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RESEARCH ARTICLE

GOJIHWADI KWATH- A DRUG REVIEW

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Abstract

Gojihwadi Yoga is described in the 20th century textbook ‘SiddhayogaSangraha’ written by AcharyaYadavji Trikamji one of the illustrious of Ayurveda of modern era. It is described in Jwara rog Adhikara. In Ayurveda it is an excellent combination of 16 ingredients which have bronchodilators, mucolytic, anti-inflammatory and expectorants properties like, Draksha, Yashtimadhu, Vasa, Kantakari, Mishreya, Maricha etc. are described in the ancient classics of Ayurveda. Many of the others like Unnav, Khatmi, Khubkalam, Jufa and Gulbanafsa are the contributions of Unani system of medicine. The indication of Gojihwadi kwath as per Ayurveda is Jwara, Kasa and Pratishyaya. According to the author it is suitable in respiratory infections where sputum is thick and adhesive in nature and difficult to come out. This article reviews Ayurvedic and chemical properties of this combination. It can be used without any side effects.

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Introduction:-

Now a day's disease *Pratishyaya* is the most common respiratory disorder. People all over the world suffer from this disorders due to climatic changes, infections and air pollution. Different Acharya has mentioned this disease in different *samhita*. But Acharya Shusruta has described this disease in *Shusruta samhita (Uttarsthana)*.¹ On the basis of same symptoms *Pratishyaya* is correlated with Allergic Rhinitis in modern science. It is a global health problem which is very prevalent. Overall prevalence of rhinitis was 26.1% in school going children in India. In Asia, this disease affects a large population, ranging from 27% in South Korea to 32% in the United Arab Emirates.² *Gojihwadi kwath* (decoction) is Poly-herbal Ayurvedic medicine useful in the treatment of *Pratishyaya* (cold/Allergic Rhinitis), cough, respiratory infections and fever due to cough. The 16 ingredients of this combination are used an equal amount of *Gojihwa (Onosma bracteatum)* Whole Plant, *Yastimadhu (Glycyrrhiza glabra)* Root, *Mishreya (Foniculum vulgare)* Fruit, *Draksha (Vitis vinifera)* Dry fruit, *Anjir (Ficus carica)* Dry Fruit, *Unnav (Zizyphus sativa)* Fruit, *Vasa (Adhatoda vasica)* Whole Plant, *Jufa (Hyssopus officinalis)* Whole Plant, *Sapistan (Cordia latifolia)* Fruit, *Khubkalam (Sisymbrium irio)* Seed, *Gulavanaphsa (Viola odorata)* Flower, *Hansraj (Adiantum langulatum)* Whole Plant, *Atasi (Linum usitatissimum)* Seed, *Khatmi (Althoea officinalis)* Seed, *Kantakari (Solanum surattance)* Root and black pepper in half amount.³

Dose of Gojihwadikwath (Decoction)

1 tola (approx-10 gm) of *Gojihwadi kwath* powder is boiled in 16 times of water, till water reduces to 4 times. Filter this decoction, add Misri/honey and take 3-4 times a day in *Pratishyaya*, cough and other respiratory disorders.

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Aim:

To evaluate the role of Gojihwadi kwath on Pratishtaya on its Ayurvedic pharmacological properties.

