

# Dew Water of Tamarisk Leafs (Salt Cedar) for Treating Warts Infection in Libya

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## Abstract

Warts are caused by Human papiloma virus which causes a skin infection in all ages, it is un-convenient, if not treated by using the relevant medicine. Tamarisk is a plant commonly known as Salt cedar or, (Athal in Arabic region), which belongs to the Tamaricaece species, the presence of high content of phytochemical compounds like polyphenolics and flavonoids, is a potential source of antioxidant, anti-inflammatory and antiproliferative properties, that seems to have secrete medication effect on warts infection. A study to dew water of tamarisk leafs effect on warts infection have showed magic results, seven cases used dew water as remedy irregularly once per day for four to seven times per month, all cases totally healed from warts infection and responded positively 100% to the use of tamarisk leafs dew water.

**Keyword:** Warts. Virus. Infection. Tamarisk. Salt Cedar. Taray.

## Introduction

**Warts infection:** warts are viral infections that are encountered world widely, and one of common causes of dermatological infection, it is caused by (Papovaviridae), human papilloma virus (HPV) (1). Although kids get warts most often, teens and adults can get them too, sometimes warts are sexually transmitted and appear in the genital area, most warts affect the fingers, hands, face, and feet as in figure (1), they can be lighter or darker than the skin that surrounds them (14).

**Figure (1) warts infection (15)**



HPV is a double-stranded DNA virus with more than 200 types being identified, it can be divided into high-risk types and low-risk types for their carcinogenic potentials ( 6).

It is responsible for many different types of warts, which include common warts, plantar warts, flat warts and genital warts (2). Most cutaneous HPV infection leads to benign proliferative lesions, while rarely develops into cutaneous cancers (8). It is develops when HPV, enters a cut or break in the skin and causes an infection, which often go away on their own after the immune system defend the virus (3).

Appropriate measures for prevention, diagnosis, treatment, and long-time management of cutaneous HPV infection are mandatory for dermatologists (7). Common warts have been treated with a variety of invasive and non-invasive methods, a surgical excision, electrocautery, laser ablation and medical compounds as salicylic acid and trichloroacetic are all examples of destructive therapy, some of these uses liquid, heat or freezing methods to peel off warts, or destroy tiny blood vessels inside the warts, which cuts off blood supply, and kill the virus (4,9). Warts are common worldwide and affect approximately 10% of the population, the prevalence is as high as 10% to 20% in school, they are more common among immune suppressed patients, it can be occur at any age (4,5).

### **Tamarisk plant (Salt cedar)**

Tamarisk species, commonly known as salt cedar or (athal in arabic region), it is a shrub or small tree as in figure (2) native to Europe and Asia (10,18). It is a prevalent invasive species that has infested many riparian areas in the world, mature tamarisk are resistant to high stress environments and fare well in drought conditions, mainly due to their extensive root systems that derive much of their sustenance from the water table rather than surface water and precipitation (11). Tamarisk grows in many soil types but prefers fine-textured soils, It tolerates a wide range of saline or alkaline soils, it mainly inhabits the margins of water courses such as rivers, streams, irrigation canals and lakeshores (12). Several species of Tamarix (including *T. ramosissima*, *T. pentandra*, *T. chinensis*, *T. parviflora*, *T. Articulata*) were introduced to north America and Arab region(13,18).

**Figure (2) Tamarisk plant (16)**



Tamarix species is traditionally used for gastrointestinal disorders, wounds, diabetes, and dental problems, due to, Phenolic acids, flavonoids, and tannins constitute which the main phytochemicals of these plants, Preclinical pharmacological evaluations have demonstrated several biological activities for tamarix spp, including antidiabetic, hepatoprotective, wound healing, and anti-inflammatory (17), the presence of high content of phytochemical compounds like polyphenolics and flavonoids, is a potential source of antioxidant, anti-inflammatory and antiproliferative properties (18).

### **Material and methods**

#### **Method**

Tamarisk is a plant that grow in semi-desert (Sahara) and known for being consumed by animals like sheep and coats in the northern part of Libya, lately we used the early morning tamarisk leaves water (Dew water), which is the form of droplets that appears on thin, exposed objects like leaves of tamarisk in

the morning or evening due to condensation, which applied directly to warts on hands or foot of infected peoples with warts infection for four to seven times per month irregularly .

### Material

Collected dew water of tamarisk leafs in early morning in bottle, distilled water, soap, cotton, all were used in the trial.

