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INVESTIGATION FOR PHYTOCHEMICAL COMPOUNDS IN THE PLANT MATERIAL OF *ROSA INDICA* (L)

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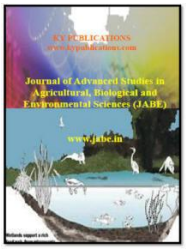

ABSTRACT:

Plants are a source of large amount of drugs comprising to different groups such as Kaur, Harleen Kaur, antispasmodics, emetics, anti-cancer, antimicrobials etc. A large number of the plants are claimed to possess the antibiotic properties in the traditional system and are also used extensively by the tribal people worldwide. It is now believed that nature has given the cure of every disease in one way or another. Investigation for Phytochemical Compounds in the plant. Plants have been known to relieve various diseases in Ayurveda. Therefore, the researchers today are emphasizing on evaluation and characterization of various plants. Type of extraction ,Time of extraction, Temperature, Nature of solvent , Solvent concentration and Polarity performed.and plant constituents are analysed with respect to Glycosides, Terpinoids, alkaloids and Flavanoid

I. INTRODUCTION

Natural products chemistry & research deals with chemical compounds found in nature that used has a pharmacological (or) biological activity for use in pharmaceutical drug discovery and drug design. Natural products chemistry and research emphasizes articles related to the study of chemical and biochemistry of naturally occurring components or the biology of living systems from which they are obtained.

Natural products of the substances made from living organisms and originate in nature. It can be produced by naturally total synthesis or chemosynthesis which plugs a vital role. In the medicinal chemistry which delivers tricky targets throughout dry discovery process it has been prolonged for commercial purposes for cosmetics ,dietary supplements and food created from natural products are the origin of the most complex and absorbing chemical structures and it represents natural biological activity whether as individual compounds or complex compounds.

Plants are a source of large amount of drugs comprising to different groups such as Kaur, Harleen Kaur antispasmodics, emetics, anti-caer, antimicrobials etc. A large number of the plants are claimed to possess the antibiotic properties in the traditional system and are also used extensively by the tribal people worldwide. It is now believed that nature has given the cure of every disease in one way or another. Plants have been known to relieve various diseases in Ayurveda. Therefore, the researchers today are emphasizing on evaluation and characterization of various plants and plant constituents against a number of diseases based on their traditional claims of the plants given in Ayurveda. Extraction of the bioactive plant constituents has always been a challenging task for the researchers. In this present review, an attempt has been made to give an overview of certain extractants and extraction processes with their advantages and disadvantages.

Plant-derived substances have recently become of great interest owing to their versatile applications. Medicinal plants are the richest bio-resource of drugs of traditional systems of medicine, modern medicines, nutraceuticals, food supplements, folk medicines, pharmaceutical intermediates and chemical entities for synthetic drugs [1]. Extraction (as the term is pharmaceutically used) is the separation of medicinally active portions of plant (and animal) tissues using selective solvents through standard procedures. The products so

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obtained from plants are relatively complex mixtures of metabolites, in liquid or semisolid state or (after removing the solvent) in dry powder form, and are intended for oral or external use. These include classes of preparations known as decoctions, infusions, fluid extracts, tinctures, pilular (semisolid) extracts or powdered extracts. Such preparations have been popularly called galenicals, named after Galen, the second century Greek physician [2]. Extraction methods used pharmaceutically involves the separation of medicinally active portions of plant tissues from the inactive/inert components by using selective solvents. During extraction, solvents diffuse into the solid plant material and solubilize compounds with similar polarity. The purpose of standardized extraction procedures for crude drugs (medicinal plant parts) is to attain the therapeutically desired portions and to eliminate unwanted material by treatment with a selective solvent known as menstrum. The extract thus obtained, after standardization, may be used as medicinal agent as such in the form of tinctures or fluid extracts or further processed to be incorporated in any dosage form such as tablets and capsules. These products contains complex mixture of many medicinal plant metabolites, such as alkaloids, glycosides, terpenoids, flavonoids and lignans . The general techniques of medicinal plant extraction include maceration, infusion, percolation, digestion decoction, hot continuous extraction (Soxhlet), aqueous-alcoholic extraction by fermentation, countercurrent extraction, microwave-assisted extraction, ultrasound extraction (sonication), supercritical fluid extraction, and phytonic extraction (with hydrofluorocarbon solvents). For aromatic plants, hydrodistillation techniques (water distillation, steam distillation, water and steam distillation), hydrolytic maceration followed by distillation, expression and enfl eurage (cold fat extraction) may be employed. Some of the latest extraction methods for aromatic plants include headspace trapping, solid phase microextraction, protoplast extraction, microdistillation, thermomicrodistillation and molecular distillation . The basic parameters influencing the quality of an extract are : 1. Plant part used as starting material 2. Solvent used for extraction 3. Extraction procedure Effect of extracted plant phytochemicals depends on : 1. The nature of the plant material 2. Its origin 3. Degree of processing 4. Moisture content 5. Particle size

