

Aftimoon (*Cuscuta reflexa* Roxb.): A Parasitic Plant with Therapeutic Potentials

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Abstract

Aftimoon (*Cuscuta reflexa* Roxb.) is a parasitic plant used in the management of various skin disorders like vitiligo, pityriasis, mental disorder like depression, epilepsy, etc. and it is used as mufrad (single drug) in the form of powder, decoction, concoction etc and in the murakkab (compound formulations) form in the Unani system of medicine. The plant belongs to genus *Cuscuta* and family Cuscutaceae. This parasitic plant grows on different host plants in India upto thousands of feets and is found abundantly in the rainy season. It is yellowish in colour with thin swirly stem grows on other plants and trees as parasite commonly called as Dodder in English. Unani physicians have been using this plant since time immemorial to treat various illnesses pertaining to the disorder of humours in the body. A number of biologically active compounds like amarbelin, cuscutein, cuscutealin, etc have been isolated and important and significant pharmacological actions like anti-cancerous, anti-tumour, anti-inflammatory, antibacterial activities etc on aftimoon (*Cuscuta reflexa* Roxb) is reported in various studies. This paper aims to review and summarise knowledge presented in the classical Unani text and various scientific research being conducted on *Cuscuta reflexa* Roxb in order to generate a data based on evidences which will be helpful to the future research endeavours.

Keywords: Aftimoon; *Cuscuta reflexa* Roxb.; Parasitic Plant; Unani

Introduction

The healing substances for diseases are provided by nature itself. Even parasitic plants have been discovered and used as medicines since ancient times. *Cuscuta reflexa* Roxb. is one of the most commonly found parasitic plant in India. It is commonly distributed in India's western Bengal plains. The different species of the *Cuscuta* genus are known to be widely distributed across the world where approximately 170 or more species have been known to occur. Although it is a plant parasite and is harmful and destroys the plant on which it is inhabitant, but it has great healing properties as a medicine. *Cuscuta* accumulates alkaloids and also other active metabolites from the plant that it hosts. It comprises various alkaloids, glycoside, flavonoids etc. It contains active compounds like amarbelin and kaempferol; stem has cuscutein, cuscutealin, berberin, beta-sitosterol, luteolin and kaempferol [1]. It is a leafless parasitic climber with thin, slender and delicate stem bears flower, fruit and seeds. *Cuscuta reflexa* Roxb., is commonly called Aftimoon or Kassoos in the Unani System of medicine the seeds are known as

Tukhm-e Kassoos. In the Unani medicine system, the aerial parts of the plant are typically used in a dried form. Peculiarly fragrant, reddish and thin stemmed, aftimoon is considered to be of the highest quality [2,3]. It has been advised in a number of ailments by the renowned Unani physicians since ancient times. The Unani system of medicine successfully uses the plant in the diseases like *Amraz i-Sawdāwi wa Balghamī* (Diseases of black bile and phlegm), *Amraz i-Dimaghi wa Aṣābi* (diseases of nervous system), *Junoon* (Mania), *Sara* (Epilepsy), *Malikholia* (melancholia) *Amraze jild* (skin diseases), other conditions like *Deedan e Ama* (Intestinal Worms), *zofe kabid* (liver debility), *Ashobe Chashm* (conjunctivitis), *Tap i-kohna* (chronic fever) *Waram-i kabid* (Hepatitis), *sartān* (cancer), *khafqān* (Palpitation), *Tasannuj* (spasm), *nafakh* (flatulence), *aurām* (inflammation) *Wajaul-Mafāṣil* (arthralgia) and it is specially mentioned useful for geriatric and debilitate people [2-5,9]. The plant is immensely used in the various traditional systems of medicine for the diseases like depression, melancholy, and other mental disorders, skin diseases, liver diseases and in the Ayurvedic system it is

used in muscular pain, urination disorders, jaundice, fever, coughs etc. The entire plant is used for the treatment of most of the bilious disorders. It has no roots under the ground and develops as a fresh parasite on the host plant during the rainy season [6,7]. Alcoholic extract of the plant has been reported for hypotensive and bradycardia effects [8,26]. A number of bioactive molecules have been isolated and pharmacological activities have been reported till date. In the Unani classical texts Aftimoon is described to possess a number of pharmacological properties like *Mushil-i- Sawdā'* (purgative of black bile), *Mushil-i-Balgham* (purgative of Phlegm), *Mudir i bawl* (Diuretic), *Muhallil waram* (Anti-inflammatory), etc which will be discussed below. In the present scenario there is a need for generating evidence based data and there is a great possibilities for working on the pharmacological attributions quoted and experienced by renowned Unani Physicians.

