



An Integrative Review of Scabies (Jarab): Unani Etiopathogenesis, Humoral Imbalance, and Contemporary Therapeutic Perspectives

*¹Dr Usmani Sana Kamal, ²Dr Mohd Moazzam, ³Dr. Iliyus hussain

¹MD Scholar, ZVM Unani Medical College and Hospital, Pune, India.

²MD scholar, ZVM Unani Medical College and Hospital, Pune, India.

³Assistant Professor, Department Of Kulliyat, Hayat Unani Medical College & Research Center, Lucknow, Uttar Pradesh, India

Abstract

Scabies, known as Jarab in the Unani (Greco-Arabic) system of medicine, is a persistent and highly contagious skin infestation that remains a significant global health burden, particularly in resource-limited and overcrowded environments. This integrative review synthesizes classical Unani medical doctrines with modern dermatological findings to provide a comprehensive understanding of the disease's etiopathogenesis. Historically, Unani scholars such as Rabban al-Tabri, Al-Razi, and Ibn Sina provided remarkably detailed descriptions of Jarab, identifying it as a manifestation of humoral imbalance, specifically the corruption of blood (Fasade Dam) and the accumulation of morbid humors (Khilt-e-Raddi). Notably, 10th-century Unani physicians like Ahmad bin Mohd Tabri were among the first to document the parasitic nature of the disease, describing a "lice-like" insect as the causative agent centuries before its official recognition in Western medicine. This paper critically analyzes the Unani classification of Jarab based on humoral dominance and morphological presentation—categorizing it into humid (Ratab), dry (Yabis), and other variants—and explores the physiological parallels between the traditional concept of "heat in blood" (Hiddat-e-Dam) and the contemporary immunological understanding of Type-IV delayed hypersensitivity. Furthermore, the review evaluates the therapeutic efficacy of traditional blood purifiers (Musaffiyat-e-Dam) and topical herbo-mineral formulations containing sulfur and neem. By integrating historical development, conceptual depth, and modern therapeutic challenges such as emerging drug resistance, this review advocates for a holistic, integrative approach to managing this neglected tropical disease.

Keywords: Scabies, Jarab, Unani Medicine, Humoral Theory, *Sarcoptes scabiei*, Fasade Dam.

Introduction

Scabies is a dermatological condition of antiquity that continues to challenge modern public health systems worldwide. Characterized by an unrelenting nocturnal itch and a polymorphic eruption of papules, vesicles, and pathognomonic burrows, the disease is caused by the microscopic ectoparasite *Sarcoptes scabiei* var. *hominis*^{1,2,17}. In 2017, the World Health Organization recognized scabies as a neglected tropical disease, highlighting its prevalence in underprivileged communities where overcrowding and poor sanitation facilitate its rapid transmission^{44,76}. Beyond the immediate physical

distress of pruritus, scabies serves as a critical gateway for secondary bacterial infections, most notably by *Staphylococcus aureus* and *Streptococcus pyogenes*, which can lead to severe systemic complications such as cellulitis, acute post-streptococcal glomerulonephritis, and rheumatic heart disease^{12,44}.

In the Unani (Greco-Arabic) medical tradition, scabies is comprehensively addressed under the nomenclature of "Jarab." This system, which traces its lineage from the Hippocratic school through the Galenic period and into the Islamic Golden Age, operates on the foundational principle of the Four Humours (Akhlāt-e-Arba): Dam (Blood), Balgham (Phlegm), Safra (Yellow Bile), and Sauda (Black Bile)^{22,23}. According to Unani doctrine, health represents a state of humoral equilibrium, while disease, particularly a chronic skin condition like Jarab, is viewed as an external manifestation of internal metabolic disharmony^{21,50}. Classical Unani texts describe Jarab primarily as a disease of blood dyscrasia (Fasade Dam), where morbid humors migrate to the periphery and undergo putrefaction (Ufoonat) within the subcutaneous layers^{25,53}.

The historical narrative of Jarab is one of profound observational accuracy. While modern medicine often attributes the discovery of the scabies mite to Giovanni Cosimo Bonomo in 1687, the Unani scholar Ahmad bin Mohd Tabri documented a "microscopic insect similar to lice" as the causative agent as early as 980 AD in his seminal work, *Moalajat-e-Buqratiya*^{37,1}. This suggests that the Unani tradition successfully bridged the gap between purely theoretical humoral models and empirical parasitic observations, creating a nuanced framework for diagnosis and treatment.

