of Horticulture, University of Agricultural Sciences, GKVK, Bangalore (Karnataka) 560065 (Karnataka) 560065 <u>https://doi.org/10.5281/zenodo.8102173</u>

Introduction

Dry flower technology, also known as dried flower preservation or dried flower arrangements, is a process that involves preserving fresh flowers by removing their moisture content. This technique allows flowers to maintain their natural beauty and structure for an extended period, even after they have been cut from the mother plant. The art of drying flowers dates back centuries and has been practiced in various cultures around the world. Initially, drying of flowers was primarily done to preserve their fragrance, but over time, it has been evolved into a decorative and creative craft. Dried flowers can be combined with other materials, such as foliage, herbs, or ribbons, to create visually appealing compositions. The final arrangements can be displayed in vases, shadow boxes, or framed as art work. Major dry flower producing areas in India are Tamil Nadu, Karnataka, Maharastra, West Bengal and Andra Pradesh. These states produce dried rose, marigold, jasmine, tube rose, gerbera, chrysanthemum and shola flowers for domestic and international markets.

Advantages of dry flower technology

- \checkmark Longevity: dried flowers can retain their beauty and shape for months or even years.
- ✓ Low Maintenance: preserved flowers do not need any special care.



- ✓ Versatility: Preserved flowers can be easily manipulated into various shapes and forms, allowing for unique and customizable designs. They can be arranged into bouquets, wreaths, centerpieces, or used in art and craft projects.
- ✓ Color Retention: Dried flowers maintain their original colors even after the drying process.
- ✓ Sustainability: Dry flower technology promotes sustainability by reducing the need for fresh cut flowers.
- Preservation of Sentimental Value: Dried flowers hold sentimental value and can serve as keepsakes for special occasions or memorable moments.

Steps involved in production of dry flowers

- A. Selection of Flowers: The process begins with carefully selecting flowers at their peak freshness. Flowers with vibrant colors, intact petals, and minimal signs of damage are preferred for drying.
- B. Harvesting: The flowers are typically harvested early in the morning. This helps in preserving the flower's natural colors and shape.
- C. Conditioning: After harvesting, the flowers are conditioned by removing excess foliage, thorns, and leaves. The stems are trimmed to the desired length, and any damaged or wilted petals are removed.
- D. Drying Methods: Some common drying methods include
- Air Drying: This is one of the oldest and simplest methods of drying flowers. The flowers are gathered into small bunches and hung upside down in a warm, dark, and well-ventilated area. Good air circulation helps in the gradual evaporation of moisture from the flowers, preserving their natural shape. Ex: Gerbera, Marigold, Statice, *etc*.



- **2. Pressing:** Pressing involves flattening the flowers between heavy objects, such as books, paper, or specialized flower presses. The flowers are carefully arranged and pressed for a certain period until all the moisture is removed. Pressed flowers are often used for crafts, art, or as decorative elements in cards and bookmarks. Ex: Hibiscus, Pentas, Ixoras, *etc*.
- 3. Silica Gel Drying: Silica gel is a desiccant that effectively absorbs moisture. Flowers are buried in



a container filled with silica gel crystals or beads. The container is sealed, and the flowers are left for a few days to allow the silica gel to draw out the moisture from the flowers. Silica gel can preserve the flowers' shape, color, and delicate details effectively. Ex: *Strelitzia reginae*, *Hemerocallis fulva*, *Antirrhinum majus*, *etc*.

1. **Microwave oven drying:** Microwave oven drying works by producing an electronic microwave that releases the moisture from organic substances by agitating the water molecule. It is a quick strategy, and the product quality is better in terms of colour and shape maintenance. Ex: Golden Rod, Gypsophilla, Carnation, *etc*.



thickness of flowers Ex: Callistephus chinensis, Dendrobium sp., etc.



- 6. Skeletonization: involves removing the moisture content from the flower petals, leaving behind only the intricate veins or "skeleton" of the flower. This technique creates delicate and transparent floral structures that can be used for various decorative purposes. Ex: Maple Leaves, Delphinium, Orchids, *etc*.
- E. Preservation Time: The drying time varies depending on the method used and the type of flower. Air drying can take a few weeks to a month, while hot air oven and desiccant drying methods are faster and can take a few days to a week.
- F. **Preservation of Color:** To maintain the natural colors of the flowers during the drying process, it is important to dry them in a dark or dimly lit area. Exposure to sunlight or bright light can cause the colors to fade.
- G. **Preservation of Shape and Structure:** Proper handling during the drying process is crucial to preserve the shape and structure of the flowers. Care must be taken to prevent petals from overlapping or sticking together, which can result in distorted shapes.
 - H. Treatment and Finishing: Once the flowers are completely dry, they can be treated with floral sprays or sealants to enhance their appearance, preserve their colors, and provide extra protection.







These treatments can help prolong the longevity of the dried flowers.

I. Arranging and Displaying: Dried flowers can be arranged into various forms, including bouquets, wreaths, wall hangings, and centerpieces. They can be combined with other materials, such as foliage, herbs, or ribbons, to create visually appealing compositions. Dried flower arrangements can be displayed in vases, shadow boxes, or framed as artwork.



J. Preservation and Storage: Proper storage is essential to maintain the quality of dried flowers. They should be kept in a dry and cool area.

Conclusion

Dry flower technology is a captivating and artistic method of preserving flowers, enabling individuals to cherish the beauty of blossoms for an extended period. Whether used in home decor, special occasions, or personal mementos, dried flower arrangements offer a unique and enduring way to appreciate the elegance and charm of nature's floral creations.

