

New Avenues and Value Addition from Harsingar Flowers

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ABSTRACT

Nyctanthes arbor-tristis Linn. (Night Jasmine) from the family – Oleaceae is known by different names such as Harsingar, Parijatha and Jayaparvati. It is well known in India and neighboring countries of which flowers and leaves or both are used for decorative as well as medicinal purposes. It contains flavonoids, anthocyanin and essential oil similar to jasmine. The orange tubular corolla of the flower contains carotenoids. Leaves bitter in taste, helps in various therapeutic conditions are used as laxative, cholagogue, diuretic, to treat loss of appetite, chronic fever, liver and biliary disorders, malarial fever, leg cramps, rheumatism, joint pains and also for children to treat deworming conditions in the form of juice extract from leaves. Development of Value Added Products in form of dry and fresh flowers, is an effective means for rural women to supplement their household income and utilization of these in food and health industry, taking shelf-life in consideration.

Key words: Harsingar, Parijatha, Jayaparvati, Mannitol, Tannin

INTRODUCTION

Nyctanthes arbor-tristis Linn. (Night Jasmine) from the family – Oleaceae is known by different names such as Harsingar, Parijatha, Jayaparvati. *Nyctanthes arbor-tristis* is native to India and distributed widely in the sub-Himalaya region and southward to Godavari. It is mostly considered sacred and religious of which flowers and leaves or both are used for decorative as well as medicinal purposes. Flowers are well known in India and neighbouring countries Indonesia and Malaysia etc and are found in gardens for ornamental purposes. Flowers have a pleasant fragrance, with five to eight lobed white corolla and orange-red center. Individual

flowers open at dusk and finish at dawn are produced in clusters of two to seven together. It contains flavonoids, anthocyanins and essential oil similar to jasmine. The orange tubular corolla of the flower contains carotenoids. Besides, it is a natural coloring agent similar to saffron- pale yellow to orange color is obtained which is used as a coloring agent in various desserts and foodstuffs for garnishing. Some essential oils, coloring matter (nyctanthin), mannitol, tannin and glucose have also been obtained bright orange corolla tubes from flowers. Generally extract is obtained by boiling or soaking the fresh/dry flowers in water. Saffron corollary tubes can be dried and stored in a cool and dry place.

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Fig. 1:

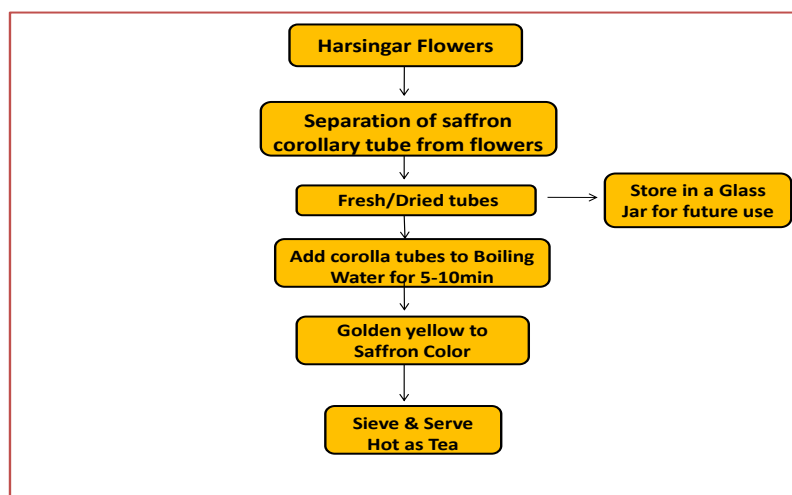
Exquisite value added products from flowers provides an opportunity for decorations like garland, bouquet, or after drying the flowers making different dried flower products after processing like health drink, floral tea, perfumes, essential oil, insect repellants, cosmetics, etc. Besides this a number of pigments like xanthophylls, carotenoids, luteins, anthocyanins, etc. which have nutraceutical properties and pharmaceutical compounds are also prepared from the flowers. Value addition of harsingar flowers at local level will help in employment generation among farmers, especially women, in addition to its therapeutic importance it is used to treat loss of appetite, liver and biliary disorders, chronic fever, malarial fever, obstinate sciatica and rheumatism.

MATERIAL AND METHOD

Collection: The flowers were collected during the month of September to October. Fresh flowers of *nyctanthes arbor-tristis* were collected from healthy plant in the night from local home area of Vaishali Nagar, and Department of Botany, Government College Ajmer, Rajasthan. The hand plucked flowers can be used fresh or dried. Flowers are dried in shade for 2-3 days and were crushed by hand or grinded into fine powder to get the finest powder of uniform size.

Method for Preparation of Floral Drink

Boil 10 grams of fresh flowers or 2 grams dried tubes in 1litre water respectively.



Process Flow chart (a)



Herbal Drink (b)

Development of Value Added Products from Harsingar Flowers

The popularity of harsingar flower as a food supplement is due to its flavour and taste; also it acts as a natural food colorant to Indian sweets like kheer, jalebi, laddoo, burfi and desserts such as cakes and puddings, in preparation of cookie dough for flavour and color. The developed products will be more of a Ready-to- Serve drink/ beverages may become popular among masses.

Future research

1. Effectiveness of using fresh/ dried corollary tubes on their nutritional content such as bioflavonoids, anthocyanin, carotenoids and some sugar in form of mannose.
2. Benefits in form of herbal tea as *Nyctanthes arbor-tristis* are free from steroids, saponins and tannins.
3. Impact on the nutritional quality of flowers if it is ground or boiled and nutrient content of Carotene, Chlorophyll, Anthocyanin as a coloring agent.
4. Extraction and utilization of these in food and health industry, taking shelf-life in consideration.
5. Drying techniques of flowers will help women supplement their household income in form of flowers-based novelty items like greeting cards, bookmarks, wall hangings, paperweights, dry-flower arrangements etc. and in form of pot-pouri.