

PRELIMINARY PHYTO CHEMICALS INVESTIGATION OF *EMBELIA RIBES*.

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ABSTRACT

Phyto Chemicals Investigation of the Petroleum ether, Chloroform, ethanol ic extracts of *Embelia ribes* fruits was studied in the presence of sterols, triterpenes, saponins and tannis in the petroleum ether extract, saponins, alkaloids and flavonoids in ethonolic extract, sterols, triterpenes, alkaloids and flavonoids in acetone extract, sterols, triterpenes,, alkaloids and resins in Chloroform extract, sterols and saponins, alkaloids, flavonoids, resins and tannins present in the tissue culture solvent.

Keywords: *Embelia ribes*, Phytochemical, investigation.

INTRODUCTION

Embelia ribes BURM.F. a medical wood climber belongs to the myrsinaceae family, the secondary constituents are 3(2H)-Benzofuran, Christembine (- A Crystalline compounds of embolic acid with soda and potash and ammonia), Daucosterol, di-hydroxy-embelin, embelic acid, Embelin,(golden yellow needle like insoluble in water, soluble in alcohol/chloroform/benzene)dyes with silk & wool with alcoholic solution, embelin dimer, embelin desalts, embelin derivatives, New embelin derivatives, Embelinol, *Embelia ribes* ester as well as the common plant metabolites, Embeliol, Gomphilactone derivative, Homoembelin, Homorapanone, Monopotassium embelate, New compounds, A nitrogen containing alkyl 1,4-benzoquinone, An unusual nitrogen-containing 3-alkyl-1,4-benzoquinone derivative, N-(3-carboxylpropyl)-5-amino-2-hydroxy-3-tridecyl-1,4-benzoquinone (1), A band of 906 bp, Amplin of 594 bp, Quarvital-1% Quercitol, rapanone, Resins, 5,6-dihydroxy-7-tridecyl-3-[4-tridecyl-3-hydroxy-5-oxo-2(5H)-furylidene]-2-oxo-3(2H)-benzofuran

(2), palmitic, oleic, linoleum acid, sitosterol , Stable oil, tannins, Cytotoxicities of the purified compounds, Vidangin (colourless & crystalline k), Vilangine, Volatile oil, Minor seed oil(fixed).

MATERIALS AND METHODS

Plant material collection and preparation of the extract

The fruit of *Embelia ribes* were obtained from Bidrilal, Maheshkumar, Attar and crude drugs company trader, new bazaar, Ajmeer – 305001 (Rajasthan) they were subjected to comminution and the powdered drug was individually extracted using the following solvents. a.Petroleum ether, b.Benzene, c.Ethanol, d.Acetone, f.Hexane, g.chloroform, h.Tissue culture solvent.

About 100 grams of the powdered drug was packed in a thimble and extracted in a soxhlet extractor using 500 ml. petroleum ether, acetone, hexane (60 to 80 degree cent) for 16 to 20 hours, at the ends of extraction, the extract were filtered and distilled to concentrate, the residue was dried under vacuum for 24 hours and the yield was recorded, the resulting residue

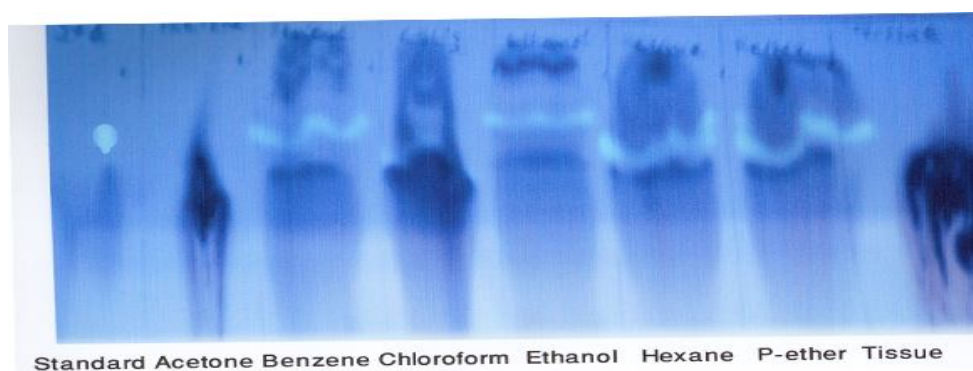
was dried and the yield was recorded and the marc left over after the extractions with chloroform was air dried and again subjected to soxhlet extraction using 500 ml. of alcoholic 90%, benzene of 24 hrs. of extraction and also

tissue culture extraction for 15 days the percentage yield of the different solvent extracts and physical character like state, colour, odour, texture, Ph and the percentage yield was studied and recorded in table No.1.