### Results and discussion

Using tamarisk for treating the warts infections is very successful method, the trial gives excellent results, we used the dew water of tamarisk leafs on seven peoples who have the infections of warts on their hands and foots. All cases responded 100% to the use of dew water of tamarisk leafs. As it illustrated in the table (1), the seven cases have responded positively to the use of dew water of tamarisk leafs as treatment for warts viral infection on hands and feet of the seven cases.

**Table (1) shows the seven cases and their results**

Case no	sex	age	result
1	male	12 years	Positive 100%
2	female	8 years	Positive 100%
3	male	40 years	Positive 100%
4	female	20 years	Positive 100%
5	female	27 years	Positive 100%
6	male	9 years	Positive 100%
7	male	4 years	Positive 100%

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### References

1. Tomson N, Sterling J, Ahmed I, Hague J, Berth-Jones J. The human papillomavirus typing of warts and the response to cryotherapy. *J Eur Acad Dermatol Venereol* 2011; 25(9):1108-11.
2. Jeffrey L, Melton, James E, Rasmussen. Clinical manifestation of the human papilloma virus infection at non-genital sites. *Dermatologic Clinics-* April 1991; 9(2): 219-32.
3. Lowy DR, Androphy EJ, Douglas R. Warts. In: Freedberg IM, Eisen AZ, Wolff K, Katz SI, Austin KE, Goldsmith LA et al. eds. *Fitzpatrick's Dermatology in General Medicine*. 5th edn. New York: Mc Graw Hill;2003; 2119-31.
4. <https://www.ncbi.nlm.nih.gov/books/NBK431047>.
5. Sudhakar Rao K.M., Ankad B.S., Varna Naidu, Sampaghavi V.V., Vinod, Aruna M.S. A Clinical Study on Warts. *Journal of Clinical and Diagnostic Research*. 2011 December, Vol-5(8): 1582-1584
6. Ringin SA. The effectiveness of cutaneous wart resolution with current treatment modalities. *J Cutan Aesthet Surg*. 2020;13(1):24-30.
7. Peiyao Zhu. Rui-Qun Qi., et al. Clinical guideline for the diagnosis and treatment of cutaneous warts. (2022). DOI: 10.1111/jebm.12494.

8. Al-Eitan LN, AlghamdiMA, Tarkhan AH, Al-Qarqaz FA. Genome-wide identification of methylated CpG sites in nongenital cutaneous warts. *BMC Med Genomics*. 2020;13(1):100.
9. Ahmad Nofal, Esraa Ragab Abd Elmonsef, Basma M. Elkholy. An Overview of Various Lines in The Treatment of Warts: Review Article. *The Egyptian Journal of Hospital Medicine (January 2022)* Vol. 86, Page 570-573.
10. Peter Lesica and Scott Miles. TAMARISK GROWTH AT THE NORTHERN MARGIN OF ITS NATURALIZED RANGE IN MONTANA, USA. *The Society of Wetland Scientists. Wetlands*, 21(2):240-246. 2001.
11. sengupta, D. Geraci, C. kolkwitz, S. Tamarisk (Salt Cedar) Infestations in Northwestern Nevada Mapped Using Landsat TM Imagery and GIS Layers. *American Geophysical Union, Fall Meeting 2004*, B31B-0223.
12. McClay, A. Risk assessment fact sheet for saltcedar, *Tamarix ramosissima*. 2007.
13. Carpenter, A. Element Stewardship Abstract for *Tamarix ramosissima* Ledebour, *Tamarix pentandra* Pallas, *Tamarix chinensis* Loureiro, *Tamarix parviflora* De Candolle, Saltcedar, Salt cedar, Tamarisk. 1998.
14. <https://kidshealth.org/en/teens/warts.html>.
15. <https://dermnetnz.org/topics/viral-wart>.
16. <https://nazinvasiveplants.org/tamarisk>.
17. The genus *Tamarix*: Traditional uses, phytochemistry, and pharmacology. Roodabeh Bahramsoltani, Mahdieh Kalkhorani, Syed Mohd Abbas Zaidi, Mohammad Hosein Farzaei, Roja Rahimi. *Journal of Ethnopharmacology* Volume 246, 10 January 2020, 112245.
18. *Tamarix articulata* (T. *articulata*)-An important halophytic medicinal plant with potential pharmacological properties. Abdullah Alnuqaydan, Bilal Rah. *Pharmaceutical Biotechnology*, 20(4), 292-299.