Methodology:-**Table No.1:-** Content of *Gojihwadi Kwath* (Syrup):⁴

S.N .	CONTENTS	BOTNICAL NAME	FAMILY	RAS	GUNA	VIRYA	VIPAK
1.	GOJIHWA	Onosma bracteatum	Boraginaceae	Madhur, tikta, kashaya	Laghu, snigdha	Sheeta	Madhur
2.	DRAKSHA	Vitis vinifera	Vitaceae	Madhur	Snigdha, Guru, Mridu	Sheeta	Madhur
3.	YASHTIMADHU	Glycyrrhiza glabra	Fabaceae	Madhur	Guru, snigdha	Sheeta	Madhur
4.	VASA	Adhatoda vasica	Acanthaceae	Tikta, kashaya	Laghu, snigdha	Sheeta	Katu
5.	HANSRAJ	Adiantum langulatum	Polypodiaceae	Kashaya	Guru	Sheeta	Madhur
6.	KHATMI	Althoea officinalis	Malvaceae	Madhur	Snigdha, pichchhila, guru	Sheeta	Madhur
7.	GULBANAFSA	Viola odorata	Violaceae	Katu, Tikta	Laghu, snigdha	Ushna	Katu
8.	MISHREYA	Foniculum vulgare	Umbelliferae	Madhur, Katu, Tikta	Laghu, snigdha	Sheeta	Madhur
9.	ANJEER	Ficus carica	Moraceae	Madhur	Guru, snigdha	Sheeta	Madhur
10.	UNNAV	Zizyphus sativa	Rhamnaceae	Madhur	Guru, snigdha	Sheeta	Madhur
11.	JUFA	Hyssopus officinalis	Labiatae	Tikta, Katu	Laghu, ruksha, tikshna	Ushna	Katu
12.	SAPISTAN	Cordia myxa	Boraginaceae	Madhur	Guru, snigdha	Sheeta	Madhur
13.	KHUBKALAM	Sisymbrium irio	Cruciferae	Katu	Guru, Snigdha, pichchhila	Ushna	Katu
14.	ALASI	Linum usitatissimum	Linaceae	Madhur, tikta	Guru, snigdha, pichchhila	Ushna	Katu
15.	MARICHA	Piper nigrum	Piperaceae	Katu	Laghu, tikshna	Ushna	Katu
16.	KANTAKARI	Solanum surattense	Solanaceae	Tikta, katu	Laghu, Ruksha, Tikshna	Ushna	Katu

Ingredients of Gojihwadi Kwath:**GOJIHWA :**

Latin name: Onosma bracteatum

Family: Boraginaceae

Name: Kharpatra, Darvipatra, Vrishjihwa.

Doshakarmata: Vatapittahara.⁵

Chemical constituents:

Tannins, sugar Therapeutic use: Fever, Asthma, Bronchitis, Anorexia, Ulcers

Therapeutic uses:

cough and cold, bronchial affections, insomnia, mental exhaustion, constipation, jaundice.

Properties / Action:

Expectorant, astringent, diuretic.⁶

Nighantu

Bhavaprakash Nighantu:-Mentioned under Guduchyadi varga.

Guna-karma:-Mutral, Rasayan, jwara, amavata, visham jwara, hridya rog.⁷

Kaiydev Nighantu:- Mentioned under Aushadyadi varga.

Guna-karma:- Tikta, kashya, madhur rasa, madhur vipaka, sheet virya, vatakarak, grahi, kaph-pitta nasak, laghu, kasa, Aruchi, prameh, jwara, Rakta vikara.⁸

Research Evidence

A study on albino rats and mice found analgesic properties of *Onosmodium*.⁹

DRAKSHA:

Latin name: *Vitisvinifera* Linn

Family: Vitaceae

Name: Mriduka, Gostani, Munnaka, Angoor, Draksha.

Doshakarmata: Vatapittahara.¹⁰

Chemical constituents:

Palmitic, stearic, oleic, linoleic and linolenic acids, cyanidin, petunidin, peonidin, malvidin, acetyl and coumaryl glycosides, biflavonoids, Malic acid, tannic acid. Tartaric acid, oxalic acid, Tannins, carbohydrates.

Therapeutic use:

constipation, Cardiac debility, hemoptysis, anemia, fever, flatulence, cough, asthma, bronchitis, general debility.¹¹

Properties / Action:

the fruits are sweet, laxative, hematinic, hemostatic, aphrodisiac, rejuvenating, antispasmodic, digestive, stomachic, expectorant, respiratory tonic, mucolytic expectorant.¹²

Pharmacological activities:

Antifungal, Angiotensin-converting enzyme (ACE) Activity, tumor inhibitory, antiulcer, hepatoprotective, antioxidant, antibacterial and cardio protective.¹³

NIGHANTU

Bhavaprakash Nighantu:-Mentioned under Aamradi varga.

Guna-karma:-Santarpan, pachan, sanshrana, balya, kanthya, kapha samak, twakdosha har.¹⁴

Kaiydev Nighantu:- Mentioned under Aushadyadi varga.