Table 1: Physical Characters of the individual extracts from Embelia ribes

S. No	01	02	03	04	05	06	07
Parameters	Petroleum ether	Benzene	Ethanol	Acetone	Hexane	Chloroform	Tissue Culture Media
01	Percentage	3.7487%	4.5311%	6.6000%	4.1544%	4.1577%	4.1057%
02	State	sticky	semisolid	semisolid	semisolid	semisolid	Solid
03	Colour	Light brown	Mid buff brown	Mangolia brown	Mid buff brown	Mid buff brown	Mid buff brown
04	Odour	Rancid	Aromatic	Aromatic	Rancid aromatic	Characteristic	Characteristic
05	Taste	Mucilaginous bitter	Bitter astringent	Salty aromatic	Bitter astringent	Bitter astringent	Slightly bitter and mucilaginous
06	Texture	Smooth	Smooth	Smooth	Sticky smooth	Smooth	Sticky
07	Ph	6.7	7.5	4.5	7.2	6.5	6.9
08 spots Toluene:ethylacetate:Formic acid(60:35:15)	03	05	11	02	03	04	03
09 Rf Value	0.68966 0.75173(F) 0.91954	0.66667 0.74712(F) 0.87356 0.91954 0.97702	0.26437 0.33333 0.55173 0.59771 0.6551724 0.712644 0.747126(F) 0.79311 0.908046 0.954023 0.9770115	0.59771 0.68966 0.67816 0.73219(F) 0.94253	0.67816 0.73219(F) 0.94253	0.65517 0.74713(F) 0.86207 0.94253	0.45977 0.57472 0.68966

Note: (F)= Florescent Embelin
Report. Embelin Rf value 0.73 to 0.752



The Phytochemical tests are performed by freshly prepared extracts of petroleum ether, tissue culture solvent of embelia ribes was subjected to standard phyto chemical screening test for various constituents and the extract revealed the presence of sterols Triterpenes, alkaloids, flavonoids, resins and tannins present in the tissue culture solvent

RESULTS AND DISCUSSIONS

The Phyto Chemical Test by freshly prepared extract of a.Petroleum ether, b.Benzene, c.Ethanol, d.Acetone, f.Hexane, g.chloroform, h.Tissue culture solvent. extracts of embelia ribes were subjected to standard Phytochemical screening test for various constituents and the extract revealed the presence of sterols Triterpenes, alkaloids, flavonoids, resins and tannins present in the tissue culture solvent respectively. The extracts were isolated by standard extraction procedure and also carried out the TLC studies in order to establish TLC profiles as in figure by considering the TLC Solvent as Toluene:Ethyl acetate: Formic acid(60:35:15) and the Petroleum ether shows 3 spots were RF value is 0.68966, 0.75173(Flouresent), 0.91954, and the Benzene extracts shows 5 spots were RF value is 0.66667, 0.74712(Flouresent), 0.87356,0.91954,

0.97702, and the Ethanol extract shows eleven spots 0.26437,0.33333, 0.55173, 0.59771, 0.6551724, 0.712644, 0.747126(Flouresent), 0.79311, 0.908046, 0.954023, 0.9770115, and the acetone extract shows two spots 0.59771, and 0.68966 and the hexane extract shows three spots were RF value is 0.67816, 0.73219(Flouresent), 0.94253, and the chloroform extract shows four spots were RF value is 0.65517, 0.74713(Flouresent),0.86207, 0.94253, 0.45977, 0.57472,0.68966. in which EmbelinRF value varies from 0.73 to 0.752.

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