

Review of Literature on Dry Flowers

*Saima Rashid Mir**, *B.M. Shinde*, *M.G. Chaskar*, *M.M. Jana*

Department of Botany, Professor Ramakrishna More Arts, Commerce and Science College, Pune, Maharashtra, India

Abstract

Dry flowers have been used in the artistic creation and ornamentation for many years. There is also an immense market of dry flowers throughout the world. The handiness of abundant plant material is one of the driving forces to nurture your hobby of preparing, crafting and developing dried plant material. Unlike fresh flowers, that easily slack their appeal and market value dried flowers prevail for longer periods if properly preserved; hence, dry flowers and foliages have great potential as alternative for fresh flowers. The present paper describes the commercial importance of dry flowers and the introduction of new techniques for the enhancement of dry flower industry.

Keywords: *Dry flowers, capitalization, vein skeletons*

***Author for Correspondence** E-mail: saimarashidmi@gmail.com

INTRODUCTION

A review of literature plays an important role in depicting the amount of work done in the related area of study. Dry flower production has already drawn the attention of many workers and entrepreneurs due to its vast number of economic importance. A brief review of study and its market potential may be helpful for grasping the existing scenario of capitalization of dry flowers.

Flowers are associated with mankind from the dawn of civilization and in the modern times, these have become an inseparable part of human life. Love for flowers is a natural instinct. The sight of growing flowers in all their grandeur makes one to wish for the season to continue and never end, but this is not possible. The answer for it could be by producing long lasting flowers, which are now becoming a favorite with the adventurous flower lovers across the world. The beauty and fresh look of cut flowers can be retained only for few days even by using the best techniques of post-harvest technology but the charm and beauty of dried flowers and foliage can be maintained from few months to years with lesser cost. Moreover, fresh flowers and foliages are not available all-round the year in all places [1].

Dried flowers are highly popular because of its benefits. Unlike fresh flowers used in a vase, dried flowers require little maintenance they look great and can last for longer. Beautifully arranged dried flowers may be a little bit more expensive, but they are quite long lasting and can even last for many years. They are tolerant of high temperatures and offer a variety of beautiful colours which could not be seen in cut flowers. Dried flowers are good standby for the florists, since designs can be made up during the slack periods and arrangements can be displayed where fresh flowers are unsuitable from the grower's point of view and the price is less than for equivalent fresh flowers [2].

India is fortunate with the affluent biodiversity. The Indian flora has a wide variety of ornamental trees, shrubs, climbers, herbaceous plants, fleshy fungi, lichens, mosses etc. Many of these ornamental plants with their variety of flowers, foliage, fruits, cones seeds, roots, stems, shoots/twigs, bark, lichens and fleshy fungi have attracted the tourists, naturalists, environmentalists and amateur gardeners. These plants cannot be retained as cut flower or cut foliage for longer duration and the masses residing in the metropolitan and other large cities who cannot visit countryside or Himalayan region remain deprived of the beauty of these plants.

Preservation of flowers and plant materials is a form of aesthetical expression that was bestselling during the Victorian age and has once again gained popularity. Dried flowers or plant part or botanicals (roots, leaves, stem, bark or whole plant) can be used for ornamental and decoration purposes. Due to rich biodiversity, India possesses immense scope for its commercial exploitation. Dried flowers can be used several times to meet the decorative demands throughout the year [3]. The charm and attractiveness of dried flowers are that they can be unbroken and treasured for years.

Earlier dried flowers were in practice in the form of herbarium made by botanists for the purpose of identification of various species [4]. In "The Florist", the journal published in 1860, author describes the techniques of drying red roses, pansies, stock and other single flowers in sand. Though drying of flowers was well known even in the past but for the first time the flowers were dried commercially in Germany [5]. Dried and preserved ornamental products offer a wide range of qualities like novelty, longevity, aesthetic properties, flexibility and year-round availability [6].

Dried flowers were used to make fragrances and were placed in tombs by Egyptians. They were used as medicines in middle age. The Japanese created an art form called "Oshibana". It is the art and craft of the pressed flower to retain the beauty and quality of a living flower. This art form of Japanese grew over the centuries. Japanese honored the flowers and plants that grew near them. This pressed flower art has grown to include more than just pressed flowers. It now incorporates all types of designs as Oshibana make use of colored paper. The enthusiasm for this craft spreads from Japan to Victorian England, during the 16th century. Victorian women made floral garlands and used dried flowers to design pictures and to make special jewellery designs, flowers are still dried to preserve memories and create art [7].

LITERATURE REVIEW

Dry flower industry is most beneficial area in floriculture. The industry has grown rapidly with over 60% share of profits belonging to the floriculture industry [8]. The industry projected annual turnover as of 2003 was more than 150

crores [9]. The industry in India is more than 40 years old and exports 500 varieties of flowers to 20 countries [10]. The different types of dry flower products are handmade paper, lampshades, wall quilt, decorations, candle holders etc. The flower arrangements using dried samples of cones, foliage, like rose buds and other plant material enhancing the beauty of dry flowers, increasing more value to dry flower industry.

The USA is a largest consumer of dried and artificial flowers estimated at (US \$2.4 million) annually followed by Germany and UK, studied by Bhattacharjee and De [10]. There is an increasing demand all over the world for the decoration of living and working places with eco-friendly objects like dried plant parts and dry flowers.