Plant material Plants are potent biochemists and have been components of phytomedicine since times immemorial; man is able to obtain from them a wondrous assortment of industrial chemicals. Plant based natural constituents can be derived from any part of the plant like bark, leaves, flowers, roots, fruits, seeds, etc i.e. any part of the plant may contain active components. The systematic screening of plant species with the purpose of discovering new bioactive compounds is a routine activity in many laboratories. Scientific analysis of plant components follows a logical pathway. Plants are collected either randomly or by following leads supplied by local healers in geographical areas where the plants are found . Fresh or dried plant materials can be used as a source for the extraction of secondary plant components. Many authors had reported about plant extract preparation from the fresh plant tissues. The logic behind this came from the ethno medicinal use of fresh plant materials among the traditional and tribal people. But as many plants are used in the dry form (or as an aqueous extract) by traditional healers and due to differences in water content within different plant tissues, plants are usually air dried to a constant weight before extraction. Other researchers dry the plants in the oven at about 40°C for 72 h. In most of the reported works, underground parts (roots, tuber, rhizome, bulb etc.) of a plant were used extensively compared with other above ground parts in search for bioactive compounds possessing antimicrobial properties. Choice of solvents Successful determination of biologically active compounds from plant material is largely dependent on the type of solvent used in the extraction procedure. Properties of a good solvent in plant extractions includes, low toxicity, ease of evaporation at low heat, promotion of rapid physiologic absorption of the extract, preservative action, inability to cause the extract to complex or dissociate. The factors affecting the choice of solvent are quantity

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of phytochemicals to be extracted, rate of extraction, diversity of different compounds extracted, diversity of inhibitory compounds extracted, ease of subsequent handling of the extracts, toxicity of the solvent in the bioassay process, potential health hazard of the extractants . The choice of solvent is influenced by what is intended with the extract. Since the end product will contain races of residual solvent, the solvent should be nontoxic and should not interfere with the bioassay. The choice will also depend on the targeted compounds to be extracted . The various solvents that are used in the extraction procedures are: 1. Water: Water is universal solvent, used to extract plant products with antimicrobial activity. Though traditional healers use primarily water but plant extracts from organic solvents have been found to give more consistent antimicrobial activity compared to water extract. Also water soluble flavonoids (mostly anthocyanins) have no antimicrobial significance and water soluble phenolics only important as antioxidant compound . 2. Acetone: Acetone dissolves many hydrophilic and lipophilic components from the two plants used, is miscible with water, is volatile and has a low toxicity to the bioassay used, it is a very useful extractant, especially for antimicrobial studies where more phenolic compounds are required to be extracted. A study reported that extraction of tannins and other phenolics was better in aqueous acetone than in aqueous methanol . Both acetone and methanol were found to extract saponins which have antimicrobial activity. 3. Alcohol: The higher activity of the ethanolic extracts as compared to the aqueous extract can be attributed to the presence of higher amounts of polyphenols as compared to aqueous extracts. It means that they are more efficient in cell walls and seeds degradation which have unpolar character and cause polyphenols to be released from cells. More useful explanation for the decrease in activity of aqueous extract can be ascribed to the enzyme polyphenol oxidase, which degrade polyphenols in water extracts, whereas in methanol and ethanol they are inactive. Moreover, water is a better medium for the occurrence of the micro-organisms as compared to ethanol. The higher concentrations of more bioactive flavonoid compounds were detected with ethanol 70% due to its higher polarity than pure ethanol. By adding water to the pure ethanol up to 30% for preparing ethanol 70% the polarity of solvent was increased. Additionally, ethanol was found easier to penetrate the cellular membrane to extract the intracellular ingredients from the plant material . Since nearly all of the identified components from plants active against microorganisms are aromatic or saturated organic compounds, they are most often obtained through initial ethanol or methanol extraction . Methanol is more polar than ethanol but due to its cytotoxic nature, it is unsuitable for extraction in certain kind of studies as it may lead to incorrect results. 4. Chloroform: Terpenoid lactones have been obtained by successive extractions of dried barks with hexane, chloroform and methanol with activity concentrating in chloroform fraction. Occasionally tannins and terpenoids will be found in the aqueous phase, but they are more often obtained by treatment with less polar solvents. 5. Ether: Ether is commonly used selectively for the extraction of coumarins and fatty acids . Dichloromethanol: It is another solvent used for carrying out the extraction procedures. It is specially used for the selective extraction of only terpenoids. The following groups are identified whether they are present or not.