Fael khas (Main or prominent action): *Dāfi'-i Sawdā'* (removes black bile) [2,9].

Scientific classification [38,39]

Kingdom	Plantae
Subkingdom	Tracheobionta
Super division	Spermatophyta
Division	Magnoliophyta
Class	Magnoliopsida
Subclass	Asteridae
Order	Solanales
Family	Cuscutaceae (dodder family)
Genus	<i>Cuscuta</i> L.
Species	<i>Cuscuta reflexa</i>

Synonyms [5-7]

English	Dodder
Unani	Aftimoon
Arabic	Kasus, Shajarus'sabagh, sharulzabiha
Persian	Aftimoon, Tukhm-e-kasus
Unani	Aftimoon, kasoos
Hindi	Akashbela, Amarbela
Sanskrit	Amarvela, akashavalli, Amaravallari,
Punjabi	Nilathari
Marathi	Nirmuli
Telugu	Savarapukada, sitana purgolalu
Tamil	Kodiyagundal, Sadadari
Bengali	Algusi
Gujrati	Akaswel, Amarabel

Geographical distribution

Various species of *Cuscuta* is distributed throughout the world. Found in tropical and subtropical regions of the world the species *Cuscuta reflexa* is prevalent throughout Indian Plains mainly in Bengal, in the regions of Himanchal Pradesh. It's also seen abundantly in Western Ghats and Ceylon. It is seen growing in the Himalayan regions upto thousands of feet [6,7]. It is also found in Thailand, Malaysia, Afghanistan and Nepal. It occurs most of the year, however flowering occurs around late October to March [10].

Botanical description

Macroscopic

Aftimoon (*Cuscuta reflexa*) is a perennial rootless, leafless, which shows an extensive climbing habit. It is a widespread creeper yearly parasitic plant. It grows as holoparasite and it has very low level of chlorophyll and photosynthetic activity, completely depends over the host plant for its survival. The plant is acrid and tastes bitter and sharp. The stems are long, narrowly twined, branched, glabrous, pale greenish-yellow, often dotted with red [5,7,10]. Flowers are single or in umbellate clusters of 2 - 4 in short racemes, pedicels is glabrous, short and generally curved; bracts is ovate to oblong, obtuse and fleshy and 1.5 mm long. Calyx is divided almost to the base, long, slightly irregular, 3 mm lobes, obtuse, glabrous and fleshy. Corolla is white; tube 6 - 8 mm by 4 mm; lobes 2.5 - 3 mm, almost cylindrical, acutely reflexed, almost at the base of corolla tube. Stamens lies in the throat of the corolla tube; filaments are scattered scarcely; anthers lies beyond the top of the corolla tube. Ovary is simple and ovoid with very short and thick style; two stigmas, which are distinct, thick, fleshy and large, 1.5 mm long. Capsules 68 mm wide, glabrous, circumscissile near the base, and depressed globose. Seeds are black and glabrous 2 - 4 in number [7,10].

Microscopic

The stem T.S is round and wavy in outline. The outer boundary consists of a single layer of epidermis composed of various small cell shapes. Externally it is lined by a thin cuticle and there are several areas where stoma is present. The epidermis is accompanied by 3 - 4 layers of cells consisting of various sizes and shapes of thin walled parenchymatous cells. In some of the cells brown substance is seen. Endodermis is formed by tangentially elongated cells; a complete ring is often formed, but broken endodermis is seen in stem. The cells are filled with starch grains, prism-shaped granules and calcium oxalate crystals. The vascular bundles are simple, conjoint, collateral and in numbers of 15 - 20. Vascular bundles are arranged in a ring. The xylem lies on the outer side, it is surrounded by phloem in old stem. The phloem consists of parenchyma sieve

tubes, accompanying cells, fibre and phloem parenchyma. The phloem within is very small. Also, few cells of cambium are found in some of the vascular bundles. The xylem is made up of vessels, parenchyma xylem and tracheids. Some schizogenous cells are seen at the junction of xylem and phloem, and in the cortex region. Unaligned parenchymatous forms the large pith [10].