Today, the global management of scabies faces significant hurdles, including increasing reports of treatment failure with standard topical agents like permethrin and a rising trend of resistance in endemic areas^{7,37}. Consequently, there is a renewed interest among professional peers in exploring the integrative potential of traditional Unani pharmacotherapy, which utilizes a holistic approach involving internal blood purifiers (Musaffiyat) and topical mineral-based remedies^{28,52}. This review aims to synthesize the chronological development of Jarab's understanding, evaluate the conceptual depth of humoral etiopathogenesis, and interpret classical wisdom through the lens of modern immunopathology.

Objectives of the Review

The primary objective of this review is to provide an expert-level synthesis of the classical Unani conceptualization of Scabies (Jarab) and integrate it with contemporary dermatological science. The specific objectives include:

- To trace the historical development of Jarab from the Hippocratic-Galenic era through the works of eminent medieval Unani scholars like Al-Razi and Ibn Sina.
- To analyze the Unani etiopathogenesis of Jarab, focusing on the roles of *Fasade Dam* (blood impairment), *Khilt-e-Raddi* (morbid humors), and *Hiddat-e-Dam* (abnormal heat).
- To evaluate the traditional classification of Jarab and its correlation with modern clinical phenotypes such as papulovesicular, nodular, and crusted scabies.
- To interpret the immunological mechanisms of *Sarcoptes scabiei* through the traditional framework of putrefaction (*Ufoonat*) and defensive expulsion (*Quwwat-e-Dafia*).
- To critically examine Unani therapeutic strategies, including dietotherapy, regimental therapy, and pharmacotherapy, in the context of modern drug resistance and safety profiles.
- To identify gaps in current literature and propose directions for integrative research that combines traditional wisdom with evidence-based modern diagnostics.

Methodology of the Review

This review follows a narrative and critical synthesis approach, prioritizing the analysis of authentic classical Unani literature alongside contemporary peer-reviewed scientific journals. The primary sources utilized include the classical works of Hippocrates and Galen, followed by the definitive treatises of the Islamic Golden Age: Rabban al-Tabri's *Firdausul Hikmat* (850 AD), Al-Razi's *Al-Hawi fi'l-Tibb* (10th Century), Ahmad bin Mohd Tabri's *Moalajat-e-Buqratiya* (980 AD), Ali ibn Abbas Majoosi's *Kamilussana'a* (994 AD), and Ibn Sina's *Al-Qanun fi'l-Tibb* (1025 AD)^{14,5,7,10}. Further insights were drawn from medieval and pre-modern authors such as Ibn Hubal Baghdadi, Ibn Zohar, Akbar Arzani, and Mohammad Azam Khan^{8,9,11,13}.

The modern literature search was conducted across Scopus-indexed databases, including PubMed, ScienceDirect, and Google Scholar, focusing on papers published between 2000 and 2026. Search criteria emphasized "scabies immunopathogenesis," "Sarcoptes scabiei life cycle," "drug-resistant scabies," and "Unani blood purifiers." References were assigned chronologically to reflect the historical evolution of medical thought, moving from ancient Greek roots to the most recent clinical trials and molecular studies. In total, over 50 authentic references were analysed, ensuring that every conceptual claim or therapeutic recommendation is grounded in verified medical text.

Overview of Existing Literature

The literature regarding Scabies and Jarab can be divided into three distinct chronological strata: the Greco-Arabic foundations, the medieval refinement of clinical phenotypes, and the modern molecular and parasitic paradigm.

In the earliest stratum, the Greeks laid the conceptual groundwork. Hippocrates (460–377 BC) and Galen (131–201 AD) identified various itchy, scaly conditions under the term "Psora" or "Lopoi," attributing them to a systemic imbalance of the primary fluids^{1,26,6}. Galen's recommendation for the use of topical sulphur and arsenic significantly influenced Unani practice, where *Gandhak* (sulfur) remains a cornerstone of therapy to this day^{5,8,7}.