Terpinoids, alkaloids,Bioactive compounds,Flavanoid, and Glycosides

Rosa indica:- Kingdom - plantae-plants
,Subkingdom - trachebionta
Superdiuison - spernatophyta
Division - magnohophyta
Class - magnoliopsida
Subclasses - rosidae
Order - Rosales

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Family	-	rosaceae-rose family
Genus	-	rosa-L-rosa
Species	-	rosaindica L-cyme rose
Domain	-	eukaryote
Unraked	-	angiosperms
Unranked	-	eudicots/rosids
Sub family	-	rosoideae

Rosa indica is a perennial flower shrub of the genus roses it belongs orosaceae family which contains herbs, shrubs or trees that are rhizomatous, thorny, or climbing rosaceae in the 19th largest family and the19th largest family and there one about hundred general which are distributed from cosmopolitan to sub composition and diversified to northern hemisphere the leaves of rose are alternate and pinnately compound. They are sharplytoothed over-shaped leaflets. The fruit of the plants is fleshly edible cores hip.

Which ripens in the best summer the main area rose cultivation in palcistan are kallankahar, choa, saidan shah, indica some species of rosa producing essential oil are also being cultivated in Sindh provided in precious study quick acid(43.12%). 5-hydroxy methyl furfural pyrogallol(21.92%),levoglucusan(5.69%)and 4H-pyran-4-one, 2,3dihydro-3,5-dihydroxy 6-methyl(8.3%)were the major identified components in methanolic extract of rosaindica . rosaindica is essential oil as an alternative treatment for vascular and gastr;o;intestinaldieseas. The results provided evidences that essential oil of rose petals may have positive effects on cardiovascular and gastrointestinal disorders .genetic traits of plant material are among the prominent factors determining the productivity of crops, performances of planting material is also affected by its productivity method. With plants combining root stocks and a scion, productivity is affected by each of the components and interactions among them .usually described as compatibility for rose.

Since many years plats have been used on valuable sources natural products for maintaining the human health. Products are being used root huge amount of allopathic drugs available in the mater.one reason of this may be widespread use of drugs is leading to the development of resistance against them in the pathogen and alto the side effect associated with them is using reophnut to less than. Free radicalsinclude dehydronylsuperoricle,nitric onide,nitrogendionideperonyl lipid peronys and hydrogen perenoids,which are generated by product of normal cellar metabolism then free radical are highly reactive and damaging to human body so their removal is essential may medical plants contain large amount of antiondants such on polyphenols letaminc, B-carbone,lycopene,lutein,and other carotenoids which play important roles and neutralizing free radical,quenchirngsiglet and triplet oxygen or decomposing paranoids.Natural products and related drugs used to treat 87% of all categorized human disease including bacterial infection, cancer and immunological dis orders. About 25% of prescribed drugs in the world originate from plants over 3000 species of plants have been reported to have anticancer properties about 80% of the population in developing countries delay ontraditional plants based medicine for their primary healthcare needs Bangladesh has a rich andprestigious heritage of herbal medicine among the south Asian countries.More than 500species of them are used for the preparation of traditional species of them one used for the preparation however, the majority of these plants have not yet under gone chemical pharmacological and tonicological studies to investigate their compounds tradition seconds and ecological diversity indicate that Bangladesh plants represents an exciting resource of for possible lead structures in drug design in this study,16 plants

