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# Value Addition in Fresh Flowers- An Overview

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## Abstract

Floriculture is an important industry in terms of profit making. As the flower crops are considered as “High Value, Low Volume crops”, production and value addition of flowers has an important role in deciding the market value. Since flower crops are perishable in nature; it needs a proper postharvest practice and value addition to enhance the value. Nowadays, different kinds of value-added products are formulated and marketed by the agro-enterprises which include essential oils, flavours, fragrance, pharmaceutical and nutraceutical compounds, insecticides, pigments, natural dye, gulkand, rose water, etc. Apart from this, fresh flowers are utilized in our day-to-day life as garlands, hair adornments, bouquets etc. In addition, fresh cut flowers have created a trend in stage decoration and flower arrangement in public and private functions. Traditional flower crops in country like India have its own spiritual importance which makes floriculture sector flourishing.

## Introduction

Value addition means increasing the value of a raw product anytime between harvesting and sale of the final product through changes by processing. People focus on perishable produce much since it has minimum validity. Flower crops with less shelf life/Vase life have to be subjected to proper postharvest operation in the limited time. Adding value by processing the harvested flower produce is an ideal methodology for enhancing the product value in the world market. Essential oils, perfumes, natural dyes extracted from the flowers can be stored for more time and introduced in the market. In our country (India), Traditional flower crops like Jasmine, Marigold, Chrysanthemum, Crossandra etc., have a high demand in day-to-day life.

## Scope and Importance

The profitability of a commodity increases when a raw material is converted into an unique product. It increases the net cash return of a small scale floriculture enterprise. It also gives high premium to the grower and provides quality products for the domestic as well as export market. Nowadays consumption pattern is getting diversified towards value added products such as essences, perfumes, pigments and other by-products from flowers. And thus, essential oils of rose, tuberose, jasmine and plant extracts are used in perfumery and pharmaceutical industry. India contributes to 0.06% (approximately) of the floriculture exports in global trade. As fresh flowers and foliage are perishables, postharvest losses are more (40-70%) (Halevy and Mayak, 1979). Value addition in floricultural products through processing, packaging and supply chain management would increase farm income, decrease losses, generate employment and development of national economy.

## Role of Loose Flowers/ Traditional Flowers

*Jasminum sambac* (Gundumalli), *J. auriculatum* (Mullai), *J. grandiflorum* (Pitchi) are the three important fragrant species of jasmine grown in southern parts of India in which *J. sambac* string has been prepared and exported from Tamil Nadu. Mostly flowers like *J. sambac*, *J. auriculatum*, *J. grandiflorum*, *Crossandra* are made into strings and used as hair adornments. Veni, garlands also prepared from these flowers including marigold and scented rose. Scented rose, tuberose, Celosia are widely used in making garlands, worshipped in temples and local functions. Even single flowers are offered for god namely Hibiscus, Night jasmine, Yellow bells, Nerium etc. Flower rangoli crafted by utilizing various types of traditional flowers and fillers like Thuja are made for decorating the entrance.



Figure 1: Veni made of loose flowers (Source: Google Image)

*Rosa damascena* and *R. bourboniana* are cultivated for rose oil. Bulgaria stands first in scented rose cultivation for oil extraction and perfumery. Gulkhand, Pankhuri (Dried rose petals) and Gulroghan (rose hair oil) are the other value-added products are prepared from fragrant roses. Marigold flowers are used for extraction of lutein pigment (yellow coloured pigment) and is employed in various industries as natural colourant, for instance in chick feed industry, textile and food industry. Essential oils and floral concrete extracted from



Figure 2: Veni made of cut flowers (Source: Google Image)



Figure 3: Orchid garland (Source: Google Image)

tuberose (Concrete recovery- 0.08 to 0.11%), Jasmine flowers and scented rose has a good value in the field of perfumery and medicines.

## Role of Cut Flowers & Foliages

Cut-roses, Chrysanthemum, Anthurium, Carnation, Orchids, Gladiolus, Gerbera are some of the important cut flowers commercially grown for making bouquets, button holes, garland, floral arrangements, bridal ornaments,



Figure 4: Jasmine string garland (Source: Google Image)



Figure 5: Crossandra string garland (Source: Google Image)

wreath and also involved in Tinting (Colouring of white flowers). Stage decorations planned in combination with foliage crops like Dracena, Asparagus fern, Philodendron, Nephrolepis fern for getting lively appearance. Bridal makeup also performed using cut flowers for long standing, especially Dendrobium orchids (var. Sonia Red) (Figure 3) getting importance in garland making for offering to god (Spiritual purpose) and also in wedding garlands. Dendrobium flowers harvested from Tamil Nadu orchid polyhouses preferred for traditional offering to Thirumala temple, Tirupathi. Essential



Figure 6: Wreath (Source: Google Image)

oils extracted from carnation absolute (Concrete recovery (0.2-0.3 %)) are used in making soaps, pot-pourriand room-fresheners. Liliium and Tulip bulbs serves as potato substitutes, while *Gladiolus edulis*, edible gladiolus species also used in culinary purposes.

## Conclusion

Value addition has become an important component of the floricultural industry. New products and processes, including innovative methods, are continually being developed as per the need of peoples. Some of the factors that require consideration such as methods of storage, packaging and transport to the local or distant market in order to preserve the quality of the product will promote the profitability. With proper planning and technical skills, fabrication of innovative and unique value-added products can generate brand recognition and add credits to the farm operation.

## References

- De, L.C., 2010. Value addition in flowers and orchids. New India Publishing Agency, New Delhi
- Halevy, A.H., Mayak, S., 1979. Senescence and postharvest physiology. Part-1. HortRev 1, 204-236
- Sharangi, A.B., Datta, S.(eds.),. 2015. Value Addition of Horticultural Crops: Recent Trends and Future Directions, Springer India.