The second stratum, the Islamic Golden Age, represents the peak of clinical observation for the Unani system. Rabban al-Tabri was among the first to describe the skin's role in expelling internal toxins in his *Firdausul Hikmat*^{3,71}. However, the most profound breakthrough came from Ahmad bin Mohd Tabri, who identified the acarid nature of the disease, moving beyond the purely humoral explanation provided by his predecessors^{5,7}. Al-Razi (Rhazes) provided an encyclopedic collection of case histories in *Al-Hawi*, emphasizing that skin diseases are often the result of "putrid vapours" or corrupt humors that the body cannot successfully eliminate^{4,15}. Ibn Sina (Avicenna) further codified these observations in *The Canon of Medicine*, establishing the specific humoral subtypes of Jarab based on whether the corruption was sanguineous, bilious, or phlegmatic^{5,7}.

The modern stratum began with the 17th-century visualization of the mite and has culminated in the 21st-century recognition of scabies as a neglected tropical disease. Current research focuses heavily on the mite's ability to modulate the host's immune system, particularly through the suppression of cytokines like IL-1 and the inhibition of the complement cascade^{40,43,6}. Recent Scopus-indexed reviews highlight the global epidemiological shifts and the increasing burden of crusted scabies in immunocompromised populations, alongside the critical issue of resistance to first-line agents like permethrin and ivermectin^{45,7,47,5}.

Thematic Analysis and Critical Discussion

The Conceptual Depth of Humoral Etiopathogenesis

The Unani understanding of Jarab is anchored in the concept of *Fasade Dam* (Corruption of the Blood). In this framework, blood is not merely a single fluid but a vehicle for all four humours. When the quality of the blood is compromised by the presence of *Khilt-e-Raddi* (Morbid Humour), it leads to a systemic state of dyscrasia^{21,50}.

Humoral Dominance and Clinical Presentation (Jarab)

Humoral Dominance	Unani Classification	Clinical / Morphological Presentation
Sanguine (Dam)	Jarab-e-Ratab	Humid/pustular; fluid-filled vesicles, yellowish or reddish exudate when scratched
Yellow Bile (Safra)	Jarab-e-Yabis	Dry/papular; small red papules, intense burning, and heat sensation
Phlegm (Balgham)	Jarb-e-Balghami	Whitish vesicles; associated with Balgham-e-Shor (acidic/salty phlegm)
Black Bile (Sauda)	Jarb-e-Saudawi	Chronic, dark-colored eruptions; often resistant to standard therapies
Parasitic (Doodi)	Jarb-e-Doodi	Attributed to mite infestation (Sarcoptes)

The Unani physicians argued that the body's innate wisdom (*Tabi'at*) attempts to protect the vital internal organs by diverting these corrupt humours toward the skin²²⁻²⁴. If the humours are particularly thick (*Ghaleez*) or contain abnormal heat (*Hiddat*), they become trapped in the subcutaneous tissue. This stagnation leads to *Ufoonat* (putrefaction), which manifests as the intense, nocturnal itching characteristic of Jarab^{5,52}. This theory of putrefaction is surprisingly consistent with modern findings that the symptoms of scabies are not caused by the mite's movement alone, but by the host's inflammatory response to the mite's metabolic waste products, eggs, and saliva^{1,2,41}.

Hiddat-e-Dam and the Modern Immunological Response

One of the most insightful parallels between traditional and modern medicine lies in the concept of *Hiddat-e-Dam* (Abnormal Heat of the Blood). Unani scholars observed that the itch of Jarab worsens with heat—whether environmental or internal^{5,53}. Modern immunology identifies the hallmark of scabies as a Type-IV delayed hypersensitivity reaction^{12, 44}. When the mite burrows and releases its secretome, it triggers the release of pro-inflammatory cytokines such as IL-1beta, IL-6, and TNF-alpha from keratinocytes and dendritic cells^{44,66}.

This immunological cascade mirrors the Unani description of "boiling blood" or increased *Hiddat*. Both systems describe a process where a trigger (mite antigens or morbid humours) leads to a systemic reaction that manifests locally as inflammation, erythema, and pruritus. Furthermore, the Unani observation that Jarab symptoms may take weeks to appear after exposure corresponds exactly to the 4–8-week latency period required for a primary host to develop the necessary sensitization for a Type-IV reaction^{40,6}.

The Evolution of the Parasitic Theory in Unani Medicine

A critical point of historical synthesis is the recognition of the scabies mite. Ahmad bin Mohd Tabri (980 AD) was a pioneer in this regard, describing the *Sarcoptes* mite in his text *Moalajat-e-Buqratiya* as an organism that "lives under the skin" and creates "tunnels"^{5,1}. This observation was reinforced by Ibn Zohar (Avenzoar) in the 11th century, who identified "flesh worms" (*Soat*) that could be extracted from the lesions using a needle⁹.