Rose essential oil, also brown as rose Otto is a highly prized product in pertumery. Bulgaria and turkey are the main rose processing countries in the world which extract the rose oil by water steam distillation of Rosa damascene mill. Petals , since more than 3,one kg of petals yield 1 kg A rose oil and 1 kg of the fress raw

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material given approximately 2 kg of residue on a wet weight basies , serval thousand tons of waste material annually result from the chistillerlse in Bulgaria alone. Due to the selective rose oil recovery, without using solvent extraction the polar phenolic compounds one retained in the waste material. The evaluation of its potential as sources of poly phenolic extracts with specific health-beneficial effects for development of functional foods requires on accurate and reliable chemical characterization of individual compounds. The use of rosaindica belongs to family rosacea for various pharmacological activities is well known, and the presents of coloured pigments and chemical constituents like flavanoid are responsible for a thought about its use an on indicator in acid base titration.

Rosaindica is a yearly flowering plant and easily available in India and also throughout the world in highly quantity and present in almost every garden to enhance the beauty of gardens present available acid base indicators like phenol phenolphthalein and methyl orange and synthetic indicators, which produce chemical hazards, availability problems and their high cost.

The hibiscus rosa-sinensis is belonging family titrate with indicators showed sharp and intense colour change at the equivalent point that is at neutralisation above indicators which lead to financial support to both farmers as well as industries.

Hybrid verities of roses are among the most economically important cut flowers plants the first hybrid Rosa was introduce in 867 and since then more than 10,000 varieties have been realised currently at the centre of variety research the Nether land, above 2,800 pre-dominantly hybrid Rosa mother nature is unassuming it is full of colours, healers and soothers for both the our body and soul, flower not only ensure entomophiles pollinations by silently spreading their aroma or by sending to constituent pigment generated UV signals their by maintained the plant diversity rather also by prodigally harbouring many significant metabolite's(both of primary and secondary type) which are potentially active against many alignments rose belongs to family rosaceae, they have indeed rule of the world of flowers and had made our ambiences colourful. It has made verities grown through the world and their rich in volatile essential oil, resin, glycoside, quercetin, and different organic acids like tartaric and tonic acids. Flower buds since ages have been used an astringent, expectorant, lenitive, acardiactonic and a parent removing bile and cold humours preparation of roses hips are used for the prevention and treatment of clods and influenza type infactions for the treatment vitamin c deficiencies and for incresing resistance rose water forms and agreeable vehiclemuch used in lotion and colliery so from the petals syrup is sometimes made and a conserve named glukand which has mild lanactive properties white Otto of roses is used for perfuming emollients. The key flower compounds that contribute to the distinctive set of rose oils however, are betadamascenone presence and quality is considered as the marker for the quality of rose oil, rose perineal plant of the genus rose within the family rosaceae. They are over hydride species of roses. They form a group of erect shrubs and climbing plants, with stamps armed with Sharpepickles. Flowers are large and come out in many colours; most species are native to Asia. Europe North America and North West Africa, they are cultivated for their beauty and fragrance.

Rose petals can bring down fener works for a diacritic to flus tannins from the body, it can also receive baronial and chats congestion, provide relit from a sore throat and stop runny rose. Rose water has antiseptic properties and he is used as an eye wash to threat eye irritation. Rose hips are used in cooking's where they had flower as well as nutrition rose oil is used for skin treatment to smooth and moistures and to relieves irradiatons. Recent timing have witnessed the and up sugar Plant or part(includingfruits) mediated synthesis of variety .Nano particles. In this work rose petal broth has been employed forthe synthesis of gold Nano particles(abbreviated hear after AUNPS).The AUNPS were obtained characterised by XRP, HRTEM and uv

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Studies. An effort has also be made to understand the probable Mechanism of Nano transformations of the completion by asynthesis the high of available metabolites.

II. Material and Method

Collection and identification of rosaindica

The fresh petals of rosaindica were collected from the rose garden of K.R .Market (koteswararao)&local market Vijayawada. The voucher specimen of the plant (3519/CIDS /IUB) was deposited in the herbarium of CIDS.

