

Role of indigenous Arqiyat distillery in conservation of Rosa species

Shujaul Mulk Khan^{1*}, Habib Ahmad²

*Corresponding author:

Shujaul Mulk Khan

¹Department of Botany, Hazara University Mansehra-21300, Pakistan

²Department of Genetics, Hazara University Mansehra-21300, Pakistan

Abstract

Cultivation of *Rosa damascene* in Pakistan is not a common practice. It was a common shrub of salt range and adjacent subtropical zone of Pakistan. Due to over grazing, agricultural expansion, increase in population and habitat loss a lot of its population has lost in the region [4, 5, 6]. Nevertheless, it's quite abundantly grown in the outskirts of Kallar Kahar Lake where there few distilleries exist since last 300 years. Arqiyat are produced in these distilleries, of which Arqe Gulab is the famous one (Fig. 1 & Fig. 2). Main objective of this short communication is to revealed on traditional and scientific communities that traditional medicinal knowledge and use of such distilleries play a vital role in the conservation of many species including *Rosa damascene*.

Keywords: Role of Indigenous Arqiyat Distillery in conservation of Rosa species

Introduction

Kallar Kahar Lake situated in Kallar Kahar town of Chakwal District in Punjab, Pakistan is famous wetland area in Pakistan. This lake is famous site in the salt range for migratory birds during winter season. Rain and mountain brooks are the major water source of the lake.

Roses are discussed by the oldest Greek writers. *Rosa damascena* Mill. the Damask Rose cultivated since ancient civilizations time that is Persia and India. In Unani tib it's kown as 'Gule Surkh'. Number of studies has very recently focused on the documentation of local ethnomedicinal techniques practices in South Asia [1, 2]. *Rosa damascene* has high medicinal values and used as astringent, expectorant, laxative, heart tonic and cephalic and aperient.



It can be briefly described as Stems erect, up to 1.5 m tall. Prickles usually curved, weakly compressed, subulate, usually mixed with stalked glands and setae. Leaflets glabrous or very sparsely hairy above, paler, softly hairy beneath. Flowers 3-5 or more, pink, rarely white, double, usually smelling. Pedicels rather long, covered with stalked glands. Hypanthium usually covered with stalked glands. Fruit globose or ovoid, often undeveloped. According to R. R. Stewart (1972) *Rosa damascene* is commonly cultivated in Pakistan, however, no reliable specimen of this rose among

available herbarium material. It is an old taxon known already in antiquity, originated in the eastern Mediterranean region. Probably a hybrid between *Rosa gallica* L. and some species from the section *Synstylae*, possibly *Rosa phoenicia* Boiss. Very polymorphic, with many local forms, often difficult to distinguish from *Rosa alba*. It is used in some countries as a source of 'the rose oil' for the perfume production. It is one of the parent of many noble garden roses [3].



Cultivation of *Rosa damascene* in Pakistan is not a common practice. It was a common shrub of salt range and adjacent subtropical zone of Pakistan. Due to over grazing, agricultural expansion, increase in population and habitat loss a lot of its population has lost in the region [4, 5, 6]. Nevertheless, it's quite abundantly grown in the outskirts of Kallar Kahar Lake where there are few distilleries exist since last 300 years. Arqiyat are produced in

these distilleries, of which Arqe Gulab is the famous one (Fig. 1 & Fig. 2). Main objective of this short communication is to reveal on traditional and scientific communities that traditional medicinal knowledge and use of such distilleries play a vital role in the conservation of many species including *Rosa damascene*.

References

- [1]. Khan, S.M., Page, S., Ahmad, H., Harper, D.M., 2013c. Sustainable utilisation and conservation of plant biodiversity in montane ecosystems; using the Western Himalayas as a case study. *Ann. Bot.* 112: 479–501, <http://dx.doi.org/10.1093/aob/mct125> www.aob.oxfordjournals.org
- [2]. Khan, S.M., Page, S., Ahmad, H., et al. 2013. Medicinal flora and ethnoecological knowledge in the Naran Valley, Western Himalaya, Pakistan. *Journal of Ethnobiology and Ethnomedicine* 9: 4.

- [3]. Ali, S.I. and M. Qaiser. 1992-2007. Flora of Pakistan, Nos. 194-208. Department of Botany, University of Karachi.
- [4]. Khan, S.M., Page, S., Ahmad, H., & Harper, D. 2014. Ethno-ecological importance of plant biodiversity in mountain ecosystems with special emphasis on indicator species of a Himalayan Valley in the northern Pakistan. *Ecological Indicators*, 37: 175-185.
- [5]. Ahmad, H., Ahmad A, and Jan M.M. 2002. The medicinal plants of Salt Range. *Journal of Biological Sciences* 3: 175-177.
- [6]. Khan, S. M. 2013. Mountain Vegetation, Indigenous People and Medicinal Plants. *Med Aromat Plants*, 2: 2167-0412.