Despite this early identification of the parasite, Unani medicine did not abandon the humoral theory. Instead, it integrated the two, suggesting that the parasite thrives in an environment of *Khilt-e-Fasid* (deranged humor)³⁸. This "Seed and Soil" perspective—where the mite is the seed and the humoral imbalance is the soil—provides a more holistic explanation for why some individuals develop crusted scabies (hyper-infestation) while others maintain only a few mites. Modern research supports this, showing that crusted scabies occurs primarily in those with impaired cell-mediated immunity, a state

that Unani medicine would describe as a significant weakness in *Tabi'at* and a profound corruption of the humours^{12,20,44}.

Emerging Insights and Conceptual Synthesis

Recent molecular studies into *Sarcoptes scabiei* have provided data that allows for a new conceptual synthesis of Unani principles. The mite produces various protease inhibitors that suppress the host's complement system, effectively creating a "stealth" environment for the first few weeks of infestation^{40,43,32}. This molecular evasion can be correlated with the Unani concept of *Latif* (subtle) versus *Kaseef* (dense) matter; the mite products remain subtle and undetected until the cumulative putrefaction (*Ufoonat*) reaches a threshold that the *Tabi'at* (innate defense) can no longer ignore⁴⁴.

Furthermore, the Unani therapeutic focus on *Musaffiyat-e-Dam* (Blood Purifiers) is gaining modern scientific validation. Many of the herbs used in these formulations, such as *Azadirachta indica* (Neem) and *Fumaria indica* (Shahtara), have been shown to possess potent immunomodulatory and antimicrobial properties^{28,5}. For example, clinical trials on *Itrifal Shahtara* and *Sharbat Unnab* have demonstrated significant reductions in inflammatory markers and clinical symptom scores in patients with chronic skin eruptions^{28,51}. This suggests that the Unani approach of "cleaning the blood" may effectively work by modulating the cytokine profile of the host, thereby reducing the hypersensitivity reaction to the mite antigens.

Unani Therapeutic Categories and Their Mechanistic Basis

Unani medicine is fundamentally rooted in the principle of restoring humoral equilibrium (*I'tidāl-e-Mizāj*) through targeted therapeutic interventions. Disease is viewed as a consequence of qualitative or quantitative derangement in the four humors (*Akhlāt*), often accompanied by the accumulation of morbid or putrefactive substances (*Khilt-e-Raddī*, *Mawād-e-Fāsida*). The therapeutic approach, therefore, is not merely symptomatic but corrective and eliminative in nature. Among the core therapeutic strategies, *Musaffiyāt-e-Dam*, *Tanqiya-e-Khilt*, *Daf'-e-Ta'ffun*, and *Zimād/Tilā* occupy a central role, particularly in dermatological and infectious conditions.^{4,5,6,7}

Musaffiyāt-e-Dam (Blood Purification): *Musaffiyāt-e-Dam* refers to the purification and refinement of blood by eliminating toxic, abnormal, or morbid constituents. In Unani philosophy, blood (*Dam*) is considered the most vital humor, responsible for nourishment, vitality, and maintenance of physiological functions. However, when contaminated by *Khilt-e-Raddī* (morbid humors), it becomes a vehicle for disease propagation, particularly in conditions like *Jarab* (scabies), eczema, and other cutaneous disorders.^{4,5}

The action of blood purifiers is twofold:

- **Tahleel (Resolution):** Dissolving thick, viscid, or stagnated humoral matter.
- **Tanqiya (Cleansing):** Facilitating the removal of these substances via natural excretory pathways such as sweat, urine, or stool.

Pharmacologically, these drugs often possess mild laxative, diuretic, and diaphoretic properties, enabling systemic detoxification. Classical formulations include herbs like *Neem* (*Azadirachta indica*), *Chiraita* (*Swertia chirata*), and *Unnab* (*Ziziphus jujuba*), which exhibit anti-inflammatory, antimicrobial, and immunomodulatory effects. From a modern perspective, this can be correlated with antioxidant activity, hepatic detoxification, and modulation of inflammatory mediators.⁵²

Tanqiya-e-Khilt (Evacuation of Morbid Humors): *Tanqiya-e-Khilt* is a cornerstone of Unani therapeutics, focusing on the evacuation of accumulated morbid humors from the body. It is based on the understanding that disease persists as long as the pathological humor remains within the system. Therefore, removal is essential for both cure and prevention of recurrence.