Plant material

The nature leaves of rosaindica L(leaves) family were collected during the month of June 2016 from Vijayawada Krishna distric,AndhraPradesh,india.The plant material was shade dried with mechanical passing through no:40,and stored in an airtigheted container.

Extraction of plant materials by using deferent solvents

Extraction of sample no:-1

50 gm of powdered plant material from each was weighted and transferred to a cellulose extraction thimble. This material was extracted using 150ML water (1000c) for shows in a soxhlet operator and the extracts were dissented from the flask separately. Then the volume of each extract was measured and each was made to a final volume of 100ML and transferred separately into round bottom flask. The flask were filled with rotary evaporated individually and evaporated to dry at a temperature not exactly 800c.Then the flask with dried material was a removed and weighted.The weight of the dried extract was calculated by subtracting the weighted of the empty flask.They after few millilitres of the ethanol for added to each flask to a dissolution of extract with water finally 50ML distilled water is added to the extact to the concentration solution.This solution used for the functional groups analysis.

Extraction of sample no:-2

50 gm of powdered plant material from each was weighted and transferred to a cellulose extraction thimble.This material was extracted using 75% water (1000c)and 75% ethyl alcohol for shows in a soxhlet operator and the extracts were dissented from the flask separately. Then the volume of each extract was measured and each was made to a final volume of 100ML and transferred separately into round bottom flask.The flask were filled with rotary evaporated individually and evaporated to dry at a temperature not exactly 800c.Then the flask with dried material was a removed and weighted.The weight of the dried extract was calculated by subtracting the weighted of the empty flask.They after few millilitres of the ethanol for added to each flask to a dissolution of extract with water finally 50ML distilled water is added to the extract to the concentration solution. This solution used for the functional groups analysis.

Extraction of sampleno:-3

50 gm of powdered plant material from each was weighted and transferred to a cellulose extraction thimble. This material was extracted using 75% water (1000c) and75%ethyl acetate for shows in a soxhlet operator and the extracts were dissented from the flask separately. Then the volume of each extract was measured and each was made to a final volume of 100ML and transferred separately into round bottom flask. The flask were filled with rotary evaporated individually and evaporated to dry at a temperature not exactly 800c.Then the flask with dried material was a removed and weighted.The weight of the dried extract was calculated by subtracting the weighted of the empty flask.They after few millilitres of the ethanol for added to each flask to a dissolution of extract with water finally 50ML distilled water is added to the extract to the concentration solution.This solution used for the functional groups analysis.

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IV. Qualitative chemical tests:-

The water (H_2O). Water + ethyl alcohol, ethyl alcohol + ethyl acetate extracts and the leaf powder were subjected to "Qualitative Chemical Analysis".

1. Test for Alkaloids: A small quantity of the extract was stirred separately with a few drops of dilute hydrochloric acid and filtered. The filtrate was carefully tested with various alkaloids reagents such as Mayer's, dragondroffs, Hager's, Wargner's reagents.

Mayer's reagent:-Mayer's reagent is freshly prepared by dissolving a mixture of mercuric chloride(1.36gm) and potassium iodide(5.00gm) in water(100ml) most alkaloids on precipitate from neutral or slightly acidic solution by Mayer's reagent to give a yellow cream coloured precipitate(potassiomercuric iodide solution).

Molecular formula:-{HgI4k2}

Molecular weight:-786.406g\mol

Dragondroff's reagent:-It is a solution of potassium bismuth iodide prepared from basic bismuthnitrate (Bi(N03)3),tartaric acid and potassium iodide(kI).Bismuth sub-nitrate 1.7g,Glacial acetic acid (20ml),water(80ml),and 50% solution of potassium iodide in water,100ml.min together and store as stock solution. Formation of red precipitate indicates the presence of alkaloids.

Eg:-used for the detection of nitrogenous compounds , alkaloids.

Wargner's reagent:Filtrates were treated with Wagner's reagent (Iodine in Potassium Iodide). Formation of brown/reddish precipitate indicates the presence of alkaloids.

Sample	Observation
Sample-1	-
Sample-2	+
Sample-3	-

2. Test for Carbohydrates: Extracts were dissolved individually in 5 ml distilled water and filtered. The filtrates were used to test for the presence of carbohydrates.

a) Molisch's Test: Filtrates were treated with 2 drops of alcoholic α-naphthol solution in a test tube. Formation of the violet ring at the junction indicates the presence of Carbohydrates.

b) Benedict's Test: Filtrates were treated with Benedict's reagent and heated gently. Orange red precipitate indicates the presence of reducing sugars.

