

## **Abstract**

Knowledge on the use of medicinal plants is important. Traditional knowledge on the medicated plants has been passed over the time among generations and has led to the discovery of a wide range of ethnobotany research. Ethnobotany is the science of how locals and indigenous tribes use different herbs for particular purposes, including remedying of the diseases. The aim of this study was to integrate indigenous and modern knowledge on the use of two medicated species, i.e., *Withania coagulanc* and *Taverniera cuneifolia*, as well as to determine the coincidence of these two knowledge in the Khash area. Data were collected in field surveys, questionnaires and medicinal plants measurement. For each species scientific name, local name, organ used for medication, common therapeutic properties, method of use and medicinal use were obtained through questionnaires and interviews with local people. In order to investigate the modern knowledge of the species studied and the chemical and active ingredients present in these plants, people tend to use these drugs in the treatment of certain diseases, chemical compounds and substances. The characteristics of the species were determined. The essence of the plants was extracted with the Klevenger apparatus by water distillation method, and the extracted essential oil was stored in the refrigerator during the experiments. The GC / MS was used to detect the essential oil composition using a mass spectrometric gas chromatography apparatus. The results showed most of the interviewees were men with an average age of 60-40 years and often illiterate. Twenty tow plant species were identified in the region, most of which were from the Lamiaceae family, and the leaves were used more than other plant organs. The results of chemical compounds identification revealed that fruit of the *W. coagulanc* was affected by the presence of saturated and unsaturated fatty acids such as palmitic acid and oleic acid in making local cheese. The leave of *T. cuneifolia* play a role in the treatment of jaundice due to the presence of terpene compounds such as phytol. Finally, it can be concluded that the high tendency of people to natural and cost-effective treatments and their cultural adaptation has led to the extensive use of medicinal plants in traditional medicine, and given that the elderly villagers have information about the plants, and with their death, their traditional knowledge will quickly disappear. Concerning the integration of the two knowledge, it can be concluded that the combination of these two knowledge on the two studied species is possible if cooperation between the owners of native knowledge and the owners of modern knowledge is possible.

**Key Words:** Ethnobotany, Medicinal Plants, Traditional Medicine, Khash City.



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**Integration of Indigenous and Modern Knowledge on the Use of Two Medicinal  
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