Guna-karma:-Guru, Rakta-pitta karak, Ushna virya, vata nasak, shrist-vin-mutra, kshat,kshya, daha, madatya.¹⁵

Dhanvantri Nighantu:-Mentioned under Aamradi varga.

Guna –karma:-Madhur, snigdha, sheetal, hridya, raktapitta, jwara, Swasa, Trishna, daha, kshya rog har.¹⁶

Research Evidence

A clinical trial study shows *Vitisvinifera* polyphenols have significant effects on the level of blood sugar glucose, lipid profile, blood pressure, as well as beneficial activities in liver and heart.¹⁷

YASHTIMADHU

Latin name: *Glycyrrhiza glabra*

Family: Leguminosae

Doshakarmata: Vatapittahara.¹⁸

Chemical constituents:

Glycyrrhizine, Glycyrrhizin, Quercetin, Licoumarin, Isoflavone, Kaempferol, Astragalin, liquoric acid, galbrolide, 3-hydroxyglabrol.

Therapeutic use:

Cough, Bronchitis, Fever, Pharyngopathy, Hoarseness of voice, hyperdipsia, ulceration of urinary tract, hiccup, and anemia.¹⁹

Properties / Action:

Expectorant, emetic, tonic, demulcent, hemostatic, anti-allergic, anti-inflammatory, liver protective, mild laxative.

Pharmacological activities:

Smooth muscle depressant, antimicrobial, antiviral, antipyretic, antioxidant, anti-inflammatory, hypolipidaemic, hypotensive, Hepatoprotective, anti-diuretic expectorant.²⁰

NIGHANTU

Bhavaprakash Nighantu:- Mentioned under Haritkyadi varga.

Guna-karma:- Madhur, sheetal, vrishya, kapha samak, swarya, mutrajanan.²¹

Kaiydev Nighantu:- Mentioned under Aushadyadi varga.

Guna-karma:- Sheetvirya, madhur, guru, balkarak, pitta-vata-rat samak, Vrana, shoth, vish nasak.²²

Dhanvantri Nighantu:- Mentioned under Guduchiyadi varga.

Guna-karma:- Madhur, sheetvirya, piitaghna, shosh, kshya, vish, vaman.²³

VASA

Latin name: Adhatodavasica

Family: Acanthaceae

Name: Vassak, Vasica, Vaajidant, Vrish

Doshakarmata: Kapha Pitta Shamaka.²⁴

Chemical constituents:

Vasicine, Vasicinine, Arachidic acid, Cerotic acid, Lignoceric acid, Linoleic acid, Vasicol, Adhatodine, Vasicinone, Vasicinol, Vasicinoline.

Therapeutic use:

Cold, cough, whooping cough, chronic bronchitis, bronchial asthma.

Properties / Action:

Sedative, antispasmodic, bronchodilator, respiratory stimulant, antiviral, anti insect, expectorant, anti bacterial, antiseptic.

Pharmacological activities:

Antispasmodic, bronchodilator, antiviral, expectorant, antibacterial.²⁵

NIGHANTU

Dhanvantri Nighantu:- Mentioned under Guduchyadi varga.

Guna-karma:- Sheet virya, tikta, pitta, kaphahar, rakt vikara, kasa, vaman, jwara, kushthnasak, Trishna nasak.²⁶

HANSRAJ

Latin name: Adiantum lunulatum Burm. f.

Family: Polypodiaceae

Name: Hanspadi, Raktpaadi, Tripaadika, Keetmata

Part use: whole plant, rhizome, leaf

Doshakarmata: Kapha Pitta Shamak.²⁷

Therapeutic use:

Cough, Bronchitis, Pharyngitis, epileptic fits, elephantiasis, leprosy, fever.

Properties / Action:

Expectorant, soothing, anti-dysenteric.²⁸

6. KHATHMI

Latin name: Althoea officinalis Linn

Family: Malvaceae
Name: Kasirul, Kasmiri-sajposh
Doshakarmata: Pitta Kapha Hara.²⁹

Chemical constituents:

Althein, pectine, flavonoids, phenolic acids, tannins, polyphenolic acids.

Therapeutic use:

Bronchitis, Cough, duodenal ulcer, gastroenteritis, ulcerative colitis.

