ScienZTech INTERNATIONAL JOURNAL OF REVIEW IN LIFE SCIENCES

Published by ScienzTech Publication

Journal Home Page: www.scienztech.org/ijrls

Screening and evaluation of Terminalia catappa and its compound application

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Abstract

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Article History:



Received on: 20 Aug 2020 Revised on: 12 Sep 2020 Accepted on: 30 Sep 2020 Published on: 10 Dec 2020

Volume: 10 Issue: 4

Keywords:

Terminalia catappa, Syzygium jumbolanam, Phytochemical, CH3)2CO, alkaloids Plant determined medications remains an important source, particularly in creating countries, to look at genuine sicknesses roughly 62-80% of the total populace although everything depends on conventional medication for the therapy of specific disease. Indeed, plants produce a various scope of bioactive atoms creation them an ironic wellspring of an alternate kind of drugs. There are hardly any reports and utilization of plants in conventional mending by either ancestral individuals or indigenous network. Rejuvenating plants are the wellspring of extraordinary monetary estimation of everywhere on over the world. Nature has the best word on us a rich plant riches, and an enormous number of assorted kinds of plants develop in various pieces of the nation. Homegrown medication is as yet a pillar of around 75 to 85% the entire populace and the significant aspect of the conventional therapy the utilization of the plant extricate and the dynamic constituents. Among the 7000 types of rejuvenating plants perceived everywhere on over the world in excess of 9000, valuable medicinal plants are found in India. Unfortunately, just not many of them are utilized for their therapeutic worth. Around 1500 plants systematically utilize the conventional arrangement of Indian medication. Notwithstanding, the ethanopharmacologist, microbiologist, botanist and common item physicist world over today, is continually still looking for therapeutic adequacy of the plants on the phytochemicals. Along these lines, the quest for the new phytochemical is the foremost significant important to research the primer phytochemical examination to Terminalia catappa and Syzygium jumbolanam.

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eISSN: 2231-2935

DOI: https://doi.org/10.26452/ijrls.v10i4.1363



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INTRODUCTION

Plant determined medications remains an important source, particularly in creating countries, to look at genuine sicknesses roughly 62-80% of the total populace although everything depends on conventional medication for the therapy of specific disease. Indeed, plants produce a various scope of bioactive atoms creation them an ironic wellspring of an alternate kind of drugs [1, 2]. There are hardly any reports and utilization of plants in conventional mending by either ancestral individuals or indigenous network [3–5].

Terminalia catappa. L. leaf has a place with the family Combretaceae, a rich in polyphenolic components, for example, punicalagin, panicalin, chebulagic corrosive, corilagin, gallic corrosive, ellagic corrosive isovitexin, vitexinrutin [6–8]. It likewise contains triterpenoids, for example, ursolic corrosive and 2a, 3b 23-tri hydraxyurs 12-en-28 oic corrosive [9, 10]. Various pieces of these plants have

for some time been utilized as society medication in India, Philippines, Malaysia and Indonesia for an antidiarrheic, antipyretic and haemostatic reason [11, 12]. The leaves of Terminalia catappa answered to have a few pharmacological exercises counting calming, antidiabetic, pain-relieving hostile to HIV invert transcriptase activity. Phenolic mixes are consistently current as glycosides in plants and are infrequently present in the for structure [13, 14].

It has been accounted for by before investigates that Terminalia catappa leaves were originated to have a great enemy of oxidant action, decreasing sugar and inhibitors of peroxidation [15].

Syzygium cumini family Myrtaceae is Florida and Hawaii in the United conditions of America. Various pieces of the jambolan were likewise revealed for its cancer prevention agent, mitigating, neuro physio pharmacological, against microbial and hostile to contagious, hostile to HIV, hostile to leishmanial and hostile to parasitic, nitric oxide rummaging free radical searching, hostile to diarrheal, hostile to fruitfulness, anorexigenic, gastroprotective and hostile to ulcerogenic and radioprotective exercises. Hence, it is essential to examine the phytochemical examination of Terminalia catappa and Syzygium jambolanam.