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c) Fehling's Test: Filtrates were hydrolysed with dil. HCl, neutralized with alkali and heated with Fehling's A & B solutions. Formation of red precipitate indicates the presence of reducing sugars.

Sample	Observation
Sample-1	+
Sample-2	+
Sample-3	-

3. Test for Proteins and amino acids:

a) Xanthoproteic Test: The extracts were treated with few drops of conc. Nitric acid. Formation of yellow colour indicates the presence of proteins.

b) Ninhydrin Test: To the extract, 0.25% w/v ninhydrin reagent was added and boiled for few minutes. Formation of blue colour indicates the presence of amino acid. 11. Detection of diterpenes Copper acetate Test: Extracts were dissolved in water and treated with 3-4 drops of copper acetate solution. Formation of emerald green colour indicates the presence of diterpenes .

Rosa genus (family Rosaceae) is an important ornamental plant and has been referred to as the queen of flowers. Rosa genus contains over 150 species that are widely distributed in Europe, Asia, Middle East, and North America. Rose is one of the most important crops in the floriculture industry and is used as cut flowers, potted plant, and garden plants. Rose products have also been used in the food, perfumery, and cosmetics industries for many years . Rosa damascena Mill is one of the most important Rosa species. This plant is called Damask rose because it was originally brought to Europe from Damascus. The main products of Damask rose are rose oil, rose water, rose concrete, rose absolute, and dried petals, and these products are used in perfume, cosmetic, pharmaceutical, and food industries . Flowers of Damask rose were reported to have astringent, analgesic, anti-inflammatory, antidepressant, antibacterial, diuretic, and anti-HIV activity, and they are used in folk medicine as a mild laxative .

Roses are the important ornamental plants and have been referred to as the queen of flowers. Over 150 rose species and more than 2000 cultivars have been registered and distributed in Europe, Asia, Middle East, and North America (Cai et al., 2005). Members of the Rosaceae family have long been used in perfumes, cosmetics, foods and for medicinal purposes. The physiological functions of Rosaceae may be partly attributed to their abundance of phenolics (Ozkan et al., 2004; Liu et al., 2010).

Flower colour investigation of roses so far have shown that four anthocyanins, 3-glucosides and 3,5-diglucosides of cyanidin (Cy) and peonidin (Pn), can be detected in #owers of wild Rosa species, and also pelargonidin (Pg) 3-glucoside and Pg 3,5-diglucoside are detected in Rosa cultivars (WillstaKtter and Nolan, 1915; Harborne, 1961, 1967; Arisumi, 1963, 1967; Yokoi, 1974, 1975; Yokoi et al., 1979; Saito et al., 1982; Mikanagi et al., 1990,1994,1995; Biolley et al., 1992, 1994a,b; Raimond et al., 1995). In addition, one acylated anthocyanin, o-coumaroylcyanidin 3,5-diglucoside, was reported to be present in R. cv. Frensham (Arisumi, 1967).

Non standardized procedures of extraction may lead to the degradation of the phytochemicals present in the plants and may lead to the variations thus leading to the lack of reproducibility. Efforts should be made to produce batches with quality as consistent as possible (within the narrowest possible range) and to develop and follow the best extraction processes.

Sample	Observation
Sample-1	-

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Sample-2 -
Sample-3 +

4. Test for gums and mucilages:-

About 10ml of various extracts were added separately to 25ml of absolute alcohol with constant stirring and filtered. The ppt was dried in air and examined for its swelling properties and for the presence of carbohydrates.

Samples observation
Sample-1 -
Sample-2 -
Sample-3 -

5. Test for Flavanoids:

a. With aqueous solution of sodium hydroxide blue to violet colours. Yellow colour (flavones) to orange (flavones).

b. With concentrated sulphuric acid yellowish orange colour. Orange to crimson colour (flavones).

Shinoda's test- The extracts were dissolved in alcohol, to that a piece of magnesium and followed by concentrated hydrochloric acid was added drop wise and heated .Appearance of magenta colour shows the presence of flavanoids.