Properties / Action:

Expectorant, demulcent, emollient, bronchitis, gastritis, diuretic.³⁰

GULBANAFSA

Latin name: Viola odorata
Family: Violaceae
Name: Banfsa, Banosha
Doshakarmata: Vata Pitta hara.³¹

Chemical constituents:

Violine, Rutin, Saponin, Odoratin, beta-sitosterol, methyl salicylate.

Therapeutic use:

Fever, inflammations, bronchitis.

Properties / Action:

Expectorant, Anti pyretic, Anti-inflammatory, diuretic.³²

MISREYA

Latin name: Foeniculum vulgare Mill
Family: Umbelliferae
Synonyms: Madhurika, Madhura, Mishi, Suaf
Doshakarmata: Vata Pitta Shamak.³³

Chemical constituents:

Anethol, Fenchone, fixed oils, nelumboside, xanthotoxin, α -amyrin, β -sitosterol, petroselinic acid.

Therapeutic use:

Cough, Bronchitis, anemia, anorexia, dyspepsia, fever, and inflammations.³⁴

Properties / Action:

Expectorant, Haematinic, carminative, digestive stomachic, anti-emetic, tonic, cardiac stimulant.³⁵

ANJIR

Latin name: Ficus carica
Family: Moraceae
Name: Falgu, Rajadumbar, Anjeer
Doshakarmata: Vata Pitta Shamak.³⁶

Chemical constituents:

Carotene, Nicotinic acid, Riboflavin, Ascorbic acid.

Therapeutic use:

Fever, Bronchitis, Liver and Spleen disorders.

Properties / Action:

Expectorant, Aphrodisiac, Antipyretic, and tonic.

10. UNNAV

Latin name: Zizyphussativa

Family: Rhamnaceae

Doshakarmata: Vata Pitta Shamak.

Therapeutic use:

Stomatitis, Asthma, Fever, Vomiting, Cough, general debility.

Properties / Action:

Tonic, Antipyretic, Diaphoretic, and Anthelmintic.

11. JUFA

Latin name: Hyssopusofficinalis

Family: Labiatae

Name: Jufa

Doshakarmata: Vata Kapha Shamak.³⁷

Chemical constituents:

Tannins, Carotene, Diosmin

Therapeutic use:

Constipation, Catarrh, Bronchitis, Asthma, Pleurisy.

Properties / Action:

Anti-inflammatory, Expectorant, Mucolytic.³⁸

12.SAPISTAN

Latin name: Cordiamyxa

Family: Boraginaceae

Doshakarmata: Vata Pitta Hara

Chemical composition:

phyticacid , phytates phosphorous, oxalic acid, alpha-amyryn, taxifolin-3, 5-dirhamnoside.

Therapeutic use:

Fever, Catarrh, Bronchitis

Properties/Action:

Anthelmintic, Expectorant, Mucolytic, Aphrodisiac, andAntipyretic.³⁹

13. KHUBKALAM

Latin name: Sisymbriumirio Linn

Family: Cruciferae

Doshakarmata: Vata Kapha Shamak.⁴⁰

Chemical constituents:

Isorhamnetin, vit.c, beta-carotene, beta-D-glucoside, oleic acid, stearic acid,erucic acid.

Therapeutic use:

Fever, Bronchitis, Asthma, Hoarseness of voice, vomiting.

Properties / Action:

Expectorant, Anti-inflammatory, Anti emetic, Tonic.⁴¹

14. ALASI

Latin name: *Linum usitatissimum* Linn

Family: Linaceae

Name: Atsi, Neelpushpi, Alsi.

Doshakarmata: Vata Kapha Hara.⁴²

Chemical constituents:

Linamarine, Vitamins A, B and E

Therapeutic use:

Cough, Catarrh, Bronchial infections

Properties / Action:

Expectorant, Thermogenic, Emollient, Demulcent.⁴³

15. Maricha

• Botanical name : *Piper nigrum* Linn.

