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% NaSiO3 + 35% H2O2 found best
5. Acrylic dyes proved best for dyeing pods
6. 72 new products developed (20 - Export market, 52 - Domestic market)
7. FTHS style of cartons, 5 ply 180 gsm cartons are used

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 create huge demand in the dry flower trade

Potential investors to this technical innovation

- Small and large entrepreneurs of dry flower industry
- Self help groups
- Housewives
- Unemployed youth
- Beneficiaries from dry flower training

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
- Compost production from pruning and dry leaves of plants
- Compost and inorganic fertilizers to promote commercial growing to improve the livelihood of growers through training programmes
- Research and development of technology through public private partnership is more beneficial because transfer of technology is more easier and immediate to the end user

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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 licensees = 1 lakh
Financial Required: Fix assets (Land and Buildings) = 280-300 sq.m Rs 10000 per-sq.m Machinery = Rs 10.15 lakhs
Others = Rs 3-4 lakhs