MATERIALS & METHODS

An assortment of plant material and distinguishing proof

Plant material of Terminalia catappa and Syzygium jumbolanam bought from neighbourhood ayurvedic clinical shop Chennai.

Extraction of the plant

The plant materials were dried from in concealed and ground by the mechanical processor. The sediment of Terminalia catappa plant material were at first defatted with CH3)2CO ($60-80^{\circ}$) trailed by 1000 ml of ethanol by utilizing a sox let extractor for 72 hours at a temperature not surpassing the breaking point of the flush. The remove was separated utilizing whattman channel paper (no:1) and afterwards moved in a vacuum and dried at 45 °C for ethanol disposal. The concentrate was reserved in a sterile jug underneath cooling state of around 2-8 \Box C.

Test for lessening sugars

Step through exam cylinder and include the 2 ml of wild plant separate include 5 ml of purified water and filtered. The filtrates were overflowed with 3-4 drops of Fehling's arrangements An and B for 2 minutes. Detect for orange-red encourage demonstrates the attendance of decreasing sugars.

Test for steroid

To the plant separate include 2 ml of acidic anhydride and include 0.5 gm of ethanolic concentrate of every example with 2 ml sulphuric acid. Detect for the shading modification from violet to blue or green in tests showing the attendance of steroids.

RESULTS AND DISCUSSIONS

The table shows the preliminary phytochemical constituents from Syzygium jumbolanam, Terminalia catappa [Table 1].

Table 1: Preliminary phytochemicalconstituents from Syzygium jumbolanam,Terminalia catappa

		Plant Name	
S.No	Phytochemical	Syzygium	Termina-
	constituents	jum-	lia
		bolanam	catappa
1	Flavanoids	+	+
2	Alkaloids	-	-
3	Terpenoids	-	-
4	Saponins	+	+
5	Tannins	+	+
6	Sugar	+	-
7	Amino acid	-	-
8	Anthraquinones	-	-
9	Steroids	+	-
10	Proteins	-	-
11	Cardiac	-	-
	glycosides		

Plant Extraction : (sample I) [Table 2] 10g of sample/20 ml Acetone in RT Yield-102 mg/2ml

Table 2: Sample I

Sample	Sample trav- elling (cm)	Solvent front(cm)	Rf value
1	0.5	5.4	0.09
2	5.4	5.4	1

Plant Extraction : (sample II) [Table 3]

10g of sample/20 ml Acetone in RT

Yield-50 mg/2ml

CONCLUSION

Medicinal plants are the wellspring of incredible financial estimation of everywhere on over the

Table 5. Salliple II						
Samp	Sample trav-	Solvent	Rf			
	elling (cm)	front(cm)	value			
1	0.5	5.3	0.09			
2	1.0	5.3	0.18			
3	5.3	5.3	1			

Table 3: Sample II

world. Nature has the best word on us a rich plant riches, and countless various kinds of plants develop in various pieces of the nation. Homegrown medication is as yet a pillar of around 75 to 85% the entire populace and the significant aspect of the conventional therapy the utilization of the plant extricate and the dynamic constituents. Among the 7000 types of rejuvenating plants perceived everywhere on over the world in excess of 9000, valuable medicinal plants are found in India. Unfortunately, just not many of them are utilized for their restorative worth. Around 1500 plants systematically utilize the typical arrangement of Indian medication. Nonetheless, the ethanopharmacologist, microbiologist, botanist and everyday item scientific expert world over today, is continually still looking for restorative adequacy of the plants on the phytochemicals. In this way, the quest for the new phytochemical is the foremost significant important to explore the primer phytochemical investigation to Terminalia catappa and Syzygium jumbolanam.

ACKNOWLEDGEMENTS

The authors are thankful to all who have extended their constant support for the completion of the work.

Funding Support

The authors declare that they have no funding support for this study.

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

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Cite this article: Sravani G, Naik A Linga, Kranthi A, Priyanka G. **Screening and evaluation of Terminalia catappa and its compound application**. Int. J Rev. Life Sci. 2020; 10(4): 89-92.



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