



M.G.V.C.ARTS, COMMERCE AND SCIENCE COLLEGE

MUDDEBIHAL

DEPARTMENT OF BOTANY

PROJECT WORK ON TANNINES



FROM: B.Sc SECOND SEMESTER STUDENTS-2019-20

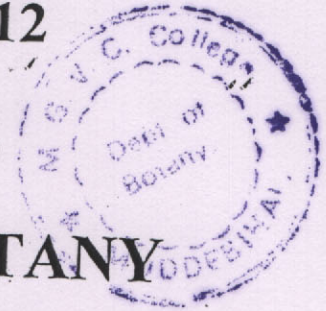


M.G.V.C.ARTS, COMMERCE AND SCIENCE COLLEGE

MUDDEBIHAL 586212

CERTIFICATE

DEPARTMENT OF BOTANY



Examination Seat. No: 51827828

Class- B.Sc Second Semester

This is certify that Mr/ Miss. Zehamukhan M. Saudagas.....

Has satisfactorily completed the project work on Tanna

Ganigal under my supervision in M.G.V.C. Arts, Comm and Science college
Muddebihal during the year 2019-2020.

Staff member Incharge


Head Department of Botany
Head of the Department of Botany
M.G.V.C. College, MUDDEBIHAL-586212
Dist: Bijapur.

VALUED

Examiner's Date:

1.

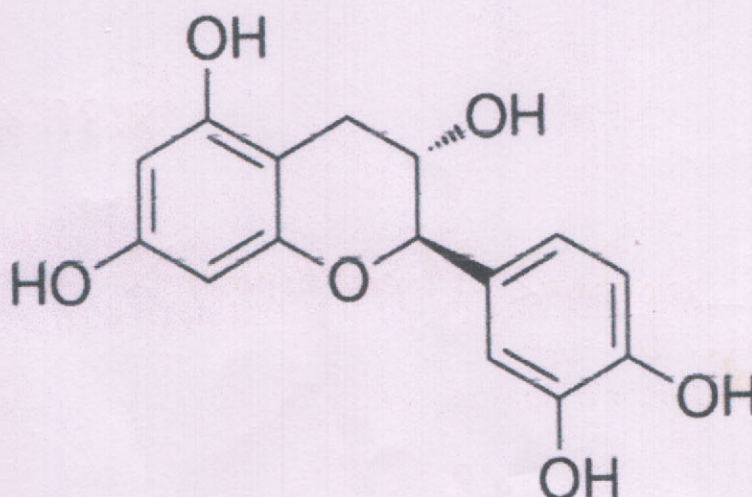
2.


PRINCIPAL,

M.G.V.C. Arts, Com. & Science College
MUDDEBIHAL - 586212.

Tannins

Tannins :- A yellowish or brownish bitter, - tasting organic substance present in some galls, barks, and other plant tissues, consisting of derivatives of gallic acid.



1. Catechin :-

Intruduction :- A catechin is a type of antioxidant. A substance and in tea that helps protect cells from damage, caused by free sadicals

| | | | |
|----------------------|---------------------------|---|--|
| <u>Properties</u> :- | Chemical formula | : | $C_{15}H_{14}O_6$ |
| | Molar mass | : | $290.271g.Mol^{-1}$ |
| | Appearance | : | Colorless solid |
| | Melting point | : | $175to177^{\circ}C(347\text{ to }351^{\circ}F;448\text{ to }450K)$ |
| | Uv-Vis(λ_{max}) | : | 276nm |
| | Chiral rotation | : | $+14.0^{\circ}$ |



2. **Gingerol** :-

Intruduction :- Gingerol properly os [6]-gingerel, is achemical compound found in fresh ginger chemically gingerol is a relative of capsaoicin & piperine the compound which gives chilli & pepper

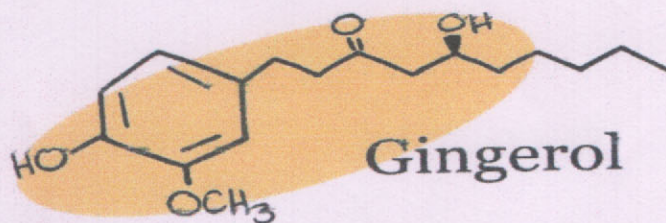
Properties:-

Chemical formula : $C_{17}H_{26}O_{16}$

Molar mass : 294.38gmol^{-1}

Melting point : $30\text{to}32^{\circ}\text{C}(86\text{to}90^{\circ}\text{F};303\text{to}305\text{k})$

Molecular Structure:-



Sources:- 6- Gingerol is isolated from the rhizomes or roots of the plant *Zingiber officinale* (ginger)

Uses :-

1. Gingerol has been used by humans for medicinal purposes & as spice condiments to enhance flavor in cooking
2. It has been used to help digestion

Curcuminoids :-

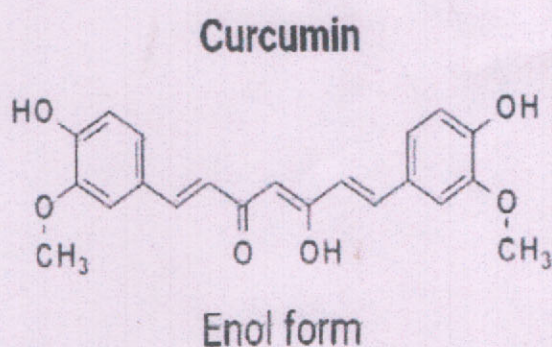


Intruduction :- A member of Ginger family

A Curcumnoids is a linear diarylheptanoid ,with molicules such as curcumin ordesiatives of curcumin with different chemical groups these compounds are natural phenols & produce a pronounced yellow color

| | | | |
|-----------------------------|------------------|---|------------------------------|
| <u>Properties :-</u> | Chemical formula | : | $C_{12}H_{20}O_6$ |
| | Molar mass | : | $368.385g.mol^{-1}$ |
| | Appearance | : | Bright yellow –orange powder |
| | Melting point | : | $183^0C(361^0F;456K)$ |

Molecular Struture:-



Sources:- Curuminoid is a chemical compound found in turmesic & is responsible for the distinctive,color of the spice & the weatth of benefits

Uses :- Curuminoid can alleviatr or treat the symptoms associated with alzheimer's disease, cances,including breast, lung. Prostate & colon cancess.