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REVIEW OF RUSHYAGANDHA

Tonge Madan B

Professor, Department of Dravyagunavigyana,vGovernment Ayurveda College,Wazirabad, Nanded, Maharashtra, India.

ABSTRACT

There are many medicinal plants mentioned in Ayurvedic texts, particularly in Nighantus. One of them is *Rushyagandha* which has been used for the management of various diseases. *Rushyagandha* is mentioned in *Charaka Samhita* in *Bruhaniya Mahakashaya* and *Madhura skandha dravya*. In northern India, its fruits are used in the treatment of *Prameha* (Diabetes). This plant has the property of coagulating milk, and has been used for preparing vegetable rennet ferment for making cheese. *Rushyagandha* fruits powder is an effective therapeutic regimen for a long term in the management of uncomplicated cases without any side effects. But the basic problem is that, there are some controversies related to its identification of exact species. That's why to revel its identity and to compare it with current biological flora; we selected the topic to review of Rushyagandha.

Key words: *Rushyagandha, Withania, Coagulans, Bruhaniya Madhura,*

INTRODUCTION

Rushyagandha is mentioned by *Acharya Charaka* in *Bruhaniya Mahakashaya*[1] and in *Madhura Skanda*.[2] In *Bruhaniya Mahakashaya*, *Chakrapani* – the one of the commentator of *Charaka Samhita* commented on *Rushyagandha* as *Rushya jangalakaha* i.e. the wild variety.

In *Madhura Skanda* of *Charaka* both *Rushyagandha* and *Ashwagandha* came with *Yugmakrama (in pair)*. In Ayurvedic text the drugs which come in *Yugmakrama*s are mostly of same *Guna* (properties) and Karmas (actions). Here *Rushyagandha* and Ashwagandha both are mentioned in *Bruhaniya Mahakashaya* and *Madhura Skanda* so they may be of having similar properties. The term *Rushyagandha* commented as *Rushya jangulika* denotes the wild variety of *Ashwagandha* or likewise drug.

The drug *Ashwagandha* comes from the *Withania* species. In India, two species of the the genus *Withania* are found.[3] *Withania somnifera* which is known by the name *Ashwagandha* and *Withania coagulans* known as *Paneer dodi* in Hindi and as Indian rennet in English. Both species closely resemble each other. Though Withanolides are the principle compound found in both species, there are some Withanolides specific to each of them.

Wit haferin-A is a major compound found in *Withania somnifera* where coagulin L has been found in major amounts in *Withania coagulans*. Antihyperglycemic leads from *Withania coagulans* have been identified.[4]

Withania somnifera has been used as an antioxidant, adaptogen, aphrodisiac, liver tonic, anti-inflammatory agent and most recently as an antibacterial, antihyperglycemic, hypolipidaemic and antitumoural as well as to treat ulcers and senile dementia.[5]

Hepatoprotective[6] anti-inflammatory [7,] antihyperglycemic[8] hypolipidaemic[9] free radical scavenging activ-

ity[10] antimicrobial[11] cardiovascular[12] central nervous system depressant[13] immunomodulatory [14] antitumour[15]cytotoxic activities[16] have been studied in Withania coagulans. Withania coagulans had the therapeutic values over all.

With the above references, the *Withania somnifera* and *Withania coagulans* both of the same genus having similar activities and resembles its actions mentioned as in *Bruhaniya Mahakashaya* and *Madhura Skanda.* With above all references, we can consider *Withania coagulans* as *Rushyagandha* mentioned in of *Charaka Samhita*.

Withania coagulans Dunal having synonym as Punerria coagulans stocks, commonly known as Indian rennet, Indian cheese makers, vegetable rennet in English, *Paneer ke Phool*, *Panir band*, *Punir dodi* in Hindi, *Ning gu shvi qie* in Chinese is distributed in the drier part of India. The plant is native of the Asia temperate (Western Asia, Afghanistan) and Asia tropical (Indian subcontinental, India, Nepal) regions.[17] A survey of literature has shown that in various traditional systems of medicine, the plant has been recommended for the treatment of various disorders.

It is an erect greyish under-shrub 60-120cm high. The leaves are lanceolate, entire clothed with a persistent greyish tomentum on both side. The flowers are dioecious in axillary clusters. The calyx is 6mm long, clothed with grey tomentum and the corolla is 8 mm long, with lobes that are ovate- oblong, sub-acute. The male flowers have stamens approximately level with the top of the corolla tube. The filaments are 2 mm long and glabrous. The anthers are 3.4 mm long. The ovary is ovoid with style or stigma. The female flowers have stamens reaching halfway up to corolla tube. The ovary is ovoid, glabrous. The style is glabrous, stigma is mushroom shaped, 2 lamellate. The berry is 6.8 mm in diameter, globose and smooth. The seeds are 2.5-3 mm in diameter, somewhat ear shaped and glabrous.[18]

In traditional medicine, the *Panchanga* means all parts, flowers, fruits are used. It shows significant lowering of blood sugars, serum cholesterol, serum lipid peroxide (LPO). Now days its flowers and fruits are commonly used in the treatment of diabetes as a traditional medicine.

RESULTS & OBSERVATIONS

Studies indicate that the *Rushyagandha* possess property and actions as same as *Withania cogulans* by various published research papers. The pharmacognostic study reveals the identity of *Rushyagandha* as same as *W. coagulans*.

DISCUSSION & CONCLUSION

With all above references of *Charaka's Bruhaniya Mahakashaya* and *Madhura Skanda*, we can say that *Withania coagulans Dunal*, by comparing its *Guna Karma* and pharmacological actions may take as *Rushyagandha.*

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CORRESPONDING AUTHOR
Dr. Tonge Madan B
Professor, Department of Dravyagunavigyana, Government Ayurveda College, Wazirabad, Nanded, Maharashtra,India.
Email:madan.tonge@gmail.com

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