Fruit: The pericarp of the fruit is thin and membranous, consists of an outer layer of tangential and narrowly oblong thin walled parenchymal cells. The parenchyma cells show a periclinal division at certain places: the inner layer consists of a large, barrel-shaped cell with very thick inner tangential and radial walls, the thickened part appears to be “U” shaped in the cross-section [5].

Seeds: Triangular to rectangular in TS; testa is thick and brittle; thick and echinate cuticle is seen present followed by a narrow region of epidermis which consists of radially elongated cells with thick walls: inner to epidermis lies a broad, compact, thin, radially elongated palisade like cell layer; mesophyll tissue is shrunk, collapsed, and forms a membranous zone. Attachment is seen to the Inner layer at some locations, but sometimes seen separated; embryo is minute and is embedded in the mass of shrunken cotyledons [5].

Figure 1: *Cuscuta* on *Indigofera tinctoria* plant.

Photo credit: Herbal garden; National Research Institute of Unani Medicine for Skin Disorders, Hyderabad, India. Original photograph by author 1.

Figure 2: Aftimoon dried aerial parts of the plant.

Photograph by author 1.

Figure 3: *Cuscuta* on *Catharanthus roseus* plant.

Photo credit: Herbal garden; National Research Institute of Unani Medicine for Skin Disorders, Hyderabad, India. Original photograph by author 1.

Part used (*Ajza i mustamila*)

- Whole plant [2-6,9].
- Stem and seeds [11].

Temperament (*Mizaj*) [2-5,9]

Hot and dry with a variation in the degree of hotness and dryness as described according to renowned Unani physicians.

Dosage (*Miqdar Khorraq*) [2-5,9]

Various Unani physicians have advised the drug in different doses where the dose ranges from 3 gm to 21 gm.

Toxicity (*Muzir*) [2-4]

Harmful for people with condition of *Mirra-i-Şafrā'* (serous bile). Also harmful for people of hot temperament as it may cause irritability, nausea and vomiting. It is also *Muzir* (harmful) for lungs. Aftimoon due to its basic temperament causes dryness of mouth, irritability and thirst. Therefore, correctives are advised to be used long with the intake of drug.

Correctives (*Musleh*) [2-4]

- *Kateera* (*Tragacanth* gum)
- *Zafran* (*Crocus sativus*)
- *Roghan badam* (Almond oil)
- *Kasni* (*Cichorium intybus*) [4,9].

Substitute (*Badal*)

- *Ustukhuddus* (*Lavendula Stoechhus*) [3]
- *Basfajj* (*Polypodium vulgare*) [3]
- *Hasha* (*Thymus vulgaris*) [2,3]
- *Turbud* (*Ipmoea turpethum*) [2,10]
- *Afsanteen* (*Artemisia absinthium*) [4,9].

Compound formulations [5,10,12]

Sharbat Deenar, Itrifal Aftimoon, Sikanjbeen Aftimooni, Ma'jūn Najaah, Ma'jūn Chobchini, Arq e Musaffi.

Pharmacological actions and therapeutic uses

It is a good purgative for Balgham (phlegm), Sawdā' (black Bile) and *Ṣafrā* (yellow bile) and is useful in different ailments arising due to derangement of these humours specially sawda and balgham as mentioned in the classical Unani texts it is found useful in treat *Malikholia* (Melancholia), *Sara* (Epilepsy), *Kaboos* (Nightmare), *Falij* (Paralysis), *Laqwa* (Facial paralysis), *Khadar* (Numbness), *Waswas* (Anxiety), *Mania*, *Junoon* (Schizophrenia), *Deedan e am'a* (Intestinal worm infestation) and various skin diseases owing to its property of being *mushil i Sawdā'* (Purgative of Bile), *mushily i ballgham* (Purgative of Phlegm), *musaffi dam* (Blood Purifier), *mufatteh sudad* (deobstruent). *Mulattif* (Demulcent) *Muqawwi* (Tonic), *Mulattif* (demulcent), *Muhallil* (resolvent) [2,3,4,5,9,10]. It is reported to be used as blood purifier, emmenagogue, diuretic, aphrodisiac, expectorant, carminative, antihelmintic, sedative and the muscular and joint pain [7]. plant as a whole possesses antihelmintic purgative and alterative properties stem is useful in bilious

and liver disorders. Externally useful in itching and seeds are carminative and anodyne [6].

