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REVIEW ARTICLE

Jasminum mesnyi Hance : Review at a glance

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ABSTRACT

Jasminum mesnyi Hance (*Jasminum primulinum*) is commonly known as Primrose Jasmine, distributed in china, India and Nepal. Traditionally, it is used to treat CNS, gastric and spinal cord disorders. Jasminin, jasmoside, jasmesoside, 9"hydroxyjasmesoside, 9"- hydroxyjasmesosidic acid, sambacoside A, jasminin 10"-O-β-D-glucoside, 2"-hydroxyjasminin, isojasminin, 4"-hydroxyisojasminin, jasmosidic acid, phenolic glucoside (syringin and caffeic), and flavnoids have been isolated from the leaves. Leaves have anti- oxidant and anthelmintic potential. *Jasminum mesnyi* is not explored deeply to analyze, its traditional potential to cure disease. It is research oriented plant, and will be explored. This article will be beneficial for the researcher to investigate and validate its traditional claims.

Key words: Secoiridoid glucoside, Unnan- obai, scavenger.

INTRODUCTION

Genus Jasminium consist more than 200 species; most of them are ornamental, while some are used in perfume industry [1,.] *Jasminum mesnyi* Hance (*Jasminum primulinum*) belongs to family Oleacea, is a native to china but distributed in India and Nepal. It is commonly known as Primrose Jasmine, Unnan- obai in japan [2], Pahari Butti[3], sansonae, and peeli chameli in villages of Himachal Pradesh, India[4]. It is an evergreen shrub moves up to 2.5 m in height and start crawling on plants or walls. Trifoliate leaves are elliptical in shape, oppositely attached on quadrangle branches. Yellow flowers appear in month of March – April. Traditionally, leaves are used in diabetes, CNS disorder, gastric disturbance, anorexia, oral sores, nocturnal emission, and in muscular pain. It is believed that branchlets are beneficial in migraine, joint disorder and spinal pain, while flower are employed in hepatic disorders[4]. Leaves show antioxidant[3] and anthelmintic[5] potential in animal studies. *Jasmenium mesyi* is not explored so much for its pharmacological and phytochemical studies. It is research oriented plant and may provide new aspects to treat the disease.

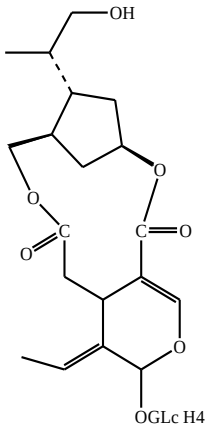
PHYTOCHEMISTRY

Secoiridoid glucoside, Caffeic glycoside and flavnoids are mainly isolated from the leaves. Numerous glucosides has been isolated from methanolic extract of leaves such as jasminin**(1)**, jasmoside**(2),** jasmesoside**(3)** oleuropein**(4)**, oleoside **(5)**, secologanin **(6)**[4] 9"hydroxyjasmesoside **(7)**, 9"- hydroxyjasmesosidic acid**(8)**, sambacoside A**(9)**, jasminin 10"-O-β-D-glucoside**(10)**[6],2"-hydroxyjasminin**(11)**, isojasminin**(12)**, 4"-hydroxy isojasminin**(13)**, jasmosidic acid**(14)**, and phenolic glucoside syringing **(15)** . The leaves also contain ceryl alcohol, α-amyrin **(16)**, β – sitosterol(**17)**, ursolic acid**(18)**, mannitol**(19)**, quercetin**(20)**, rutin **(21)**[7], poliumoside**(22)**, and forsythoside B**(23)** [8]

