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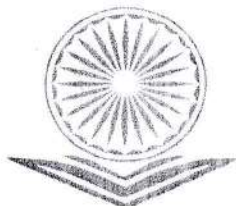
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18. Ethano - Botanical Review on *Clerodendrum Serratum* Linn. Moon

Kurhe Pooja G.

Kamble L. H.

Dalvi S. M.

Abstract

Nature comprising kind of flora. These are responsible for diversity and their presence may affect to the mankind. Plants are play an important role in human health. One of them is *Clerodendrum serratum* (Linn.) Moon. It belongs to the family of verbanaceae. It is a shrub which is not much branched with stems. The root of the plants is with different activities like digestive, carminative, anti- inflammatory and many more. It is also helpful in anorxia, cough, asthma, hiccough, inflammations, skin diseases etc. In present review, Identification, Vernacular Name, Habitat, Morphology, Chemical constituents & different pharmacological activity of *Clerodendrum serratum* were done. Thus, this paper highlights the various pharmacological activity of *Clerodendrum serratum* and its further scope for clinical trials.

Keywords : *Clerodendrum serratum*, Barbura, hispidulin, Bronchodilator Property.

1. Introduction

Clerodendrum serratum (Linn.) Moon belongs to the family Verbenaceae. It is commonly called as 'Bharangee' in Marathwada region. The parts used are the root and leaf. Its roots are bitter, acrid, thermogenic stimulant, anti-inflammatory, expectorant, digestive, carminative, stomachic, anthelmintic, depurative, sudorific, antiparasmodic, activities & are also helpful in asthma, bronchitis, hiccough, tumors, dropsy, colic, dyspepsia, consumptions, appetite, lessens expectoration, chronic inflammation of the nose, skin disease, leprosy, fever and leucoderma. Leaves are useful as an external application for ophthalmia and cephalgia.

2. Taxonomical Identification

Domain : Eukaryota

Kingdom : Plantae

Sub-Kingdom: Viridaplantae

Phylum : Tracheophyta



5. Morphology

Habit : woody shrub with branches, 2-8 feet high, annual, aromatic **Root :** Hard, woody, cylindrical, solid, smoothy texture, external surface light brown having elongated lenticels.

Stem : usually quadrangular.

Leaf : three leaves at a node, sometimes opposite oblong or elliptic, serrate, alternate without stipules. **Flower :** Blue, many in long cylindrical, bisexual, hermaphrodite, zygomorphic, bracteolate, 5 petals, stamen epipetalous, anther 1, dehiscing, disc persistent. **ovary superior**, 2celled and each cell 2 ovuled and style sub-terminal.

Fruit : Four lobed purple drupe.

Seed : endospermic seed



6. Bioactive Compounds

Types	Compound Name	Structure
Carbohydrates	D- Mannitol	
Flavonoids	catechins	

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97

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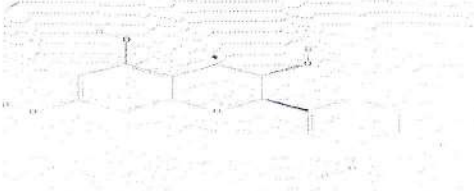
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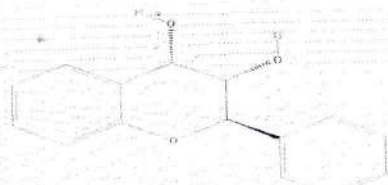
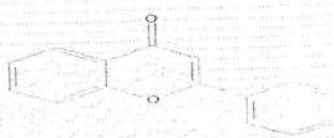
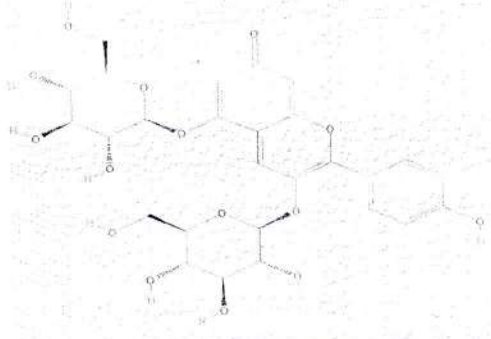
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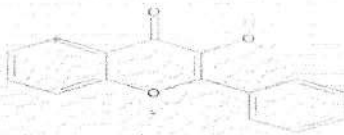
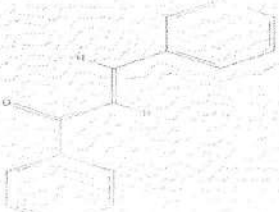
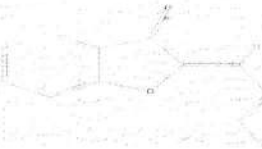
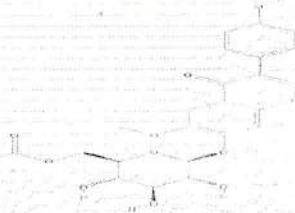
Types	Compound Name	Structure
Carbohydrates	D- Mannitol	
Flavonoids	catechins	

