

A review of medicinal properties of Alkali weed (*Cressa cretica* L.)

Mojdeh Jahangir^a, Fatemeh Nasernakhaei^{a*}

^aDepartment of Agronomy and Plant Breeding, Faculty of Agriculture, Shahid Chamran University of Ahvaz, Ahvaz, Iran

Abstract:

Background and Purpose: Alkali weed (*Cressa cretica* L.) is a halophytic plant that has a tremendous economic value, in addition to various therapeutic properties. This study aims to introduce and review the chemical composition and medicinal properties of this plant.

Materials and Methods: This research was a review study using the library and literature obtained from different resources such as Irandoc, Science Direct, PubMed, SID, Google Scholar, Research Gate, and JamiTib software version 1.5. Obtained data were collected, reviewed, and classified according to the subject.

Results: Major studies on Alkali weed include phytochemical studies and medicinal properties. This plant contains valuable compounds, such as coumarins, flavonoids, glycosides, tannins, sterols, etc. The investigated plant has also antibacterial, antiviral, and antifungal properties. Also, *Cressa cretica* is used to treat tuberculosis, joint pain, leprosy, asthma, dyspepsia, intestinal worms, bloating, bronchitis, colic, skin disorders, and herpes. Moreover, it has mucolytic, laxative, appetitive, stomach tonic, anti-constipation, sexual stimulant, and hematopoietic activities. Alkali weed has also been reported to be a hepatoprotective, anticancer, anti-congestion, anti-inflammatory, antidiabetic, antipyretic, and analgesic agent. Interestingly, this plant is used to make toothpaste in Madagascar.

Conclusion: Alkali weed is shown to have many valuable compounds, and can therefore be used as a potential source for many herbal remedies. Also, this medicinal plant can have other uses, such as regenerating saline soils and lost pastures, providing livestock fodder, oil industry, and biofuel production. Since the results of this study indicate the potential of this plant in the environment, pharmacy, and industry, clinical trials are suggested to be conducted on the medicinal properties of this plant.

Keywords: Medicinal plants, Chemical constituents, *Cressa cretica*

Corresponding Author: f.nasernakhaei@scu.ac.ir