Phytochemical constituents

Phytochemical examinations have shown the presence of therapeutic compounds such as flavonoids, alkaloids, lignans, saponins, phenolics, tannins, resin and glycosides. Dulcitol, Luteolin, Quercetin A glycoside or luteolin [5]. Organic: Alkaloid, protein, flavonoids, resin, tannin, glycosides and carbohydrates. Inorganic: Aluminium, iron, calcium, sodium and potassium [10]. The seeds contain amarbelin and kaempferol like alkaloids. Stem has cuscutin, cuscutatin, luteolin, beta-sitosterol, bergenin and kaempferol [1]. A study for extracting the bioactive constituents from the different fractions of stems of *Cuscuta reflexa* Roxb. using GC-MS revealed two known and 12 unknown compounds [35]. Two tetrahydrofuran derivatives, Swarnalin and cis-swarnalin have been isolated in a study also reported for its free radical scavenging activity [16].

Therapeutic activities in *Cuscuta reflexa* Roxb

Experimental studies have shown that *Cuscuta* species have a wide range of biological activities, notably, anticancer, anti-inflammatory, immunomodulatory, antioxidants, antidiabetes, antiviral and anxiolytic etc.

Therapeutic activities	Extract used	Observation and Findings
Antioxidant activity	Alcoholic extract	A study on <i>Cuscuta reflexa</i> and <i>Cassytha filiformis</i> revealed that both possess antioxidant activity, in which <i>Cuscuta reflexa</i> is found more effective in scavenging free radicals and superoxide radical than the <i>Cassytha filiformis</i> [13].
Anti-HIV activity	Crude water extract	<i>Cuscuta reflexa</i> water extract exhibited anti HIV activity which could be due to combinatory effects with compounds of different modes of action [14].
Antibacterial activity	Methanolic extract	The methanol extract of <i>Cuscuta reflexa</i> exhibited anti-bacterial and free radicals scavenging activity [15,16].
Anti-cancerous activity	Water extract	Anti-cancer activity was analysed on Hep3B cells by MTT assay, DAPI staining, annexin V staining and SQ-RT PCR analysis of BAX, Bcl-2, p53 and survivin. The extract induced apoptosis in Hep3B cells through the up regulation of p53, BAX and down regulation of Bcl-2 and surviving [17].
Anti-tumor activity	Ethanol extract Chloroform extract	The results of the study revealed that chloroform and ethanolic extract of <i>Cuscuta reflexa</i> exhibit significant antitumor activity in mice comparable to standard used, 5-fluorouracil [18].
Anti-convulsant activity	Methanolic extract	The study showed that the methanol extract of <i>Cuscuta reflexa</i> significantly increased catecholamine levels in the brain mice after 6 weeks of dose-dependent therapy. The extract also substantially raised the levels of GABA, glutamine and glutamate relative to the control groups. It reveals that <i>Cuscuta reflexa</i> extract possesses anticonvulsant activity [19].
Hypoglycemic activity	Methanolic extract	<i>Cuscuta reflexa</i> Roxb. methanolic extract and its subsequent ethyl acetate fraction shows significant inhibition against α -Glucosidase enzyme. Inhibition of this enzyme prolongs the absorption time of glucose in the blood after a meal [20].
Diuretic activity	Aqueous extract Alcoholic extract	Both the extracts of <i>Cuscuta reflexa</i> is reported to show diuretic activity in wistar rat [21].

Antipyretic activity	Aqueous extract Ethanol extract	A study is reported in which at the dose of 400 mg/kg body weight the aqueous and ethanol extract reduced 79 % and 83.8 % respectively of the elevated rectal temperature in rat as compared to reference drug paracetamol (96.5 %) after 6 h of treatment. The ethanol extract was found to be slightly potent than the aqueous extract [22].
Hepatoprotective activity	Methanolic extract	The study with methanol extract of <i>Cuscuta reflexa</i> reduced the alkaline phosphatase as well as the total bilirubin levels, indicating its protective effect of liver and improvement of its function [23].
Anxiolytic activity	Methanolic extract	The study reports methanol extract of <i>Cuscuta reflexa</i> showed significant anxiolytic effect at doses 400 mg/kg and 200 mg/kg and could serve as a good anxiolytic agents and seems to be promising for the development of phytomedicines for anxiety [24].
Anti-inflammatory activity	Aqueous extract	A study is reported in which the water extract of <i>Cuscuta reflexa</i> was analysed in vitro. The study showed that <i>Cuscuta reflexa</i> inhibits lipopolysaccharide induced inflammatory responses in murine macrophage cell line (RAW264.7) through interplay of TNF- α , COX-2 and NF- κ B signalling [17].
Anthelmintic Activity	Petroleum ether extract Chloroform extract Methanol extract	A study is reported in which Crude extracts of <i>Cuscuta reflexa</i> shows a dose dependant inhibition of spontaneous motility (Paralysis) of earthworms (<i>Pheretima posthuma</i>) <i>in-vitro</i> . The petroleum ether, chloroform and methanol extracts have shown anthelmintic activity, which was compared with albendazole as reference drug. The exact mode of action and the constituents responsible for the anthelmintic activity needs to be investigated [25].

