Botanical, phytochemical and traditional medicine evaluation of different types of Harmal: A library study

Farshad Amini Bebahani\textsuperscript{a,b}, Omid Sadeghpour\textsuperscript{a,b*}

\textsuperscript{a}Research Institute for Islamic and Complementary Medicine, Iran University of Medical Sciences, Tehran, Iran. 
\textsuperscript{b}School of Persian Medicine, Iran University of Medical Sciences, Tehran, Iran

Abstract:

Background and purpose: Considering the increasing trend of using oral form of Esfand (Peganum harmala) as the equivalent of Harmal in traditional Persian medicine and reports of its complications and controversies in its efficacy, it seems that conducting a review study on Peganum harmala and its relationship with Harmal in traditional sources is a necessity.

Methods and Materials: At the first step, different names and equivalents of Esfand and Harmal were extracted using Jamie Tibb software. Then, each extracted name was evaluated in the main and older traditional medical sources. Phytochemical and botanical properties of each related herb were evaluated in modern sources. Also, common Esfand in the Iranian markets were evaluated and its phytochemical properties were searched in the web and PubMed database. At the end, a comparison between the results was done.

Results: Phytochemical and botanical properties of Peganum harmala is different from the Harmal which is mentioned in traditional medical sources. Rhazia stricta which is known in Iran as Eshvarak has the nearest morphology to the Harmal.

Conclusion: According to phytochemical and morphology of these two different herbs, considering the therapeutic effect of Harmal for Esfand is in doubt.

Keywords: Esfand, Harmal, Peganum harmala, Rhazia stricta, Traditional Persian Medicine, Botanical

Corresponding Author: sadeghpour.o@iums.ac.ir