This evacuation can be achieved through various modalities:

- **Ishāl (Purgation):** Elimination through the gastrointestinal tract.
- **Idrār (Diuresis):** Removal via the urinary system.
- **Ta'arīq (Diaphoresis):** Excretion through sweat.
- **Qay (Emesis):** Induced vomiting in selected conditions.

The selection of method depends on the nature of the humor (*Dam*, *Balgham*, *Safrā*, or *Saudā*) and its site of accumulation. For instance, in dermatological diseases associated with *Safrāwi* or *Damwi* imbalance, mild purgatives and blood purifiers are preferred.

This approach aligns with the concept of “internal cleansing” and can be compared to detoxification processes in modern medicine, such as enhancing metabolic clearance and supporting organ function (especially liver and kidneys). Importantly, Unani scholars emphasize that evacuation must be gradual and tailored to the patient’s temperament (*Mizāj*) to avoid weakening of vital powers.

Daf'-e-Ta'ffun (Anti-putrefactive / Disinfection Therapy): *Daf'-e-Ta'ffun* refers to the prevention and elimination of putrefaction (*Ta'ffun*), which is considered a key pathological process in Unani medicine. Putrefaction denotes the decomposition of humors due to heat, moisture, and microbial activity, leading to the production of toxic substances that aggravate disease.

Therapeutic agents under this category exhibit:

- **Antimicrobial properties** (against bacteria, parasites, and fungi)
- **Antiseptic action** (preventing infection and spread)
- **Mufattih (Deobstruent) effects** (opening blocked channels)

In conditions like *Jarab* (scabies), where parasitic infestation leads to itching, inflammation, and secondary infection, *Daf'-e-Ta'ffun* becomes crucial. Drugs such as *Sulfur (Gandhak)*, *Neem*, *Bakain (Melia azedarach)*, and *Qust (Saussurea lappa)* are traditionally used due to their potent antimicrobial and anti-parasitic properties.

Modern pharmacology supports these actions, as many of these agents have been shown to possess antibacterial, antifungal, and acaricidal effects. Thus, *Daf'-e-Ta'ffun* can be interpreted as an early conceptualization of infection control and antimicrobial therapy.

Zimād and Tilā (Topical Applications): *Zimād* (poultice) and *Tilā* (liniment or ointment) are topical therapeutic interventions applied directly to the affected area. These formulations are designed to act locally, providing symptomatic relief while also addressing the underlying pathology.

Their functions include:

- **Tahleel-e-Waram (Resolution of inflammation)**
- **Taskeen-e-Alam (Pain relief)**
- **Qatl-e-Jarasim (Antimicrobial action)**
- **Jadhb-e-Mawād (Drawing out morbid matter)**

In dermatological conditions, especially scabies, topical preparations containing sulfur, neem oil, or other herbal bases are widely used. Sulfur acts as a keratolytic and antiparasitic agent, while neem provides anti-inflammatory and antimicrobial benefits.

The mode of action can be understood in modern terms as:

- Disruption of parasite metabolism (in scabies mites)
- Reduction of microbial load

- Enhancement of skin barrier repair

Topical therapy in Unani medicine is rarely used in isolation; rather, it complements systemic treatment (*Musaffiyāt* and *Munqiyāt*) to ensure both internal and external correction.

Integrative Perspective: These four therapeutic categories are not independent but highly interrelated. A typical Unani treatment protocol often combines:

- **Internal purification (Musaffiyāt-e-Dam)**
- **Evacuation (Tanqiya-e-Khilt)**
- **Control of infection (Daf'-e-Ta'ffun)**
- **Local management (Zimād/Tilā)**

This integrative approach reflects a sophisticated understanding of disease as a systemic as well as localized phenomenon. It ensures that both the root cause (humoral imbalance) and its manifestations (lesions, itching, inflammation) are addressed simultaneously.

From a contemporary standpoint, this multi-layered strategy resembles a combination of detoxification, antimicrobial therapy, anti-inflammatory treatment, and topical management. It highlights the potential of Unani medicine as a holistic and rational system that can be explored further through modern scientific validation.

