Drying of Ornamental Flowers: An Income Earning Venture

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Abstract

The art of drying ornamental flowers and their parts is a flourishing art from olden days. The use of dried floral parts in a variety of products has now become a major business worldwide and this art has transformed from hobby to dollar earning venture. The Andaman and Nicobar Islands is a storehouse of variety of ornamental plants and provides ample opportunities for dry flower making. Agriculture land holding is very less in the Island, hence the additional activities along with farming will help in increased economic benefit to the farmers. Dry flower technique is one such avenue which may be exploited in the Island by the use of native ornamental plant wealth and provide employment opportunities for farm women, tribal women, self help groups and unemployed youth. When the dry flower is developed as an enterprise for manufacturing of various products many techniques of drying are standardized that may be used for successful production. However, for initiation of small scale cottage industry simple drying techniques may be employed.

Introduction

Dry flowers are products of dehydration process and are devoid of moisture. The dried flowers are gaining popularity because the fresh flowers have short post-harvest life. Flowers can be dried with high precision so that they look like natural fresh flower and can be treasured for a longer period of time. Dried flowers are one such floral crafts; which suit the need of the day best. These are used as decorative items and fragrance as well. Fresh flowers though exquisite their beauty, are expensive, short lived and sensitive to heat and cold. On the other hand, the dry flowers that are near naturals, dried and preserved have an everlasting value that can be cherished for longer periods. Dry flowers can add colour and beauty to a place and do not require frequent replacement like fresh flowers. In dry flowers, microbial activity comes to a standstill and can be stored in dry atmosphere for a long period without losing their appearance and decorative value in terms of colour and beauty. Dry flowers are put to many novel and varied uses. Apart from bouquets and flower arrangements, their flexibility enables them to make into long lasting flower pictures, flower balls, cards, pomanders, festive decorations, sweet smelling pot pourri, etc. Apart from adding to aesthetic flower drying is a lucrative income generating hobby for women entrepreneurs. Dry flowers and plant materials have tremendous potential as substitute for fresh flowers and foliage for interior decoration as well as for variety of their aesthetic and commercial uses. Dry flowers may be arranged in dry vases, bouquets and wall displays. Pressed leaves and flowers may be used in making number of products like greeting cards, book marks, wall hangings, paper weight, table mat, etc. Dried flowers should be handled...
with care since they are more delicate than fresh flowers. Dry pods, seeds, nuts, dried fruits, flower skeletons after giving some artistic touch can be best used for decoration and various arrangements through value addition. Dry flower value addition help in providing employment to the people especially women and also helpful in generating the resources for self help groups. Being of low cost and having high demand, small scale drying industry may be started.

Drying of flowers

B y different methods of drying various locally available flowers, seeds, leaves, twigs and pods can be used for dry flower making. Nowadays the dried flowers are the best alternatives for the plastic and artificial flowers as they are cheaper, eco-friendly and biodegradable. These are available year round.

Methods of Flower Drying

F lowers can be dried by any one of the following methods depending upon the type of flower and intended use.

1. **Air drying:** This is the most common method of drying flowers. For this type of drying, a well-ventilated room is needed to avoid rotting before the flowers are dried. The disadvantage of this method is shrinkage of petals in most of the flowers. Different types of air drying are as follows.

   (i) In-situ drying: In this method, the flowers or plant parts are allowed to dry naturally in the plant itself and harvested only after sufficient loss of moisture.

   (ii) Vertical or hanging drying: Vertical drying can be done either by hanging the flowers upside down or by placing them vertically on the racks. After bringing the flowers to the laboratory, remove of the leaves from the lower portion and tie the flowers in bunches. When the flowers are in bunches, hang the flowers upside down in a well ventilated room. Light is not necessary as it may cause bleaching of colour. Darkness will preserve the colour and leave the flowers hanging until they are ready to use.

   (iii) Flat drying: In this method flowers can be dried by simply placing them on horizontal surface in a dark room

2. **Embedded drying:** To overcome the problem of petal shrinking, the flowers are dried in embedding technique. The flowers or leaves are embedded in drying medium viz., silica gel, borax, white sand and alum powder. Metallic or plastic or earthen or glass containers are used for embedding at room temperature in a well ventilated room. In this method of drying, there is very little loss of colour or shape. Embedded drying can be hastened by drying the flowers in sun, solar dryer, hot air oven, microwave oven or by vacuum drying.

   **The steps in embedded drying are**

   (a) Spread the layer of desiccants (5 cm layer) in the bottom of the container.

   (b) Arrange the plants according to type. No two specimens should touch each other or sides of the container.

   (c) Pour the desiccants gently, gradually and completely from all sides until it forms a layer of 1.5 cm above plant parts.

   (d) The drying agent should provide even drying through the flower and support the flower so that the shape retains.

   (e) The drying time will vary with the flowers from 2 to 4 weeks when the flowers are dried completely gently take the flowers out of the drying agent.

   (f) After dehydration, the containers are tilted for removing the desiccants over and around the flowers.

   (g) The dried flowers are either picked up by hand or tweezers; cleaned by inverting them and tapping with fingers slowly and gently. Remaining desiccants are finally removed with the help of fine hair painting brush as the dried flowers are very fragile.

   (h) After the flowers have been cleaned spray them with a dried flower preservative, it will strengthen and protect them.

3. **Freeze drying:** By this method, the qualities of dried flowers are almost doubled as compared to the other methods of drying. In this method, flowers are arranged in specimen chamber and then frozen to -35 °C. Any frozen crystal on flower is sublimed or vapourized with application of heat. This technology is little expensive.

4. **Water / Glycerine drying:** Those flowers which loose moisture and gloss rapidly and tend to give loose flower form or dried in water or glycerine. This method is frequently used for drying leaves. For glycerine drying, mix one part of glycerine with two parts of water. Remove the lower leaves and flowers from the stem and keep in standing cold water or glycerine mix with 5 cm depth. It takes 6-7 days for drying depending upon the weather condition.

5. **Press drying:** Flower shape does not retain. Press dried flowers can be used for making products like greeting cards, book marks, photo frames and sceneries. In this method, take the herbarium press, place the blotting paper over it and then keep the flower, leaves or floral parts, cover them with blotting paper and then fasten the bolts of herbarium press. On alternate days change the side of flower as well as blotting paper according to the requirement, so that flowers are not attacked by fungi. The drying process can be hastened by placing the herbarium press in the hot air oven at 45 -50 oC temperature.

**Precautions for collection and drying of flowers**

1. Collect fresh material
2. Collect material after dew or moisture has evaporated
3. Collect material from field 2-3 days after watering
4. Collect all stages of flower development. Inflorescence should be collected which have sufficiently hardened as
immature, shrivel fast
5. Embed material immediately after plucking
6. One type of flower and foliage should be embedded at time
7. Cut all undesirable portions before embedding

**Conclusion**

The flower drying techniques do not involve much technology and one can start this as a small scale industry without much investment. Dry flower industry

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**Figure 1:** Table decorations with dry flowers

**Figure 2:** Greeting cards, wall hangings and decorative paper weights using dry flowers

**Figure 3:** Dry flower products in market

**Figure 4:** Dry flower arrangement using spathodia pods
can be associated with many subsidiary industries like bamboo and cane baskets, coconut shell crafts and candles, etc. By incorporating one with another, the benefit of value addition can be reaped to a greater extent. Drying of flowers is a labour intensive work and hence it can generate ample job opportunities particularly for women in the Island. Thus the dry flower technology is a boon to the self help groups and unemployed youth for earning additional income.

References