Samples
observation
Sample-1 -
Sample-2 -
Sample-3 +

6.Test for Tannians:-

Presence of tannians in various fractions was determined with the protocol reported by sofowara(1993). 50gm of each fraction was boiled in distilled water and was filtered. A few drops of 0.1%Fecl was mixed and observed for colour change , presence of brownish green coloration shows the occurrence of tannins.

Samples Observation
Sample-1 +
Sample-2 -
Sample-3 +

7.Test for terpenoids:-

Presence of terpenoids in various fractions was determined according to Harborone (1973).5ml of fraction was combined with few drops chloroform and then 3ml of concentration of HSO change of reddish brown colour revealed terpenoids.

Samples Observation
Sample-1 -
Sample-2 -
Sample-3 -

8. Molisch's Test:

The filtrate were treated with 2-3 drops of 1%alcohol alpha napthol and 2ml of concentrated sulphuric acid was added side of the test tube to obtain a violet ring at the junction of H2S04 solution.

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Samples Observation
Sample-1 -
Sample-2 +
Sample-3 -

9. Test for Glycosides:

Extracts were hydrolysed with dil. HCl, and then subjected to test for glycosides.

a) Modified Borntrager's Test: Extracts were treated with Ferric Chloride solution and immersed in boiling water for about 5 minutes. The mixture was cooled and extracted with equal volumes of benzene. The benzene layer was separated and treated with ammonia solution. Formation of rose-pink colour in the ammonical layer indicates the presence of anthranol glycosides.

Samples observation
Sample-1 +
Sample-2 +
Sample-3 +

10. Test for Tannins and Phenolic Compounds:

Small quantity of various extracts were taken separately in water tested in the presence of phenolic compounds and tannins with

a. Dilute ferric chloride solution (5%) -violet colour.
b.1% solution of gelatin with 10% NaCl -white –ppt.
c.10% lead acetate solution white ppt.

Samples observation
Sample-1 +
Sample-2 +
Sample-3 +

11. Detection of resin:Colour test for detection of the presence of resin bond aldehyde groups using 4-amino-3-hydrazine-5-mercapto-1,2,4-triazole(purple). Aldehyde resin turns dark brown to purple after 5 minutes reaction followed by 10 minutes air oxidation period. Resins that process other groups (ketone, ester, amide, alcohol and carboxylic acid) do not change colour under the same conditions.

Samples observation
Sample-1 -
Sample-2 -
Sample-3 +

12.Detection of quinines:A small amount of extraction was treated with con.HCL and observed for the formation of yellow PPT.

Sample	observation
Sample-1	-
Sample-2	-
Sample-3	+

Rose and Its Therapeutical Applications.

Rose Pure Rose Rosa rugosa Rosa Damascena Rosa Gallica rose flower bud Chinese medicine practitioners believe that Rose taste sweet and light bitter, warm in nature.

Relieve liver and drive away problems, the justifications for gas transfer,boost circulation and shows analgesic effects. Pharmacological studies show that the modern yellow roses shows inhibition on the grape bacteria,

Research Article

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hepatitis and cholecystitis recovery, the attack of gallstones,low appetite,irregular menstruation, typhoid and tuberculosis bacilli.

Traditionally, roses have long been valued for their culinary, medicinal, cosmetic, and aromatherapy properties. Although only R. gallica is listed as having any medicinal properties, most old roses still have valuable curative properties.

Rose vinegar was once used for headaches, especially those induced by heat. The leaves also act as a mild laxative, and rose oil is highly antiseptic.

Much more popular are the cosmetic and culinary values. Rose hip jam, jelly, syrup, and candies are quite popular. Other variations include rose butter a stick of butter is wrapped in rose petals and sealed in a jar overnight. The next day, the butter has a delicate flavor that can be spread on bread and served with a few fresh rose petals, like a sandwich. Many perfumes are made from rose oil, and the petals and rosehips are often found in potpourris for their color and fragrance.

Flower for physical illnesses, has been called "anther," who spend more medicine, anther has many unique effect. Rose benefit liver and stomach,treat menorrhagia,swollen breast pain,bruises,vaginal discharge, dysmenorrhea, sterilization, anti-inflammatory, and the prevention of influenza, bronchitis, pharyngitis role.

