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ORIGINAL RESEARCH PAPER

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

QUALITATIVE PHYTOCHEMICAL ANALYSIS OF LATEX CONTAINING PLANT OF LAKHANI REGION

Science

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ABSTRACT

Secondary metabolites such as, Alkaloids, Flavonoids, Steroids, Glycosides, Phenol, Tannin, Saponin, Terpenoids, is conspicuously most important bio-active chemical present in plant. Tribal people used medicinal plant from surrounding area to cure a common disease. It is useful to know our civilized society, chemical analysis is carried out from latex containing ten plant species from Lakhani region. The present study investigate the qualitative phytochemical analysis for major bio-active constitute found most active form in plant. The plant is used for curing a disease which cause rheumatic pain on human.

KEYWORDS

Secondary metabolites, Phytochemical analysis, Latex.

INTRODUCTION

Indian Continent known for their wealth of forest in a very ancient time. Forest plant used by tribal people to cure a different disease in human being and animal, from of Rig Vedic period, 1500-1000 BC (Mollers1936 & Ralph Griffith 1896). In recent year, secondary plant metabolites have been extensively investigated as a source of medicinal agent (Balandrin et,al.1985). The known constituent of latex are Proteins, Alkaloids, Tannin, Terpens, Starch, Sugar, Oil, Resin, Gum, Enzyme (Pandey,2001). plant latex has wider ethnophar macological application as it is used by tribal communities (Igoli et,al.2005). Latex is a milky fluid secreted by duct of laticiferous tissue (HageL et,al.2008) and flow inside in leaves, stem, fruits, and root of some flowering plant (Pickare2008). Latex is a complex mixture of secondary metabolites (Santos et,al. 2011), contain various biological active compound and antimicrobial activity (Siritaperawee et,al. 2012). The present study revealed that the bio-active secondary metabolite present in plant so the aim to study qualitative phytochem ical analysis of latex contaning known plant.

MATERIALAND METHODS

Plant species ;

Cassava - ***Manihot esculanta***, L., Caster oil plant - ***Riccinus communis,*** L, Cyathia - ***Euphorbia baylissii***, L., ***Jtropha gassypifoila,*** L., (Family - Ephorbiaceae).

Ruie - ***Calotropis procera*** , W.Alt. R.Br., (Family - Asclepiadaceae).

Kaner- ***Nerium indica***,L.,Vinca rosa- ***Catharanthus rosus***, L.,(Family - Apocynaceae)

Utati - ***Argemona maxicana***, L., (Family - Papavaraceae).

Chaudhara - ***Cycus quadrangularis,*** L., (Family - Cycadaceae).

Jangaliwanga - ***Solanum xanthocarpus***, L., (Family - Solanaceae).

Qualitative phytochemical analysis of latex contaning plant species, of Lakhani, Tahsil, Bhandara District of Maharashtra, India. carried out in session 2016 - 17. The plant collected from area of village. The plant where identify with the help of established floras (Cook 1965, Patil 2003, Shah 1978) and 'Flora of Marathwada' (Naik,1998). The voucher specimen deposited at Department of Botany, N.P.W. Science College Lakhani. The correct Local name, Botanical name and Family, identified by floras.

Collection of Latex ;

Latex samples where collected early in the morning from each plant species by nipping the leaves or by incision of branches of the plant. Allowing to drain in the sterile glass tube separately. The samples were brought to the laboratory, kept in refrigerator at 04 ^{0}C until use. Latex was homogenized in a homogenizer and filtered through fore folds of muslin cloth and used for phytochemical analysis.

Phytochemical Screening of the latex ;

Latex samples from each plant in this study where screened for identification of there phytochemical content using standard procedures. (Kokate,1999; Harborne, 1998)

Table 1 ; Phytochemical analysis of some latex containing plant.

Sr. No.	Plant species	Phytochemicals							
		Alk.	Flav.	Phe.	Ta.	Sap.	Ter.	Ste.	Gly.
1	*Manihot esculanta*, L.	+	+	+	+	+	+	=	+
2	*Riccinus communis* , L,	+	+	+	+	+	+	+	=
3	*Euphorbia baylissii*, L.	+	+	+	+	+	=	+	=
4	*Jtropha gassypifoila*, L.	+	+	+	=	+	+	=	+
5	*Calotropis procera* , W.Alt.	+	+	+	=	+	+	+	+
6	*Nerium indica*,L.	+	=	+	=	+	+	=	=
7	*Catharanthus rosus*, L.	+	+	=	+	+	=	=	+
8	*Argemona maxicana*, L.	+	+	+	+	+	+	+	=
9	*Cycus quadrangularis*, L	+	+	=	+	+	+	+	+
10	*Solanum xanthocarpus*, L.	+	+	+	+	=	=	+	+

Alk. - Alkaloids, Flav. - Flavonoids, Phe. - Phenols, Ta. - Tannins, Sap. -Saponins,
Terp. - Terpenoids, Ste. - Steroids, Gly. - Glycosides.

Discussion and conclusion:-

Phytochemical analysis carried out from latex contain plant. During investigation it is noted that collected 10 taxa belong to 6 families of Angiosperm. Form Table .1., the study found that phytochemical componant of latex is Alkaloids, Flavonoids, Phenol, Tannin, Saponnin, Terpenoids, Steroids, Glycosides, where widely distributed in most of the plant latex. The crude latex of Manihot esculanta,L. Riccinus communis,L. Euphorbia baylissii, L. is contaning all bioactive componant except, Steriods in

Manihot esculanta,L. Glycosides in Riccinus communis, L. and Terpenoids in Ephorbia baylissii,L. The latex of Jatropa glysipifoilia,L. consist of all bioactive componant, except Tannin and Steroids. This result support the finding of Patil and Borase (2012). Phytochemical analysis carried by Calotropis procera W.Alt. Latex found contain all most all the bioactive componant except Tannin, this evident reported by Goyal and Mathur (2011), he reported that the

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