



# Technologies for Development of Dry Flower Products

## Technology Description

1. Identification of 40 locally available species suitable for dry flower technology
2. Leaves preserved through Glycerinization (full dip method) were found best
3. Flowers dried in silica gel + sand (1:1) embedding followed by microwave drying were found best
4. Pods bleached by overnight soaking in 10% NaOH then treated with 2% NaOH + 2.5 % NaSiO<sub>3</sub> +35 % H<sub>2</sub>O<sub>2</sub> found best
5. Acrylic dyes proved best for dyeing pods
6. 72 new products developed ( 20- Export market , 52 - Domestic market )
7. FTMS style of cartons, 5 ply 180 gsm cartons are

Name Of institute:  
Dept of Floriculture and landscaping, HC & RI, TNAU  
Stage of development:  
Ready for Commercialization  
Patent status: No

Scientific Experts:  
Dr.M.Jawaharlal

## Background

1. Existing Processing tech - Air drying, bleaching and dyeing with random chemicals and concentration gives poor quality products or otherwise high cost end product
2. Replacement of plastic materials with plant parts is expected to create huge demand in the dry flower trade
3. Refined technology development help in reduction of health hazards due to dyeing

## Benefits / Utility

1. Identified species reduced out sourcing of raw materials and reduced the transport cost
2. Innovation - Preservation of leaves, drying of flowers with desiccants, standardized bleaching and dyeing gave good overall accepted raw materials at reduced cost
3. New products developed increased the domestic market
4. Standardized package reduced the damage of products considerably saving 0.8-1.2 % cost

## Country Context

India

## Scalability

Minimum turnover of 4-5 lakhs in the first year and it can go up to 40-50 lakhs from third year onwards

## Business and Commercial Potential

Business Potential: Dried flowers owns an immense and untapped potential for Indian market especially in the home décor segment  
Market Response: As tested in various avenues such as home exhibitions , flower shows , nursery exhibits showed that buyers

## Potential investors to this technical innovation

Small and large entrepreneurs of dry flower industry  
Self help groups  
House wives  
Unemployed Youth  
Beneficiaries from dry flower training



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## Target Market / Customer

VALUE OF THE TECHNOLOGY: Project cost : 25 lakhs, Innovating team/organization's margin = 15 % Revenue to be generated by tech commercialization= 1st year - 4-5 lakhs , 3rd year onwards - 40-50 lakhs  
Tech commercialization fee to be charged from one licensee= 1 lakh  
Financial Required: Fix assets (Land and Building)= 280-300 sq.m Rs 10000 per-sq.m Machinery = Rs.10-15 lakhs Others= Rs 3-4 lakhs

## Target Market / Customer

Potential Clients: Export market - US, U.K, Japan and Australia , Domestic market - Metropolitan cities . Target group -  
1. Middle and upper Income working and non working ladies  
2. Traditional celebrations and functional decorators markets  
3. Social groups

## Limiting factors for large scale commercialization

Marketing of the end product Lack of awareness of this technology

## Social impact of the technology

Identification of local plant species would help to prevent the illegal collection of plants from forests and increased the volume of export significantly  
Promotes commercial growing to improve the livelihood of growers through training programmes  
Research and development technology through public private partnership is more beneficial because transfer of technology is more easier and immediate to the end user