Rose for the drug has been the history of several hundred years, the Chinese believe that Rose of thirs and sweet taste,light bitter, in the liver, kidney,adjust body gas,blood,menstrual problems,the effectiveness, feasibility.Liver and stomach gas induced pain, swollen breast pain drugs, and Irregular menstruation, vaginal discharge and bruises. Rose also medicinal roots and can be used for bruises, blood, and yellow dyes can be used, such as silk fabric dyeing. Over the centuries it has been summed up a number of Rose-prescription to treat a variety of diseases, also with other drugs such as Cyperus rotundus, the fruit of Chinese wolfberry and generations of flowers, such as Angelica with enhanced efficacy.

Several medicinal value of Rose: Rose, used to symbolize love, Valentine's Day, is presented roses to express the love of Valentine's. In fact, Rose is a high value and beauty of a good drug.

Menorrhagia: 9g rose root, cockscomb 9g, Decoction to slag, and brown sugar served. Irregular Menstruation: 6-9 grams rose root, after into the water to cook rice wine and brown sugar, served by one sooner or later.

Red White dysentery: Rose, untiringly, in order, baked dry fine powder, wine delivery service. Serving 1.5 grams per day 2-3 times.

Liver and Stomach gas Disease: Rose inquiry small water Chongbo, 1.5 grams per serving.

Acute and chronic rheumatism pain: Rose 9 grams, safflower, Angelica 6 grams, Decoction to slag, hot rice wine decoction drink.

Bruises and blood: 15 grams root roses, wine or water to cook by day in two service.

Treatment of skin disease: bacteria after contact with fresh rose petals will be dead within five minutes, which makes the best Rose drugs in the treatment of skin diseases.

Rose aqueous extract is not as concentrated as its volatile oil cousin, yet has the same benefits and therapeutic effects on the skin, with minor variances, as there is a slight difference in the chemical composition of the flowers. Rose aqueous extract also contains a bit of tannin as well as a bitter principle, which translates into it having a more toning effect, which is helpful in tightening the skin.

Rose extract has a host of beneficial affects on the skin and great for promoting a youthful complexion with good tone,elasticity and an even colored complexion.

Rose flower is a highly fragrant substance that can be a skin irritant.Rose flower oil is a fragrant, volatile oil that can be a skin irritant and sensitizer. There is no research showing this to have any benefit for skin.

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Septic sores and burns: Fresh rose petals also help in septic sores and burns, but also reduce the itching caused by allergies.

Stomatitis and treatment of periodontitis: dry roses powder mixed with honey, stomatitis, and the treatment of diseases such as periodontitis medicine. In addition, the stem roses powder mixed with honey treatment of gingivitis also help.

Relieve headaches, nausea and weakness: Rose and Rose inhaling the flavor of the oil, will effectively relieve headaches, nausea and weakness and other symptoms.

Neurasthenia and depression: experts also recommended neurasthenia neurosis and depression in patients with recurrent inhalation roses and rose oil flavor. Once suffering from neurological diseases, head cold, cough and flu, the best placed a rose petal water and bowl on the room. Rose has the effect of so many, so we can that it is a universal nature of drug.

V. RESULT (OR) CONCLUSIN

TABLE:-01

TESTS	SAMPLE 1	SAMPLE 2	SAMPLE 3
01.CARBOHYDRATES MOLISHE TEST	+	+	-
02.DETECTION OF TANNIANS	+	-	+
03.DETECTION OF RESINE	-	-	+
04.DETECTION OF PHENOLIC ACIDS	+	+	+
05.DETECTION OF FLAVANOIDS	-	-	+
06.DETECTION OF QUININES	-	-	+
07.CONFERMATION TEST FOR TANNIANS&PHENOLIC ACIDS	+	+	+
08.TEST FOR PROTEINS	-	-	-
09.TEST FOR FLAVANOIDS	-	-	+
10.TEST FOR GLYCOSIDES	+	+	+
11. TEST FOR GUMS & MUCILAGES	-	-	-
12.ALKALOIDS	-	+	-

TABLE:-02

SAMPLE'S	SOLVENT	STATE
Sample-1	Water	Liquid
Sample-2	Ethyl alcohol + Water	Semi liquid
Sample-3	Ethyl alcohol + Ethyl acetate	Semi liquid

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