Original contributions with reference to studies on *Cuscuta reflexa* Roxb

Year	Study title	Result	Reference
1992	"Pharmacological Actions of <i>Cuscuta reflexa</i> ."	The study shows that the ethanol extract of <i>Cuscuta reflexa</i> causes a dose-dependent decreases in arterial blood pressure and heart rate in pentothal anesthetized rats. The Study also reports that the hypotensive and bradycardiac effects of <i>C. reflexa</i> are independent of cholinergic receptor stimulation or adrenergic receptor blockade. In spontaneously beating guinea-pig atria, <i>C. reflexa</i> it caused decreases in the force and rate of atrial contractions. In guinea-pig ileum, <i>C. reflexa</i> inhibited both acetylcholine- and histamine-induced contractions to a similar extent. <i>C. reflexa</i> also abolished spontaneous contractions of rat uterus. These data indicate that <i>C. reflexa</i> in a non-specific depressant on all the isolated tissues tested and this action is probably responsible for its hypotensive and bradycardiac effects observed <i>in vivo</i> .	[26]
2003	"Evaluation of psychopharmacological effects of petroleum ether extract of <i>Cuscuta reflexa</i> Roxb stem in mice".	The study reports that the extract treated mice show prolonged sleeping time, Sedation, decreased motor activity and has a CNS depressant effect.	[27]
2003	"Onset of puberty and ovarian steroidogenesis following administration of methanolic extract of <i>Cuscuta reflexa</i> Roxb. stem and <i>Corchorus olitorius</i> Linn. seed in mice."	The study reports that the methanolic extract of <i>Cuscuta reflexa</i> stem and <i>Corchorus olitorius</i> seed on the onset of reproductive causes a remarkable delay in sexual maturation as evidenced by the age at vaginal opening and appearance of first estrus (cornified smear) in extract treated mice as studied by means of biochemical techniques.	[28]
2005	"Hepatoprotective activity of <i>Cuscuta reflexa</i> extract on experimental liver damage in rats."	The study reveals that the ethanol extract of buds of <i>Cuscuta reflexa</i> , caused significant decreases in the CCl ₄ -induced elevated levels of, SGPT and ALP, indicating that it possess significant hepatoprotective activity against CCl ₄ -induced liver toxicity in rats .	[29]