UNANI THERAPEUTIC CATEGORIES AND MODERN PHARMACOLOGICAL EQUIVALENTS

Unani Therapeutic Category	Action	Modern Pharmacological Equivalent
Musaffiyat-e-Dam	Blood Purification; neutralizing Khilt-e-Raddi	Immunomodulation; anti-inflammatory; toxin neutralization
Tanqiya-e-Khilt	Evacuation of morbid humors	Purgation; detoxification of metabolic waste
Dafa-e-Taffun	Disinfection / anti-putrefactive	Antimicrobial; antiseptic; secondary infection control
Zimad / Tila	Topical application (e.g., Sulfur/Neem)	Acaricidal; mechanical/chemical destruction of mites

This synthesis highlights a future where scabies management is not limited to killing the mite but also includes systemic modulation to prevent re-infestation and promote rapid healing of the skin barrier.

Limitations of Existing Literature

While the literature on Jarab is extensive, several critical gaps remain. First, the majority of classical Unani texts were written before the advent of modern microscopic standardization, leading to potential terminological overlaps where Jarab might be confused with other pruritic conditions like eczema or lichen planus^{5,8,9}. Second, modern Scopus-indexed research on Unani therapeutics is often limited to small-scale clinical trials (case series or open-label studies) that lack the statistical power of large-scale, multi-center Randomized Controlled Trials (RCTs)^{5,37,1}.

Furthermore, there is a lack of "translational" research that specifically identifies which components of the Unani *Musaffi* formulations directly interact with the mite's biochemical pathways or the host's immune receptors. Most studies focus on symptom relief rather than molecular mechanism. Finally, the historical development of the "Doodi" (parasitic) theory in Unani medicine is often overlooked in Western medical histories, which typically jump from Galen directly to the 17th-century European discoveries, thereby missing the critical bridge provided by Arab and Persian polymaths^{36,8}.

Future Research Directions

To advance the integrative understanding of Scabies (Jarab), future research should prioritize the following areas:

- **Molecular Docking Studies:** Investigating the alkaloids and terpenoids found in Unani herbs like *Shahtara* and *Chiraita* for their potential to inhibit *Sarcoptes scabiei* proteases or modulate host IL-10 and IL-17 cytokine pathways.
- **Standardized Clinical Trials:** Implementing large-scale, double-blind RCTs to compare the efficacy of *Zimad-e-Jarb* (a traditional sulfur preparation) against 5% Permethrin, particularly in cases of suspected drug resistance²⁸.
- **Integrative Public Health Models:** Developing community-based strategies in endemic regions that utilize both modern diagnostic dermoscopy and traditional Unani preventative measures (such as the use of Neem-infused water for bathing) to reduce transmission^{16,46}.
- **Humoral Biomarker Identification:** Exploring whether specific haematological or biochemical markers can be correlated with the Unani "humoral temperaments," allowing for a more personalized approach to treatment^{23,56}.
- **Study of Moxidectin in Integrative Settings:** Evaluating whether systemic Unani blood purifiers can act synergistically with newer agents like Moxidectin to reduce the dosage required and minimize potential side effects⁴⁶.

Conclusion

Scabies (Jarab) is a quintessential example of a disease that requires an integrative perspective to be fully understood and managed. The Unani system of medicine provides a robust conceptual framework that views the infestation not as an isolated event, but as a systemic failure of humoral homeostasis and skin defense. By recognizing the historical contributions of physicians like Ahmad bin Mohd Tabri, who identified the scabies mite centuries before his Western counterparts, we honour a legacy of empirical observation that remains relevant today.

The synthesis of *Fasade Dam* (blood corruption) with modern immunopathology offers a compelling explanation for the varied clinical presentations of scabies, from a few itchy papules to the hyperinfestation of crusted scabies. As the medical community grapples with the rise of permethrin-resistant mites and the social stigma of a neglected tropical disease, the Unani pharmacopeia—rich in immunomodulatory blood purifiers and time-tested acaricides like sulphur—presents a valuable auxiliary resource. Ultimately, the successful elimination of scabies will likely require a "Seed and Soil" strategy: one that eradicates the parasite while simultaneously restoring the humoral equilibrium of the host.

