

Overview of Simple Syrup from the Pomegranate Leaves Extract

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Abstract: *Pomegranate (Punica granatum) is a wonder fruit because of its huge pharmacological parcels. Pomegranate and its excerpts parade potent anticarcinogenic parcels and the waste part of this wonder fruit, pomegranate has miraculous goods for mortal health. The implicit remedial parcels are wide-ranging and include treatment and forestallment for cancer, cardiovascular complaint, diabetes, dental conditions, manly gravidity, arthritis, and protection from ultraviolet(UV) radiation. The ideal of the study was to estimate the Pomegranate leaves excerpt hy in vitro antioxidant styles like DPPH radical, superoxide radical inhibition, phosphomolybdenum reduction, and ferric reducing power assays. The results showed that the Pomegranate leaves excerpt has significant antioxidant exertion. The DPPH radical scavenging exertion of leaves excerpt was 79.13-0.37 at 120 µg/ ml. attention and its IC₅₀ was 39.16 µg/ ml. attention. The superoxide radical scavenging exertion of leaves excerpt was 71.480.43 at 120 µg/ ml. Concentrati on and its IC₅₀ was 40.31 µg/ ml, attention. The phosphomolybdenum(Mo) reduction of leaves excerpt was 53.36-0.39 at 120 µg/ ml. attention and its RC₃₀ was 104.89 µg/ ml, attention. The Fe reduction of leaves excerpt was 81.47 ±0.13 at cemistry exploration Biotek Institute. Nadu, 120 µg/ ml. attention and its RC₃₀ was 21.28 µg/ ml. attention. The antibacterial exertion showed the loftiest zone of inhibition of 19 mm against Micrococcus luteus.*

Keywords: Punica granatum, antioxidant, antibacterial, antimicrobial

I. INTRODUCTION

Syrup are concentrated, arid specifics of sugar or sugar cover with or without flavoring agents and medicinal substances. syrup containing spicing agents but not medicinal substances are called seasoned vehicles syrup , for illustration, cherry sentimentality, cocoa sentimentality.

Syrup containing medicinal agents are called treated syrup , for illustration, chlorpheniramine maleate sentimentality. utmost syrup contain the following factors in addition to purified water and any medicinal agents

1. Sugar, generally sucrose or sugar backups that are used to give affability and viscosity
2. Antimicrobial preservatives
3. Flavors
4. Colorings

Sucrose is most constantly employed in syrup , but sometimes it may be replaced by other sugars analogous as dextrose or nonsugars analogous as sorbitol, glycerin, and propylene glycol. sentimentality imparts a characteristic viscosity; along with the affability and flavors, it results in a type of pharmaceutical drug that is effective in masking the taste of the added medicinal agents. When the sentimentality is swallowed, only a portion of the dissolved drug actually makes contact with the taste kiddies, the remainder of the drug being carried down the throat in the constraint of the thick sentimentality. The thick sweet sentimentality has a soothing effect on the bothered apkins of the throat as it passes over them. Simplesaccharinity I.P. contains 66.7 w/ w sucrose. At this attention, the sentimentality is resistant to microbial growth, due to the inaccessibility of the water demanded for the growth of microorganisms. Under cool storage conditions, some sucrose might solidify from the result when the sentimentality is completely saturated with sucrose.



Introduction of the pomegranate

The pomegranate (*Punica granatum*) is a fruit-bearing evergreen shrub in the family Lythraceae, subfamily Punicoideae, that grows between 5 and 10 m (16 and 33 ft) tall. The pomegranate is rich in emblematic and mythological associations in numerous societies.

Health benefits of the pomegranate leaves

Ameliorate your immunity Pomegranate leaves are rich in antioxidants, and this can be helpful to ameliorate your immunity or diseases related to your vulnerable system. Having pomegranate also provides Vitamin C that also helps to ameliorate your immunity.

Get rid of the bellyache People who suffer from indigestion and stomach pang should have pomegranate because the nutrient-rich pomegranate leaves work as drug for similar stomach problems. Also, the high fibre in pomegranates is helpful to ameliorate digestion, satisfy your hunger and help you from snacking.

Helps to treat itchy skin People who have eczema (a habitual itchy skin condition) can use pomegranate leaves. You can make a paste from pomegranate leaves and use that paste on the affected areas of your skin to treat the symptoms of eczema.

Get a papule-free face If you're suffering from papule problems, now is the time to use pomegranate leaves paste. You can make a paste out of pomegranate leaves (do not forget to wash leaves) and apply it on your face or other corridor where you get pustules. You'll see excellent results after applying pomegranate leaves paste. Pomegranate juice also

works like a color that helps to close the open and your skin looks indefectible. You should also consume pomegranate seeds rather of eating junks to satisfy those small, in between refections hunger.

