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"Phytochemical Analysis Pod of Acacia Arabica"

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ABSTRACT: A plant with pod includes trees, woody vines andshrubs. Acacia Arabica is widely spread in subtropical and tropical Africa from Egypt to Mauritania southwards toSouthAfrica,andinAsiaeastwardstoPakistanandIndia.Ithasbeenfound inChina,theNorthernTerritoryandQueenslandinAustralia (where it is consideredtobe abestplantof national importance), intheCaribbean,Indian Ocean islands, Mauritius, United States, Central America, South America and the Galapagos Islands). It hasnaturalizedinseveralcountrieswhereithasbeenintroducedasamedicinal,forageandfuelwoodplant.Presentstudydealswiththepreliminaryphytochemicalanalysisoftheethanol,n-Hexane chloroform extractofpod of Acacia Arabica. In which we collect secondary metaboliteswhich are usefulfor developmentand growth ofplant.

Keywords: AcaciaArabica,podExtractsandPhytochemicalAnalysis.

I. INTRODUCTION

In the past,Plantshave providea source of insight for newdrug compounds,asplantderivedmedicineshave made large involvement to human health and well-being [1]. Medicinal plants have been identified and usedthroughouthumanhistory.Plantsthe powertosynthesizegood forms of varietyofchemicalcompoundsthatareusedto perform important biological functions and to defend against attack from predators like insects, fungi andherbivorousmammals. Atleast12, 000 such compounds have beenisolated so far; avarious estimated to be lessthan10%ofthe total[2][3].

Acacia Arabica [family-Mimosaceae] is a medium size thorny tree found in the drier parts of India. It has yellowmimosa similar to flowersand long grey pods constrictedbetween seeds.The bark and branches aredark withfissures.The branches bear spikes 2 cm long. The pod expectorant, used for impotency and dry cough, also pod are use as astringent in diarrhea and seeds oil as antifungal, antidiabetic activity are [6].Itisalsousedfor treatmentofvariousdiseases[7].

The present study wasundertaken to identify the phytochemicals present in thepod of Acacia Arabicausing n-hexane,ethanol and chloroformextract.

II. MATERIALS AND METHODS

Collection and Authentication: The AcaciaArabicapods were collected from Maharashtra (Tal.-parli Dist.-beed).The part of plant acacia The collected plants materials were shade-dried for 20 days and ground to powder by using electronic blender (Bajaj)and passing the powder at sieve no.40

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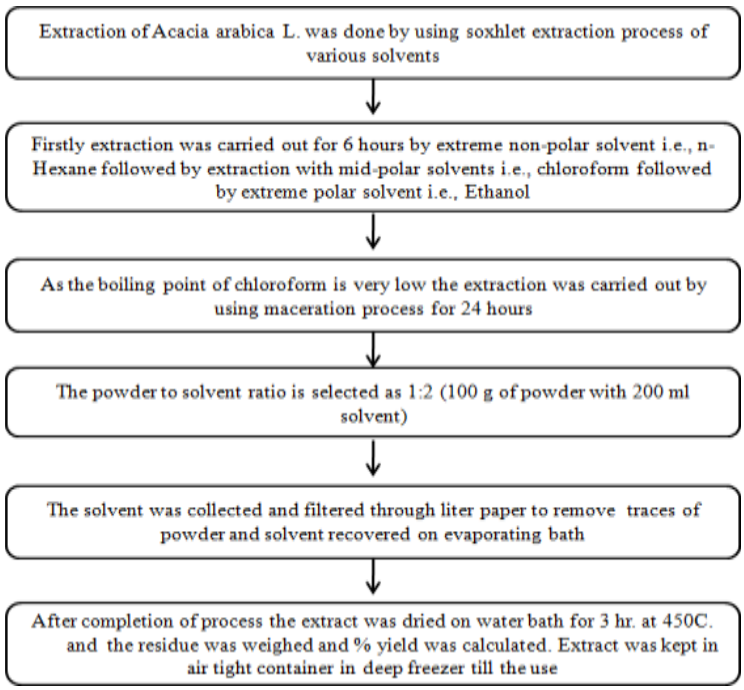
Preparation of extract:



Phytochemical screening:
Allextractofmedicinalplantswereanalyzedforthequalitativephytochemicalsanalysisasshownin table1using standard methods.

Table1:Phytochemicalanalysisofethanol, chloroform andn-hexane

Sr. No	Compounds	n-Hexane	Chloroform	Ethanol
1	Alkaloids	-ve	-ve	-ve
2	Carbohydrates	-ve	+ve	-ve
3	Steroids	-ve	-ve	+ve
4	Saponins	-ve	-ve	+ve
5	Proteins	-ve	-ve	-ve
6	Fixed Oils/Fats	-ve	+ve	-ve
7	Flavonoids	-ve	-ve	+ve
8	Tannins and phenols	-ve	-ve	+ve
9	Glycosides	-ve	-ve	-ve
10	Reducing sugars	-ve	-ve	+ve
11	Amino Acids	-ve	-ve	-ve

III. RESULTS AND DISCUSSION

Forvariousextractschemicaltestwereperformedandtheresultswerepresentedin Table1.Inthechemicaltestresults ethanolic extracts contains high number of phytochemicals qualitatively whereas n hexane extract containsverylownumber ofsecondarymetabolites.

We reported Alkaloids,Carbohydrate, Saponin,Proteins, AminoAcids, Tannin, Flavonoids, Fixedoilsandfats, sterolsand CardiacGlycosidesfromthestempodofAcaciaarabica .

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