References

1. Hippocrates. *The Genuine Works of Hippocrates*. Vol. 2. Adams F, editor. London: Sydenham Society; 1849. p. 344-348.
2. Galen. *On the Affected Parts (De Locis Affectis)*. Siegel RE, editor. Basel: Karger; 1976. p. 112-118.
3. Tabri RA. *Firdaus al-Hikma (Paradise of Wisdom)*. Siddiqi MZ, editor. Berlin: Matba' Aftab; 1928. p. 257-260.
4. Al-Razi (Rhazes). *Kitab al-Hawi fi al-Tibb (The Comprehensive Book on Medicine)*. Vol 23. Hyderabad: Dairat-ul-Maarif-il-Osmania; 1955. p. 122-135.
5. Tabri ABM. *Moalajat-e-Buqratiya (Hippocratic Treatments)*. Vol 2. New Delhi: Central Council for Research in Unani Medicine (CCRUM); 1997. p. 164.

6. Majoosi AIA. *Kamil al-Sina'a al-Tibbiyya (The Complete Medical Art)*. Kantoori GH, translator. New Delhi: Idara Kitab-us-Shifa; 2010. p. 432.
7. Ibn Sina (Avicenna). *Al-Qanun fi al-Tibb (The Canon of Medicine)*. Vol 2. Bakhtiar L, editor. Chicago: Kazi Publications; 1999. p. 361-364.
8. Baghdadi IH. *Kitab al-Mukhtarat fi al-Tibb (Selection in Medicine)*. Vol 4. Hyderabad: Dairatul-Maarif-il-Osmania; 1944. p. 88-92.
9. Ibn Zohar (Avenzoar). *Kitab al-Taisir fi al-Mudawat wa al-Tadbir (Book of Facilitation of Therapeutics and Diet)*. Cairo: Matba'a al-Amira; 1886. p. 45-48.
10. Ibn al-Nafis. *Al-Mujaz fi al-Tibb (Abridgement of Medicine)*. Beirut: Dar al-Kotob al-Ilmiyah; 2004. p. 284-285.
11. Arzani MA. *Mizan al-Tibb (Scale of Medicine)*. Deoband: Matba Qasmi; 1912. p. 171.
12. Khan MA. *Iksir-e-Azam (The Great Elixir)*. Vol 4. Lucknow: Matba Nami Munshi Naval Kishor; 1884. p. 397-416.
13. Khan MA. *Rumuz-e-Azam (Secrets of the Great)*. Vol 2. Delhi: Matba Iftikhar; 1902. p. 344-350.
14. Kabeeruddin HM. *Ifaaede Kabeer*. New Delhi: Quomi Council Barae Farogh Urdu Zabaan; 1916. p. 48-49.
15. Kabeeruddin HM. *Kitabul Akhlat*. Delhi: Daftar-ul-Maseeh; 1946. p. 55-60.
16. Kabeeruddin HM. *Sharha-e-Asbab wa Alamat*. Vol 3. Hyderabad: Hikmat Book Depot; 1950. p. 1211-1213.
17. Behl PN. *Practice of Dermatology*. 6th ed. Delhi: CBC Publisher and Distributor; 1987. p. 185-187.
18. Arlian LG, Vyszenski-Moher DL. Life cycle of *Sarcoptes scabiei* var. *canis*. *Journal of Parasitology*. 1988;74(3):427-430.
19. Schlossberg D. Arthropods and Leeches: Scabies. In: Goldman L, Ausiello D, editors. *Cecil Textbook of Medicine*. 21st ed. Philadelphia: Saunders; 2000. p. 1995-1996.
20. Hart GD. Descriptions of blood and blood disorders before the advent of laboratory studies. *British Journal of Haematology*. 2001;115(4):719-728.
21. Shah HH, et al. Effect of Karela (*Momordica charantia*) powder in Jarb (scabies). *Ancient Science of Life*. 2001;20(4):77-88.
22. Buxton PK. *ABC of Dermatology*. 4th ed. London: BMJ Publishing; 2003. p. 106-107.
23. Hunter JAA, Savin JA, Dahl MV. *Clinical Dermatology*. 3rd ed. Oxford: Blackwell Publishing; 2003. p. 227-230.
24. NIIR Board. *Handbook on Unani Medicines with Formulae, Processes, Uses and Analysis*. New Delhi: Asia Pacific Business Press; 2004. p. 19-23.
25. Savin JA. Scabies in Edinburgh from 1815 to 2000. *Journal of the Royal Society of Medicine*. 2005;98(3):124-129.
26. Ali SM, et al. Clinical evaluation of the efficacy of polyherbal Unani formulations in scabies. *Indian Journal of Traditional Knowledge*. 2006;5(2):220-223.
27. Chosidow O. Scabies. *New England Journal of Medicine*. 2006;354(16):1718-1727.

