

SUMMARY OF THE REPORT ON

UGC AIDED MINOR RESEARCH PROJECT ON

**Micropropagation and conservation of
Clerodendrum serratum (L.) MOON.**

Submitted to University Grants commission

By

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Introduction

Clerodendrum serratum(L.) Moon (syn. (*Rothea serrata*(L,) steane & Mabb) belong to the Family Verbenaceae is small perennial shrub found in India, Malasia and Pakistan. It is native of of East inda and Malasia and distributed through out India and Srilanka. It has a long history has a source of potential chemotherapeutic agents in various system of medicine like Ayurveda, Unani etc. It is one of the most important plants from traditional systems of medicine found all over the world.

Its common name is Cheruthekku, Kurukutti (Malyalam)

Bargi (Sanskrit)

Micro propagation

Various accessions of the species were collected from Botanical Garden, Calicut University; forest of wayanad and Nilambur and southern regions of Kerala.

Culture were initiated from immature shoots carrying atleast single viable bud.

Culture initiation was conducted in basal MS medium (Murashigae and Skoog (1962)

Medicinal properties of *Clerodendrum serratum* are due to the presence of major groups of chemical constituents like phenolics, flavonoids, terpenoids and steroids. In present study three chemical compound are taken in to consideration for the comparison of quality of micro propagated plants to mother plant.



Figure 1: *Clerodendrum serratum* habit

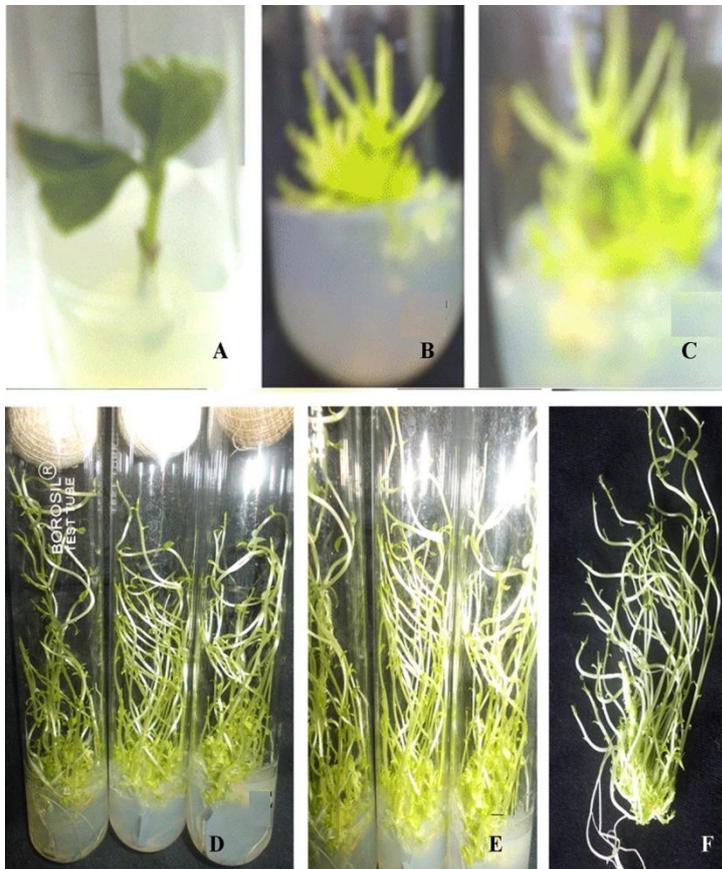


Figure 1. *Clerodendrum serratum*
 A- Culture initiation; B&C- Culture after dark incubation;
 D&E-Culture multiplication; F- Multiplied cultures taken out;

Results

A total of stem accessions were collected from Kerala were planted in the field and green house of PSMO college were established and showed flourished growth. Culture initiation was successfully carried out from juvenile and mature segments in basal M.S medium

The nodal segments cut from the initiated cultures were inoculated in to various multiplication media. All these cultures were responded.

During phyto chemical analysis there was no significant variations were observed between micro propagated plant and mother plant in their chemical compositions.

Summery

The study can be used for large scale propagation and conservation of this threat species and assures the resource base enhancement of the species and there by availability of spore and pathogen free raw materials to the pharmaceutical industry