2008	"Effect of <i>Cuscuta reflexa</i> Roxb on androgen-induced alopecia."	The study demonstrates that the petroleum ether extract of <i>Cuscuta reflexa</i> and its isolate is useful in treatment of androgen-induced alopecia by inhibiting the enzyme 5 α -reductase.	[30]
2010	"Effect of <i>cuscuta reflexa</i> stem and <i>calotropis procera</i> leaf extracts on glucose tolerance in glucose-induced hyperglycemic rats and mice."	In the study the hypoglycemic effects of chloroform and methanol extracts of whole plants of <i>Cuscuta reflexa</i> , and methanol extract of leaves of <i>Calotropis procera</i> were investigated in oral glucose tolerance tests in Long Evans rats and Swiss albino mice, respectively. Both methanol and chloroform extracts of <i>Cuscuta reflexa</i> whole plant demonstrated significant oral hypoglycemic activity in glucose-loaded rats in a dose dependent manner.	[31]
2012	"Ethnomedicinal, Antibacterial and Antifungal Potentiality of <i>Centella asiatica</i> , <i>Nerium indicum</i> and <i>Cuscuta reflexa</i> - Widely Used In Tiwa Tribe of Morigaon district of Assam, India".	In the study <i>Cuscuta reflexa</i> was found beneficial against the growth of <i>Staphylococcus aureus</i> .	[32]
2014	"A study on the extracts of <i>Cuscuta reflexa</i> Roxb. in treatment of cyclophosphamide induced alopecia".	The study with petroleum ether and ethanolic extract of <i>Cuscuta reflexa</i> at the dose 250 mg/kg in male swiss albino rats (Cyclophosphamide induced alopecia) shows hair regrowth. Histopathology and gross morphologic observations revealed active follicular proliferation.	[33]
2014	"Phytochemical investigation and evaluation of antimutagenic activity of the extract of <i>Cuscuta reflexa</i> Roxb. by Ames Test"	The study reports that the phytochemical investigation of methanol extract of <i>C. reflexa</i> Roxb. yielded three flavonoids Isorhamnetin, Isorhamnetin-3-O-glucoside and Isorhamnetin-3-O-robinobioside. The extract was reported to exhibit significant antimutagenic potential by Ames test against known positive mutagens 2-aminofluorine, 4-nitro-o-phenylenediamine and sodium azide against <i>Salmonella typhimurium</i> TA 98 and TA 100 bacterial strains.	[34]
2018	"Identification of bioactive constituents from different fractions of stems of <i>Cuscuta reflexa</i> Roxb. using GC-MS."	The study revealed two known compounds i.e. 2-Methoxy-4-vinyl phenol & Benzofuran-2,3-dihydro also 12 unknown compounds that are 3,5-di-tert-Butyl-4-hydroxyanisole; Hexatriacontane; n-Hexadecanoic acid; Scoparone; Hexadecanoic acid methyl ester; 1,3-Benzenediamine, N, N, N', N' tetramethyl; Phenol, 4 (3-hydroxypropenyl), 2-methoxy; Phenol, 2,4 bis (1,1dimethylethyl); 2,3,5,6-Tetramethyl para phenylene diamine; Retinoic acid-5,6-epoxy-5,6-dihydro; 2,4-Dihydroxy-2,5-dimethyl-3 (2H)furan-3-one; 2,3-dihydro-3,5-dihydroxy-6-methyl-2-Propyl-tetrahydro-pyran-3-ol; Pregn-4-ene-18-oic acid as some of the major compounds in its different fractions.	[35]
2019	"Effect of ethanolic extract of <i>Cuscuta reflexa</i> on high fat diet-induced obesity in Wistar rats".	The study shows that treatment with ethanolic extract of <i>Cuscuta reflexa</i> produced significant dose dependent decrease in the body weight, BMI, Lee's index, feed intake (in Kcal). Also caused reduction in the levels of serum TC, TG, LDL, VLDL and glucose and the level of HDL was enhanced as compared to HFD fed group. The results suggest that administration of <i>Cuscuta reflexa</i> can inhibit the development of obesity in HFD-induced obesity.	[36]
2020	"Effect of <i>Cuscuta reflexa</i> extract on Experimentally Induced Hypertension in normal and Streptozotocin Induced Diabetes in Rats".	The study shows <i>Cuscuta reflexa</i> possess significant antidiabetic activity and antihypertensive activity in experimentally induced hypertension in normal and streptozotocin induced diabetic rats.	[37]

Materials and Methods

Review of literature was done referring to classical Unani literature and scholarly articles and an account of published original work done.

Discussion

This article reviewed the literature about Aftimoon in detail for its pharmacological characteristics and traditional uses thereby illustrating, focusing and enhancing the knowledge about its efficacy and effectiveness. Traditional medicines, like the Unani medicine system, have been using this plant as medicine in the form of single and compound formulation since ancient times, based on well-established literature and its use on the basis of experience by various Unani renowned scholars suggesting its effectiveness; however, clinical evidence and Published data in the field of Unani medicine has yet to be achieved in terms of evidence based scientific studies.

Conclusion

The various pharmacological activities of *Cuscuta reflexa* have been extensively reviewed in the article as apparent through the studies mentioned above. *Cuscuta reflexa* is a quite promising drug though it is a plant parasite but can be promoted for being use as alternative source of medicine in various ailments. In the Unani classical texts a vast details on uses and pharmacological activities have been mentioned yet there is a need for generating evidence by performing trials and yet providing the ailing masses with a great deal of healing through natural sources generating and firming up the research in the field of Unani system of medicine.

Financial Interest

No financial interest.

Conflict of Interest

No conflict of interest.

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