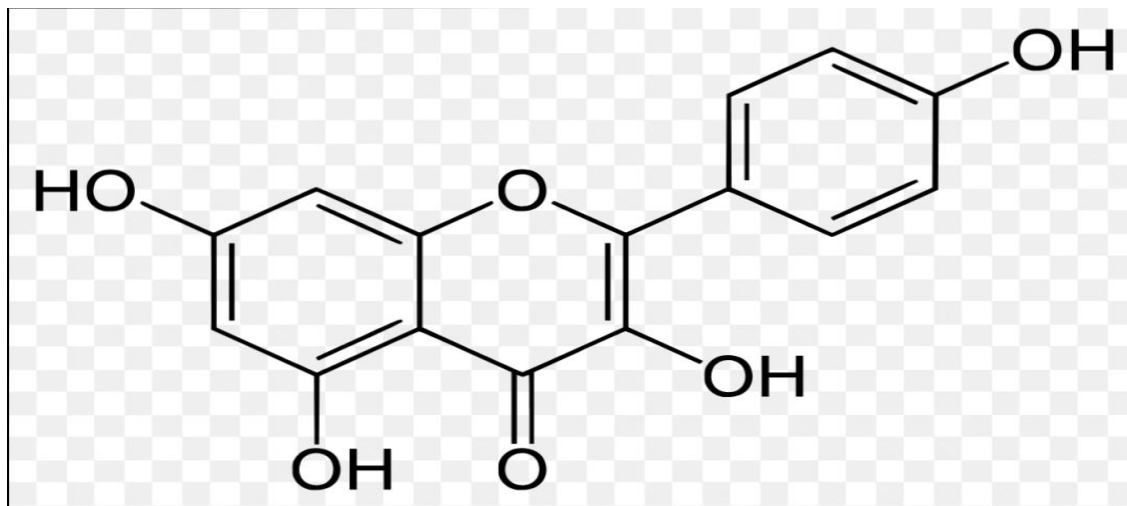
May treat insomnia People who suffer from sleep privation like wakefulness should try a home remedy made of pomegranate leaves. You need 3 grams of fresh pomegranate leaves and 200 ml of water to prepare this remedy. Mix 3 grams of pomegranate leaves in 200 ml of water and boil it until 50 ml of water is left. also, you need to drink this admixture before bedtime. This home remedy is effective to ameliorate your sleep quality and treating wakefulness.

May treat cold and cough You can prepare an effective home remedy to get relieve of cough and cold wave. Pomegranate leaves are helpful for furnishing relief during a cold and cough. You need to get pomegranate leaves and put them in some water and boil it. Once the water is suitable to consume, you should drink this liquid at least twice a day. This remedy helps to reduce infection in your throat and treat coughing problems. Not only this, this pomegranate leaves drink helps to ameliorate your impunity as well.

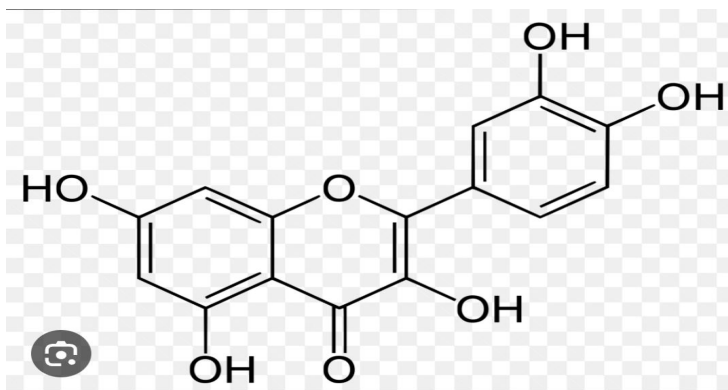
Pomegranate scientific classification-

Name	Pomegranate
Scientific name	<i>Punica granatum</i>
Family	Lythraceae
Kingdom	Plantae
Clade	Tracheophytes
Clade	Angiosperm
Clade	Eudicots
Clade	Rosids
Order	Myrtales
Genus	<i>Punica</i>
Species	<i>P. granatum</i>

Extract out mainly 2 flavonoids like Quercetin and kaempferol.



Quercetin



Kaempferol

To check the ingredients we perform the physical and chemical tests that are follows-

Sr.no.	Detection for	Test
1.	Alkaloids	Mayers test
		Wagners test
		Hagers test
		Dragondroff test
2.	Glycosides	Borntegers test
		Legals test
3.	Saponin	Foam or froth test
4.	Phytosterols and triterpenoids	Liebermanburchards test
		Salkowski test
5.	Phenolic compounds and tannins	Ferric chloride test
		Gelatin test
		Lead acetate test
		Shinoda test
6.	Carbohydrates	Molischs test
		Fehlings test
		Barfoeds test
		Benedicts test
7.	Amino acids	Ninhydrin test
		Xanthoproteic test
		Folins test
		Millions test
		Paulys test
8.	Flavonoids	Alkaline reagent test
		NH ₄ OH test
		Mg turning test
		Zn test

Then quality control tests for syrup-

Sr. no.	Test
1.	Clean and purified vehicle
2.	Light transmittance test
3.	Visual inspection
4.	pH Measurement
5.	Physical stability
6.	Sucrose concentration
7.	Refractive index
8.	Specific gravity
9.	Identification of Active ingredient
10.	Optical rotation
11.	Weight/ml
12.	Viscosity

II. CONCLUSION

pomegranates are a nutritional, delicious superfood with a wide variety of health benefits. They're low in calories but high in vitamins, minerals, antioxidants, and anti-inflammatory compounds. Pomegranate leaves are considered biowaste, indeed though they contain structurally different bioactive compounds. These compounds have been extensively studied due to their observed biological goods. In the present work, the highest content of phenolic compounds was attained in the MAE extract. Gallic acid, epicatechin, and granatin B were the most abundant compounds detected in all three extraction methodologies studied. More antioxidant exertion for TBARS was attained for MAE and MAC extracts. All the studied extracts showed no perceptible negative effects on the studied skin cell lines and presented cytotoxicity against all excrescence cell lines tested. still, in this ultimate case, the UAE extract had the smallest GI50 values. Through this exploration, we also vindicated that MAE pomegranate splint extract was the one that presented the stylish bacteriostatic effect against clinical and food pathogens. This study improves knowledge of pomegranate waste disposal styles and enhances their implicit application in skin health and food wisdom exploration. Overall, these findings give experimental evidence supporting the implicit use of pomegranate leaves as a functional bioactive component. They could also be used as a rich source of motives of interest in different areas of assiduity. Grounded on these findings, farther studies on the molecular medium underlying the demonstrated bioactive properties, and the most important contributing compounds, should be further studied.

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