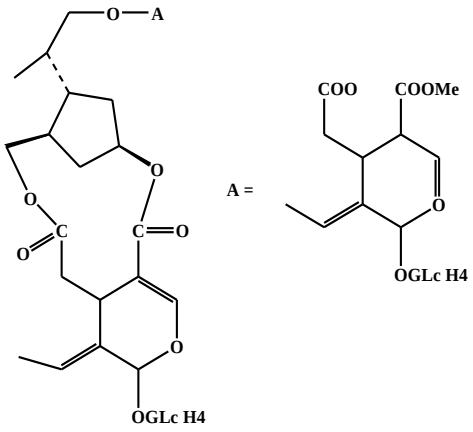
DISCUSSION

Secoiridoids glucoside, Caffeic glycoside and flavnoids are mainly isolated from the *Jasminum mesnyi*, which has antioxidant potential[9, 10]. Secoiridoids (Sanshiside-D[11], swertiamarin[12], jaspolyoside and oleuropein[13]) are free radical scavenger, amarogentin has been reported diabetes, and activate the platelet formation [14] while naresuanoside[15], Oleuropein[16], amarogentin are used in cancer[17].

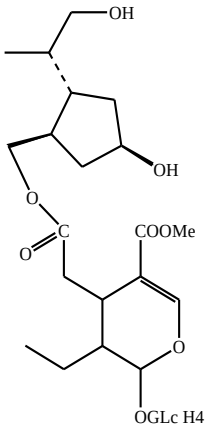
Traditionally, plants cure various diseases due to presence of antioxidant compounds such as flavnoids and Secoiridoids and phenolic compounds. In *Jasminum mesnyi* flavnoids and Secoiridoids are mainly present, which posses wide range of activity in preclinical and post clinical studies due to its anti-oxidant potential. This review provides complete information about the phyto-chemistry and traditional uses of *Jasminum mesnyi*. It will be beneficial for the upcoming research scholars to explore its potential.



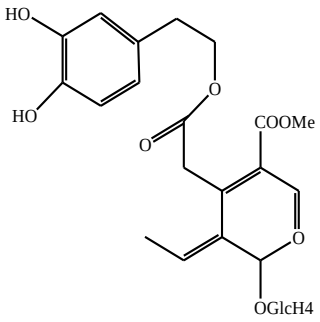
Jasminin (1)



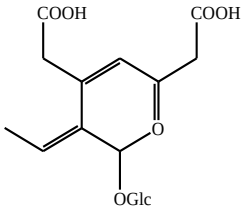
Jasmoside (2)



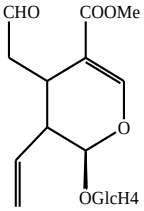
Jasmesoside (3)



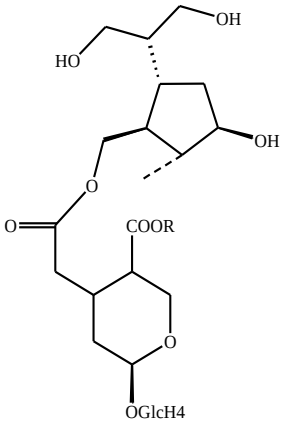
Oleouropein (4)



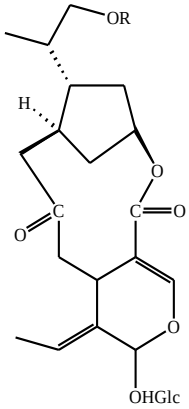
Oleoside (5)



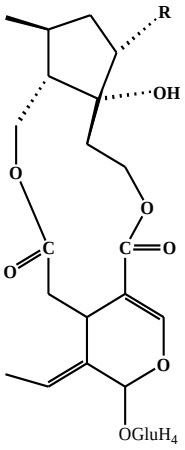
Secologanin (6)



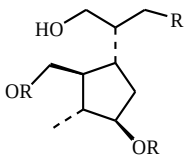
Name of Compound	R
9"-hydroxy jasmesoside (7)	CH_3
9''-hydroxyjasmesosidic acid (8)	H



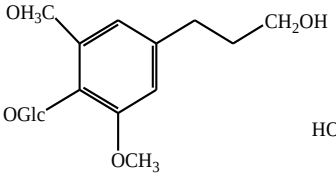
Name of compound	R
Jasmin10'' -O-Beta -D- Glucoside(10)	Gluc
2'' Hydroxyjasminin (11)	OH



