

RESEARCH AND PG DEPARTMENT OF BOTANY

SACRED HEART COLLEGE, THEVARA

VALUE ADDED COURSE

**COURSE COORDINATOR: Mr. Kiran George Koshy
Dr. Giby Kuriakose**

DEPT. OF BOTANY

Title: ORCHID CULTIVATION

14BOTVAC02

DURATION OF THE COURSE: 30hrs

STUDENTS INTAKE: 30

Course Objectives;

- Learn to identify different orchids
- to learn different cultivation techniques
- Expand horticultural knowledge and career opportunities, start a business -or just follow a passion

MODULE 1: INTRODUCTION (3 hrs)

Introduction to Orchids, Plant Names and the System for Naming Orchids, Orchid sub families and tribes, Plant Name Pronunciation, Orchid Plant structure. Common Hybrids and cultivars of orchids available in the market.

MODULE 2: ORCHID CULTURE (10 hrs)

Overview of Growing Orchids, Guidelines; temperature, light, humidity, ventilation, watering, feeding, potting mixes, Growing Cattleyas, Substrates for Geophytes and Epiphytes, Understanding Soils; texture, pH, nutrient availability, fertility, Mycorrhiza and Orchids, Propagating and Potting Media, Nutrients and Nutrition, Plant Health; orchid pests, orchid diseases, other problems, Pruning Orchids, Watering Orchids.

MODULE 3: PROPAGATION (12 hrs)

Sexual vs. asexual propagation, Asexual Propagating sympodial Orchids, Asexual Propagation of Monopodial Epiphytes, Aerial Offset Propagation, Propagating Orchids by Seed, Hybrid Seed Production, Harvesting Orchid Seed, Flasking Method of Seed Sowing, Tissue (Meristem) Culture of Orchids, Propagation Equipment; greenhouses, hotbeds, cold frames, mist systems etc.



MODULE 4: GROWING ORCHIDS: COMMERCIAL AND GENERAL USES (5 hrs)

Cut Flower Production of Orchids, Basket Plants, Epiphytes, Review of Orchid Genera for Cut Flower Production, Environmental Requirements for many significant orchid genera, Vanilla Bean Culture and Production, Greenhouse Management for Orchids.

Course outcome

1. Students would be able to identify different orchids
2. Would be able to identify different culture media
3. They would be equipped with different cultivation techniques for orchids
4. They would get a clear understanding on marketing opportunities of orchids.

MODE OF EVALUATION: Attendance, Assignments, Demo practicals, Tests, etc.



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