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Review Article

THERAPEUTIC USES OF ASPAGHOL (*PLANTAGO OVATA*) MENTIONED IN GREECO ARAB MEDICINE AND MODERN ERA: A REVIEW

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ABSTRACT

The seeds/husk of *Plantago ovata* Forsk. from family Plantaginaceae commonly known as Aspaghol Musallam or Suboos-e-Aspaghol are used in Greeco-Arab medicine, other traditional medicine and even modern advanced medicine as herbal drugs. The seeds/husk of *Plantago ovata* contain hemicelluloses, carbohydrates, protein, tannin, glycosides, fixed oil, linoleic acid, palmetic acids etc. Therapeutic uses of seeds/husk of Aspaghol are mentioned in Greeco-Arab medicine are Qabz (Constipation), Warm-e-Balghami, Zaheer (Dysentery), Aanton ki kharash (Intestinal ulcers), Qurooh-e-Meda wa Isna Ashari, (Peptic ulcers), Diabetes Mellitus, Hyperlipidemia etc. This article reviews the main reports of the therapeutic uses of Aspaghol and its constituents based on the available literature.

Keywords: Aspaghol, *Plantago ovata*, therapeutic uses, Greeco-Arab medicine.

INTRODUCTION

Aspaghol is derived from Persian word Aspa = means 'horse' ghol = means 'ear'. It resembles like the ear of horse, so called Aspaghol.¹ Scientific name is *Plantago ovata* Forsk.²⁻⁴ from the family Plantaginaceae.⁴ Greeco-Arab Medicine is named because Unani system of medicine was originated in Greece and developed by Arabs into an elaborated medical science based on the framework of teachings of great Greek Philosopher and Physician Buqrat (Hippocrates) and Jalinoos (Galen). Unani medicine got enriched in Egypt, Syria, Iraq, Persia, India, China and other Middle East countries. It was the Greek founder who freed medicine from superstition and magic, and gave it the scientific evaluation. Unani System of Medicine was introduced in India by Arabs in 13th Century. Due to its efficacy and scientific base, it was accepted by masses and this system took firm roots in India. Now it comes under AYUSH department and progressing as organized way.

Alternative Names

Bazre-Qutuna (Arabic)^{1,2,4-8} Aspiyoos, Shikamdarida, Aspghol (Persian and Urdu)^{1,4,6,8-9} Isbaghol (Hindi)^{2,4-6} Spogel Seed husk (English)^{4,8-9}

Plant Description

Aspaghol is an important medicinal crop of India which is found in North-West India and mostly cultivated in Gujarat, Karnataka, Haryana. It is a stem less, softly hairy or wooly annual herb. Leaves are 7.5-23 cm long, broad, narrowly linear or filiform, entirely or distantly toothed, attenuated at the base usually 3 nerved. Flowers in ovoid or cylindrical

spikes 1.3-3.8 cm long, bracts 4 mm long, calyx 3 mm long usually glabrous, sepals elliptic obtuse concave, corolla lobes rounded 3 mm long concave. The husk is the rosy white membranous covering of the seed.²⁻⁵

Parts used

Whole Seeds or Husk of the Seeds.^{3,6,9-10}

Chemical Constituents

Psyllium husk contains a high proportion of hemicelluloses, composed of a xylan backbone linked with arabinose rhamnase and galacturonic acid units (arabinoxylans). Carbohydrates, Protein, Tannin, Glycosides, Fixed oil, Linoleic acid, Palmetic acids, Iron, Zinc, Potassium and Sodium.^{4,8-11}

Temperament

Cold and Wet^{8,10} Cold 2° and Wet or Dry (Moatadil) Jalinoos⁶ Cold 2° and Wet 2° (Shaikh)^{1,9,12-13} Cold (Discoroids)⁶ Cold 3° and Wet 2°^{4,7} Cold 3° and Wet (Little)¹ Cold 3° and Between Wet and Dry¹⁴

Therapeutic Dosage

4.5 – 10.5 Masha (g)⁸ 4.5 – 7 g⁴

Pharmacological Actions

Daf-e-Humma (Antipyretic)^{1,6,12,15}, Mulayyin (Laxative)^{4,8-9,16} Mudirr-e-Baul (Diuretic)⁹, Muqavvi-e-Medah (Stomachic)¹⁰ Naf-e-Quroohe Meda wa Isna Ashari (Anti-peptic ulcer)^{1,6-7,10} Mugharri wa Muzlique (Glutinous and Demulcent)¹⁰, Daf-e-Zaheer (Antidysentric)⁹⁻¹⁰, Qabiz (Astringent)^{7-9,13},

Mudammil Sahaj wa Qurooh-e-Ama (Cicatrigen)¹², Musakkin-e-Atash^{1,6-9,12}, Musakkin-e-Hararat (Hypothermic)^{4,7,9}, Hypocholestromaemic Agent⁴

Therapeutic Uses

Aspaghool are used since long time in Greeco-Arab medicine in the following:

Qabz (Constipation)^{1-2,4,9}, Warm-e- Balghami^{6,12,15}, Zaheer (Dysentery)^{4,10}, Su'ale yabis (Dry Cough)^{2-4,8-9}, Zatu-l- Janb (Pleural Effusion)⁴, Qulanj⁴, Warme Luhah⁴, Wajau-l- mafasil (Arthralgia)^{1,4,12,15}, Atash or peyas (Thirst)^{1,7-9,12}, Hummiyat (Fever)^{8-9,12-13,15}, Aanton ki kharash (Intestinal ulcers)^{6,8-9,15} Qurooh-e-Meda wa Isna Ashari (Peptic ulcers)¹⁰, Amraz-e-Kulliyya wa Masana (Kidney and Bladder disease)¹⁰, Ishal wa Pechish (Diarrhoea)^{1,7-8}, Maror and Anton ke zakhm (Intestinal cramps and wounds)¹⁰

Therapeutic Effect of Husk

Effect on sterol metabolism.¹⁷

Effect on plasma lipids and lipoprotein.¹⁸⁻²⁵

Effect on cardiovascular system.²⁶

Effect in constipation.^{11,27}

Effect in Diabetes mellitus.²⁸⁻²⁹

Muzir Asraat (Adverse Effects)

Adverse effects on nerves and appetite.^{1,7-9}

Musleh (Corrective)

Use of some drugs has been recommended along with Aspaghool to avoid its adverse effects. Shahad (Honey) and Sikanjabeen Asli.^{1,7-9}

Badal (Substitute)

Following drugs are mentioned as substitute of Aspaghool in Unani text book: Behdana (Talaen) and Tukhm-e-Khurfa (Tabreed)⁶⁻⁹

Murakkabat (Formulations)

Sufoof-e-Teen^{4,10} Sufoof-e-Moya¹⁰ Qurs-e-Tabasheer Kafoori⁸⁻¹⁰ Qurs-e-Ziyabetus Khas and Laoq-e-Behdana.⁴

CONCLUSION

Aspaghool is very beneficial for human being due to its pharmacological actions of the seeds in different ailments like constipation, peptic ulcer, diarrhea, dysentery, intestinal cramps, arthralgia, hyperlipidemia, hypertension and diabetes mellitus. This drug is used in traditional medicine since long time in some diseases. But it is proved that it can be used in a number of disease because research are going on. So, this paper may be helpful to know the pharmacological actions and uses of Aspaghool.

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