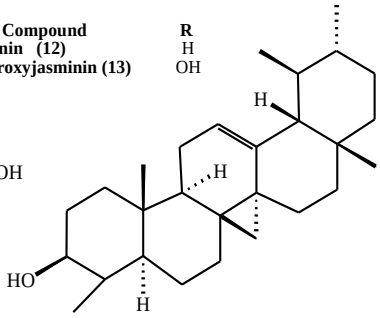
Name of Compound	R
Isojasminin (12)	H
4'' - hydroxyjasminin (13)	OH



Sambacoside (9)



Syringin (15)



Alpha -amyrin(16)

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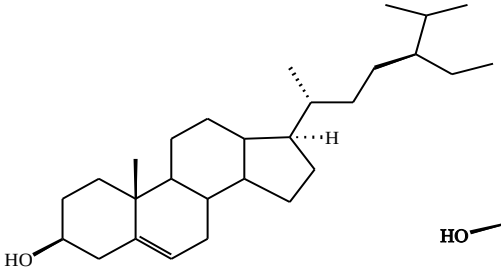
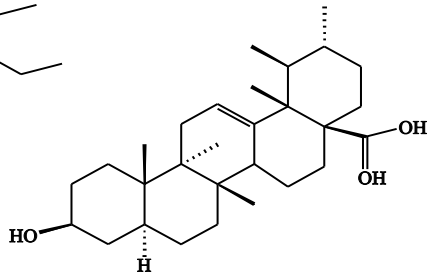
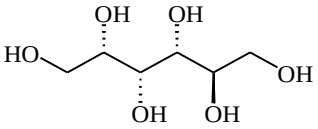


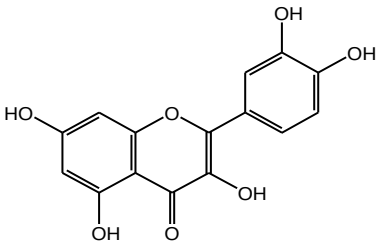
Beta-sitosterol (17)



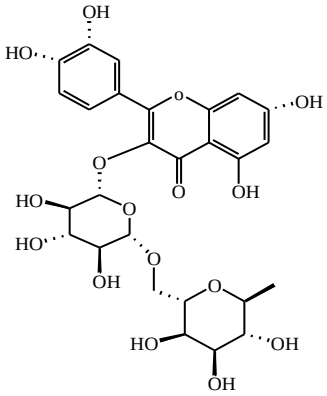
Ursolic acid (18)



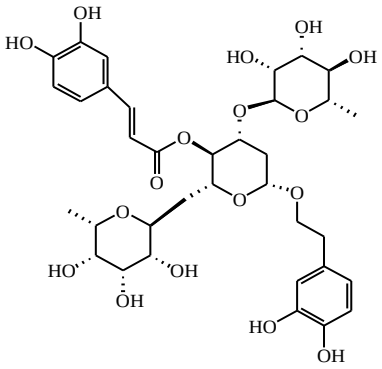
Mannitol (19)



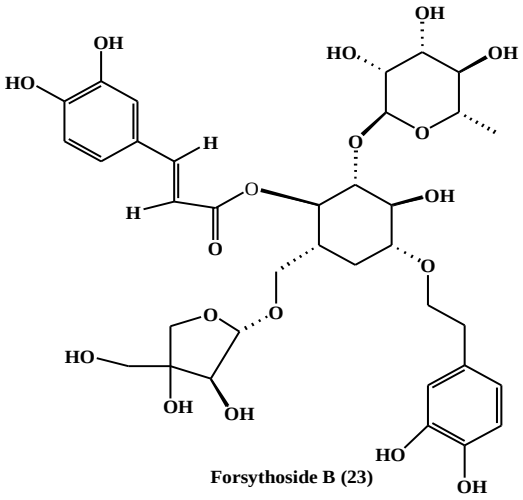
Quercetin(20)



Rutin (21)



Poliumoside (22)



Forsythoside B (23)

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