



## Recognition of Sandarac Resin Nature in Old Scientific Texts

A. Nemati Babaylou\*, M. Azadi Bouyaghchib, F. Najafic

### Abstract:

**Background and Purpose:** Sandarac as tree resin has attracted attentions in Islamic medicine in the past and it has been mentioned as a treatment for visual disturbances, opening bronchi, toothache painkilling, filling out the rotten teeth, obesity, hemorrhoids, bloody diarrhea, tinnitus treatment, etc. Many of ancient medical scientists and gemologists have described the features of this matter, including physical characteristic, chemical characteristic, the location to produce it. It has also been compared with such materials as amber, but many disagreements can be seen when comparing their descriptions to each other. In new works, sandarac resin extraction is limited to a species of pine family named *Tetraclinis articulata* Vahl, found in the north of Africa specially Morocco, and another species was introduced in Australia named as *Calitris Quadrivalvis* Vent whose resin is known as Australian sandarac. The aim of this study is to identify the exact sandarac in ancient scientific sources and matching it with the resin material in the present time. This will make it possible to scientifically recognize it and accurately apply it.

**Materials and Method:** In this research, the research method is descriptive-analytic and the data from the studies of ancient and modern texts are criticized and investigated based on adaptive logic.

**Results:** The findings in this study showed that whatever in ancient texts had been mentioned as sandarac is different from nowadays sandarac. In fact, in the past sandarac was referred to a category of diterpenic resins including Zanzibar copal, colophony, and sandarac which are different from each other in terms of geography, origin and chemical structure. In old written texts, they have been introduced as different species of sandarac.

**Conclusion:** The results showed that, in ancient Arabic culture there was not specific and different words to refer to copal or sandarac, and copal is only cited as equivalent of crystalline sandarac in more recent sources. Sandarac name introduced in Farsi from Arabic. Sandarac name introduced in Farsi from Arabic. Sandarac name introduced in Farsi from Arabic. However, these two resins have different chemical structure, source and geographical origin, but both of them introduced Sandarac in old texts.

**Keywords:** Sandarac, Copal, Zanzibar Copal, Colophony, Ratyaneh, *Tetraclinis articulata* Vahl, Old scientific texts.

Corresponding Author: A.nemati@au.ac.ir