Potpourris are the major segment of dry flower industry valued at Rs.55 crores in India alone [11]. Easy accessibility of products from forests, chances of affordable manpower available for labour intensive craft making and availability of wide range of products throughout the year are some of the reasons for the advancement of dry flower industry in India.

With its rich floral diversity, India could serve as a major raw material supplier for the industry. To encourage the eco-friendly trade, government has given a rebate of 25% on the freight of this product and a bulk quantity of the raw material are exported from India to the developed countries like UK, Japan and America, where dried floral arrangements are of great demand [12]. Besides domestic consumption, there is an increasing demand worldwide for the decoration of living and working places with eco-friendly items.

In the recent floriculture trade the exports from India grew from Rs.266 crore during 2002–2003 to Rs.302 crore during 2003–2004 and Rs.273 crore during 2004–2005 to achieve a growth rate of 2.66%. The Indian export basket comprises of 71% of dry flowers which are exported to USA, Europe, Japan, Australia and Russia. Dry flowers constitute more than two-thirds of the total floriculture exports. The demand for dry flowers is increasing, offering a

lot of opportunities for the Indian entrepreneurs to enter in the global floricultural trade [13].

Therefore, dry flowers are showing more commercial profits than cut flowers that often beautify homes, working place, etc. because of their tendency to remain durable and eye catching for longer durations with almost very little maintenance [14].

A lot of research work is been carried out on dry flowers in National botanical research institute of Lucknow India where number of flowers and foliages are dehydrated and certain techniques have also been developed by which number of flowers, twigs, branches, etc. are preserved for longer durations [15]. Some research work on dry flowers is also being carried out in Indian Council of Agricultural Research Institute, Delhi.

It is well-known fact that people use different plant materials for aesthetic purposes by different methods. Leaves are naturally beautiful, but they do not last for very long away from the tree. The skeleton leaves that have been reduced to their framework of veins can be created to preserve the everlasting beauty of leaves in which both the beauty of nature's creation and a charm of craftiness can be enjoyed. Prepared leaf skeletons can survive the harsh colds of winter and the blazing heats of summer; they make lovely gifts apart from being beautiful.

The dried flowers available in the market (prepared from various techniques including glycerin drying, sand drying, silica gel drying and various other chemical drying methods) have a tremendous market potential and their demands can be significantly increased by establishing new and interesting techniques like processed leaf skeleton preparation and preservation, in which the end product would be more long lasting and less fragile than commercial dry flowers. Skeletonized leaf is purely cellulose which is quiet durable. Skeletonization is a process that occurs spontaneously in nature, but it takes a long duration to expose the inner mantle of leaves, they have loose and wide gaps in between which is not in case of chemically prepared one. Thus naturally processed skeleton leaves

cannot be used further because of the loose and damaged network of veins. A skeletonized leaf shows high resistance, is flexible and does not crumble easily. Due to their durability they can be used in fashion and fine arts applied to packaging, lining, lighting fixtures, furniture, canvas, glass, fine stationary, shop windows and where else your imagination will take you. Unlike dry or dehydrated leaf, the prepared skeleton leaves show high resistance. There are reports of skeletonized leaves as old as a hundred years. They can be of various shapes and can also be ironed, just like a fabric [16].

The literature search has revealed a number of successful reports on the preparation of venation skeletons of leaves have been done by various ways. The selected leaves were boiled in one-quart water and two tablespoons of lye to obtain the network of veins [11]. The use of microorganisms to separate plant vascular skeletons is not new. Loomis and Shull [17] suggested the immersion of leaves in an algae tank until the mesophyll was eaten away by microorganisms, leaving an intact vascular skeleton. The recovery of rubber was done from *cryptostegia* to isolate and measure the full extent of the leaf veins as reported by Whittenberger and Naghski [18]. Skeleton leaf preparation in India is comparatively a new technique for producing a variety of flowers and other products, which are being used for natural, aesthetic and for interior decoration purposes [19]. In this way, some preliminary research work has been done on venation skeleton by some workers but the detailed scientific data of preparing venation skeletons their preservation techniques is not available till this date, hence by working on the same in a complete scientific manner would be a value addition to both researchers as well as entrepreneurs.

DISCUSSIONS

In modern era of eco-consciousness, the demands for dry flowers and other dried botanicals has become the first preference of people for decoration and for other ornamentation purposes. Thus, by the addition of new techniques the output of dry flower industry can be enhanced. So, there is a need to come forward to take up studies on dry flower technology in order to commercialize the

Indian dry flower potentiality. Appropriate funding for research in dry flower is a necessity since this industry shows great opportunity to our rural areas and cottage industries, so that India will be the leader in this area in near future.

CONCLUSION

Dry flowers are beautiful, inexpensive and long lasting. The industry has the tremendous potential to employ thousands of people. It could start as a home or cottage scale unit and can quickly grow into a big enterprise. The dry floral craft helps to upgrade the creative facility of human mind and converts the cheapest plant raw material into wealth, customer awareness by way of exhibitions, workshops, seminars, trainings etc. would help in employment generation especially to housewives and rural women.

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