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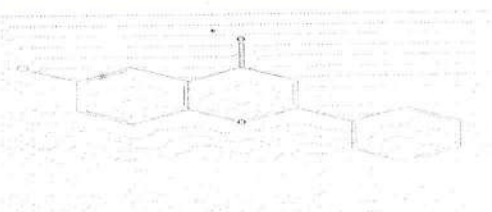
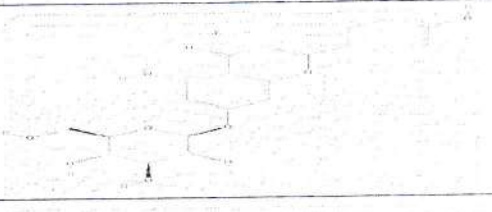
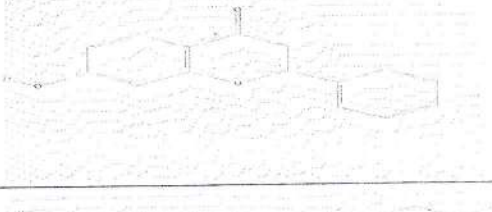
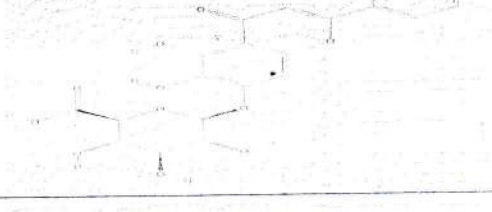
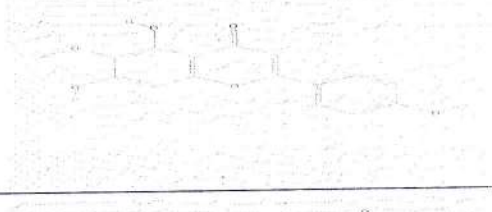


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	leucoanthocyanidins	
	flavanones	
	flavanonols	
	flavones	
	anthocynidin	

	flavanols	
	chalcones	
	aurones	
	isoflavones	
	Ursolic	


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	cleroflavone	
	apigenin	
	7 hydroxy flavanone	
	Scutellarein acid	
	Pectolinarigenin	
Phenolics	Serratagenic acid	