• Family : Piperaceae

• Synonyms : Vellaj, Krishna, Ushan, Suvrit, Maricha etc

• Part used : Fruit

• Doshaghna : Kapha-Vata shamaka

• Karma : Nadibalya, Kaphaghna, Kapha nissaraka, Sroto shodhana, Deepana, Pachana, Mootrala, Vatanulomana, Lekhana, Nadiuttejaka, Artavajanana, Swedajanana, Srotoshodhana.⁴⁴

• Chemical constituents:

Piperidine, N-transferuloyltyramine, Guineensine, N-isobutyl- 2E, 4E, 8Z- eicosatrienamide (fruits); Piperine, Hentriacontan-16 one, Hentriacontan and β -sitosterol (stem); N-isobutyl-11-(3,4-methylenedioxyphenyl)- 2E, 4E, 10E-undecatrienamide, N-isobutyl-11-(3,4-methylenedioxyphenyl)- 2E, 4E, 12E- tridecatrienamide, Cryptone, Piperonal, Alanine, Arginine, Pipelic acid, Serine, Ascorbic acid , Carotene etc (Plant)

Therapeutic uses:

arthritis, asthma, fever, cough, catarrh, dysentery, vertigo, throat troubles, colic, cholera, hiccough.

Pharmacological action:

Anti-oxidant, Anti- helminthic, Anti-pyretic, Anti-microbial, Anti-inflammatory, Analgesic, CNS depressant, Muscle relaxant, Anti-bacterial, Hepatoprotective, Anticonvulsant, carminative, digestive etc.⁴⁵

NIGHANTU:-

Bhavaprakash Nighantu:- mentioned under Haritkyadi varga.

Guna-karma:- kaphagn, krimihar, aadhman, pravahika, aamashyasathilya, girna Pratishaya, kasa.⁴⁶

Kaiyadev Nighantu:- mentioned under Aushadyadi varga.

Guna-karma:- katu, Ushna, madhur vipak, kapha nisarak, ishat pitta vardhak.⁴⁷

Dhanvantri Nighantu:- Under Shatpushpadi varga.

Guna-karma:- Katu, tikta, Ushna, pitta-kaphnasak, krimi har.⁴⁸

Research Evidence:

In this pilot study, maricha found anti-inflammatory, analgesic and anti-bacterial properties.⁴⁹

KANTAKARI

Latin name: *Solanum surattense* Burm. F.

Family: Solanaceae

Name: Dushsparsha, Kshudra, Vyaghri, Battkattiya

Doshakarmata: Kapha Vata Shamak.⁵⁰

Chemical constituents:

Solacarpidine, Potassium nitrate, Potassium chloride.

Therapeutic use:

Inflammation, Dyspepsia, Anorexia, Fever, Cough
Asthma, Bronchitis, Pharyngitis, Hiccough, Catarrh and Cardiac disorders.

Properties / Action:

Antihistaminic, Thermo genic, Anti-inflammatory, Digestive, Carminative, Stomachic, Expectorant.⁵¹

Discussion:-

Gojihwadi kwath consist of 16 ingredients, most of the ingredients are *Madhur rasa* like; *Gojihwa*, *Draksha*, *Yashtimadhu* etc., are *snigdha* and *guru* in nature which reduce elevated *Vata dosha*. *Madhur rasa* have *balya* (strength promoting activity), *jeevanya* (life prolonging activity) and *bhringhanap* properties, which helps in building up tissues and may increase the *Vyadhikshamatva* (immunity) and relieve symptoms of *Pratishyaya* like; *Kshavathu*, *Shirashool* etc., by its *Vatapittahara* property. *Ushnavirya* and *laghu-tikshna guna* of *Maricha*, *kantakari*, *jufa* etc. has *Ama pachan*, *vaatanuloman* and *vata-kaphahara* property which pacify the *vata dosh* and *kaph dosh* which is responsible for disease *Pratishyaya*. Due to *ama pachan* property it digest the free toxins of body. Hence the formulation of *Gojihwadi kwath* is used in *Pratishyaya*, cough and other respiratory disorders without any after effects.

Conclusion:-

It is concluded from the above properties of ingredients of the *Gojihwadi kwath*, it is safe and effective herbal formulation for *Pratishyaya* and other respiratory disorders. The constituents of *Gojihwadi kwath* that are important effective medicine in *Ayurveda*. It can be used without any side effects.

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