

A comprehensive review of scientific evidence of *Daucus carota* L. plant from the viewpoints of Persian Medicine and Current Medicine: A review study

Abolhasan MousaviKhorshidi^a, Ayesheh Enayati^b, Fatemeh Kolangi^{c*}

^aClinical Research Development Unit (CRDU), Sayad Shirazi Hospital, Golestan University of Medical Sciences, Gorgan, Iran

^bIschemic Disorders Research Center, Golestan University of Medical Sciences, Gorgan, Iran ^cCounseling and Reproductive Health Research Centers, Golestan University of Medical Sciences, Gorgan, Iran

Abstract

Zardak (Daucus carota L.) is a medicinal plant of hot and dry desert regions of Iran. Zardak (Jazar) is mentioned as a nutritious plant, a brain, heart and liver tonic and an aphrodisiac and sperm enhancer in the texts of Persian Medicine (PM). The purpose of this study is to specify the medicinal effects of this plant from the viewpoint of PM and to compare it with new findings. The inclusion criteria in this review included the findings in Persian and Arabic sources of Persian medicine and pharmacology, and Persian and English articles on medicine, pharmacy, and botany until December 13, 2022, without time limits. Exclusion criteria included unpublished information, such as dissertations and articles for which only abstracts were available. Articles written in other languages were not included in this study. Using keywords of Persian medicine, Carrot, Daucus carota L., Daucus carota L. var. carota, in domestic scientific databases including SID and Magiran, as well as international scientific databases including PubMed, Scopus, Google Scholar and ScienceDirect were searched. Among the 80 obtained articles, 31 were selected based on the inclusion criteria. In order to search for authentic sources of Iranian medicine, Jame Teb software version 1.5 was also used with the keywords Zardak, Jazar, Gazar, Kazar and Doghu. Containing carotenoids such as alphacarotene and lutein, Zardak is one of the valuable sources of natural antioxidants that can play a role in preventing many eye, cardiovascular, and skin diseases and also types of cancer. From the point of view of Iranian medicine, Zardak is a sexual tonic, liver tonic, digestive and anti-flatulent, and diuretic. It enhances vision, eliminates kidney and bladder stones, and relieves chest pain. According to the conducted studies, it seems that as one of the native vegetables of Iran, Daucus carota L.has been favored, and the various products obtained from its various components are recommended as part of the diet of all age groups.

Keywords: Persian Medicine, Daucus carota, Medicinal Plants

Corresponding Author: Dr.kolangi@goum.ac.ir