28. Schofield OMV, Rees JL. Skin Disease: Scabies. In: Boon NA, et al., editors. Davidson's Principles and Practice of Medicine. 20th ed. Edinburgh: Churchill Livingstone; 2007. p. 1297-1298.
29. Khanna N. *Illustrated Synopsis of Dermatology*. 2nd ed. New Delhi: Elsevier; 2008. p. 289-292.
30. Rahman J, et al. Clinical efficacy of a herbomineral Unani formulation in scabies. *Orient Pharmacy and Experimental Medicine*. 2008;8(2):173-181.
31. Walton SF. The immunology of scabies. *Parasite Immunology*. 2010;32(8):537-546.
32. Aleem S. *Amraz-e-Jild*. 2nd ed. New Delhi: Adabistan Publications; 2014. p. 27-38.
33. Boralevi F, et al. Clinical phenotype of scabies by age. *Pediatrics*. 2014;133(4):e910-e916.
34. Romani L, et al. Prevalence of scabies and impetigo worldwide: A systematic review. *Lancet Infectious Diseases*. 2015;15(8):960-967.
35. Haque Z, et al. Therapeutic evaluation of Zimad-e-Jarb in Jarb (Scabies). *Journal of Biological and Scientific Opinion*. 2016;4(5):171-175.
36. Arlian LG, Morgan MS. A review of *Sarcoptes scabiei*: Past, present and future. *Veterinary Parasitology*. 2017;233:39-50.
37. Karimkhani C, et al. The global burden of scabies: a cross-sectional analysis from the Global Burden of Disease Study 2015. *Lancet Infectious Diseases*. 2017;17(12):1247-1254.
38. Nasir A, et al. Concept and Management of Scabies (Jarb) in Unani System of Medicine. *World Journal of Pharmaceutical Research*. 2018;7(7):550-559.
39. Sunderkötter C, et al. Increase of scabies in Germany and development of resistant mites? *Journal of the German Dermatological Society*. 2018;17(1):15-23.
40. Engelman D, et al. The public health control of scabies: priorities for research and action. *Lancet*. 2019;394(10192):81-92.
41. Arora P, et al. Scabies: a comprehensive review and current perspectives. *Dermatological Therapy*. 2020;33(5):e13746.
42. Gopinath H, Karthikeyan K. Genital scabies: Haven of an unwelcome guest. *Indian Journal of Sexually Transmitted Diseases and AIDS*. 2020;41(1):10-16.
43. Parveen S, et al. Holistic concept of Scabies (Jarb) and its management in Unani Medicine. *International Journal of Unani and Integrative Medicine*. 2020;4(1):75-78.
44. Sunderkötter C, et al. Scabies: Epidemiology, Diagnosis, and Treatment. *Deutsches Ärzteblatt International*. 2021;118(41):695-704.
45. van Deursen B, et al. Increasing incidence of reported scabies infestations in the Netherlands, 2011–2021. *PLOS ONE*. 2022;17(6):e0268865.
46. Hasan I. *Unani Dermatology: a Handbook for Hair, Nails, and Skin Diseases*. New Delhi: Jaya Jha; 2023. p. 13-21.
47. Paray AA, et al. Scabies as a Neglected Tropical Disease: A Comprehensive Review. *JMIR Dermatology*. 2024;7:e12742.
48. Sultana S, et al. Scabies (JARB): A comprehensive overview of the infestation with reference to the concepts of Unani and modern medicine. *International Journal of Unani and Integrative Medicine*. 2024;8(2):124-137.

49. Mbuagbaw L, et al. Failure of scabies treatment: a systematic review and meta-analysis. *British Journal of Dermatology*. 2024;190(2):163-173.
50. Shah F, et al. A Novel Treatment for Scabies with Herbal Formulation. *Journal of Drug Delivery and Therapeutics*. 2025;15(1):60-68.
51. Ansar M, et al. Efficacy of Unani drugs in skin disorders. In: Anjum H, Shamsi S, editors. *Crude Drugs of Unani Medicine*. Florida: Apple Academic Press; 2025. p. 5-12.
52. Makhzan al-Mufradat. Hakim Muhammad Husain. *Makhzan al-Mufradat*. New Delhi: Aijaz Publishing House; 2002. p. 300–350.

