

Rare and threatened Orchid species used for various diseases by Irulars, Vellingiri hills, Coimbatore

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Abstract- This paper deals with the medicinal value of six threatened orchids used by the Irular, a tribal community of Coimbatore Forest Division

Index Terms- Irulars, Orchids, skin diseases, Vellingiri Orchid

I. INTRODUCTION

Orchids are well known for their beautiful flowers, botanical specialty (symbiosis), medicinal and horticultural importance. In almost all aspects Orchidaceae stands apart from the rest of the plant families, maintaining an intriguing individuality, all its own. Nearly 1331 species in 140 genera dwell in the country with Himalayas as their main habitat and others scattered in Eastern and Western Ghats. In Peninsular India about 371 species have been reported. Of which 175 species of orchids found in the Nilgiri Biosphere Reserve, first Biosphere Reserve in India. The North East Himalayan region and Western Ghats region are the richest source of wild orchids which has ornamental and medicinal value.

II. RESEARCH AREA

Vellingiri hills, a part of Bolampatty range (reserve forests) of Coimbatore Forest Division, Tamil Nadu, Western Ghats and a southern part of Nilgiri Biosphere Reserve, which lies between the longitude 6° - 40' and 7° - 10' E and latitude 10° - 55' and 11° - 10' N with the highest peak of 1840 m. The mountain range of the study area consists of seven undulating hilltops with different altitudes. Many seasonal riverlets and streams like Neelivaikal, Mayar, Andisunai, etc., are traversing all along the mountain and support the vegetation. The Noyyal River originates from Vellingiri hills is one of the major tributaries of the Cauvery. Vellingiri Andavar temple in peak and the popular Isha yoga center for Meditation located at the foot hills is religiously important of this study area.

The forest types met within the study area are southern tropical thorn forests (scrub jungles), tropical dry deciduous forests, tropical wet evergreen forests, shola forests and southern montane humid grasslands (Champion and Seth, 1968). The soil types are red, loamy, acidic and ferruginous. The average rainfall in the region ca 3500 mm at the foothills and 4500 mm at the peak of monsoon per year.

The Hill Tribe community settlements of Irulars are found only in the foot hills. Thirteen bullas of land (52 acres / 21.04 hectares) have been allotted to the Irulars of Athuparapatti area. The Tamil Nadu Forest Department engaging the qualified tribal

persons in fire-watching, animal movement watching, forest maintenance work etc. They are permitted to collect the Minor Forest Produce to improve their socio-economic status.

During the festive seasons they collect the medicinal plants including the orchids from the forest and sell in local market or at the foot-hill.

III. FINDING

During the study the following three rare and interesting orchid species were noticed in their herbal shops and the ethnic uses are documented. The orchid species were pocketed weighing about 50 gm and sold for Rs.20/- each.

Bulbophyllum fusco-purpureum Wight

Local name: Thiroupathy manjal

Season of collection: January – May

Part used: Pseudobulb

Use: to cure skin diseases

Mode of administration: The pseudobulbs are washed and make a paste. This paste is applied externally on affected parts.

Bulbophyllum neilgherrense Wight

Local name: Maramanj

Season of collection: January - May

Part used: Whole plant

Use: to cure pimples & skin allergy

Mode of administration: The whole plant is washed and crushed. The plant paste is applied externally on affected parts.

Habenaria longicorniculata J. Graham

Season of collection: August - November

Part used: Tuber

Use: to cure leucoderma

Mode of administration: The tuber is washed, crushed with turmeric and this mixed paste is applied on affected parts for two weeks.

Polystachya concreta (Jacq.) Garay & Sweet.

Season of collection: May – August

Part used: Tuber

Use: Arthritis

Mode of administration: Fresh tubers boiled with water and extracted the decoction. The decoction mixed with honey and taken orally twice a day in empty stomach.

Satyrrium nepalense D. Don

Season of collection: July – December
Part used: Roots & Tubers
Use: Malaria
Mode of administration: Roots crushed and the filtrate taken orally in the morning for a week.

Vanda testacea (Lindl.) Rehb.f.
Season of collection: March – July
Part used: Leaves
Use: Bone fracture
Mode of administration: Leaf paste applied externally on the affected parts and plastered with cloth.

IV. CONCLUSIONS

The ethnic data will provide an insight for further research in Pharmacology. The wild populations of these species are restricted in distribution and not sufficient to meet the demand in drug industry. Hence propagation through tissue culture is attempted for multiplication and conservation of these wild medicinal orchids.

V. ACKNOWLEDGMENT

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Figure 1



Figure 2

Figure 1 & 2: The orchid species sold in the local market