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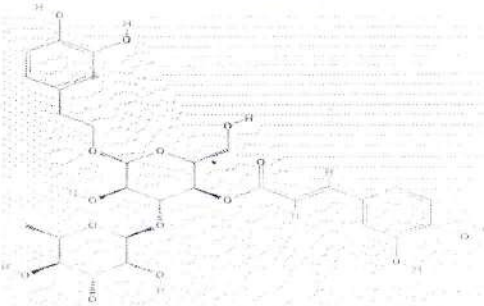
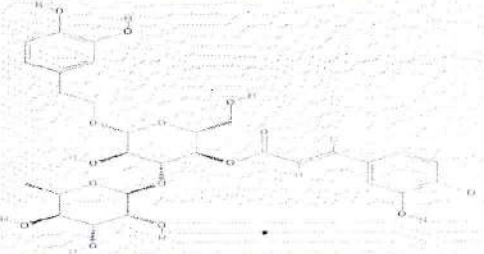
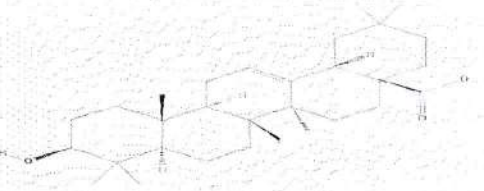
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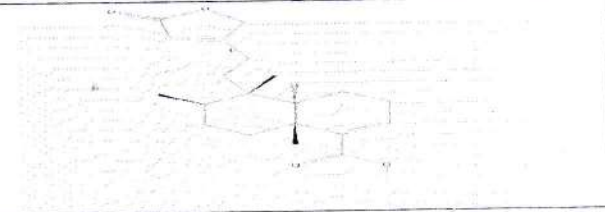
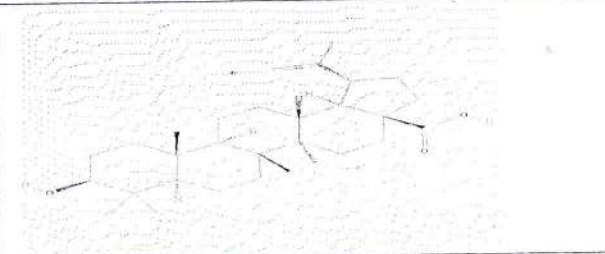
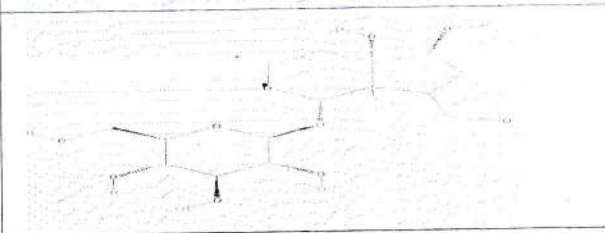
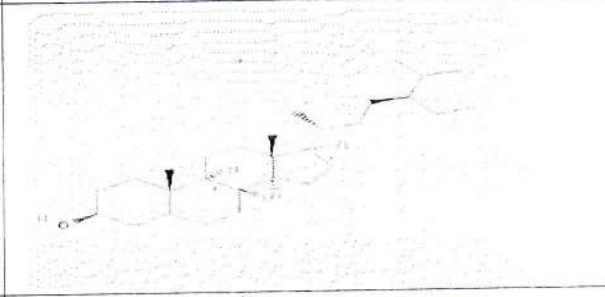
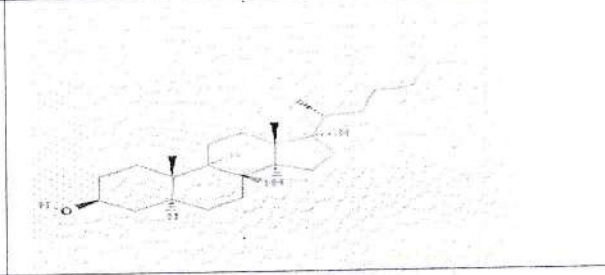


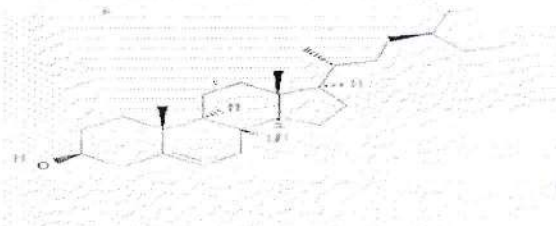
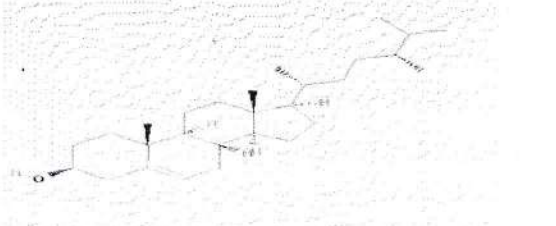
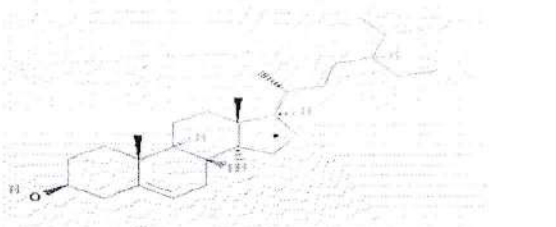
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	acteoside	
	Indolizonoic acid	
	verbascoside	
Terpenes	Betulin	
	Oleanolic acid	

	Clerodermic acid	
	Betulinic acid	
	Friedelin	
	Monomelittoside	
Steroid	Gamma- sitosterol	
	cholestanol	

	clerosterol	
	campesterol	
	24 ethyl cholesterol	

Conclusion

The present review revealed that the *clerodendron serratum* is a very useful plants . It has unique morphology, it also contain numerous bioactive compounds such as serrategenic acid , gamma sitosterol, etc. *Clerodendron serratum* acts as thermogenic stimulant , anti – inflammatory, Depurative , sudorific, antiplasmodic, etc. It is also helpful in asthma bronchitis, hiccough, tumors, dropsy, colic, Dyspepsia, appetite, lesion expectorants, chronic inflammation of the nose, skin disease, leprosy, fever and leucoderma, Leaves are useful as an external application for opthalmia and cephalgia. Further intention of this study is to correlate relationship of secondary metabolites to possible biological activities and evaluate *C. serratum* as a potential source of natural bioactive compounds. **Acknowledgement :**

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