

# ETHNOPHARMACOLOGICAL STUDY OF MEDICINAL PLANTS USED FOR TRADITIONAL CANCER THERAPY IN M'SILA REGION (NORTHEAST OF ALGERIA)

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**Abstract:** Cancer treatment is a major global health challenge in both developed and underdeveloped countries. Hence, finding natural anticancer agents with minimal side effects has become of high priority concern. In response, several plants as a safe therapeutic modality have been used a thousand years ago and remained becoming increasingly popular. This paper aims to provide ethnobotanical surveys of the plants reported anticancer activity used by the local people in M'sila's (Northeast of Algeria-North Africa). The databases revealed that among the 40 plant species reported to be used in the management of cancer 08 of them were the most frequently encountered species, namely *Ephedra alata* subsp. *alenda.*, *Annona muricata* L., *Berberis vulgaris* L., *Artemisia herba-alba* Asso., *Nigella sativa* L., *Trigonella foenum-graecum* L., *Ziziphus lotus*, *Peganum harmala* L. The leaves are the most used parts (45.5 %), by infusion or as powder respectively with 43.3 % and 37.5 %.

**Keywords:** Ethnobotany; Anticancer; Medicinal plants; Msila, Algerian traditional medicine.

## 1. Introduction

Currently, thousands of chemical substances are used in modern medicine for therapeutic purposes. Every year many new drugs are authorized and brought to market. However, these new drugs are rarely innovative, expensive and cause many side effects due to their lack of specificity and are limited in rural settings [1]. Therefore, there is a need to discover alternative anticancer treatments or prevention against cancer, hopefully more potent, with the cheaper costs as well as more selective and less toxic than those currently in use. Because consumers were provided more information about health, there has been a gradual revival of interest in the use of medicinal plants. Thus, plants are regaining shape and emerging as an integral field of traditional medicines all over the world for the management of diseases. Their tendency has shifted because herbal medicine has been reported safely and less or without any adverse

effect especially when compared with synthetic drugs [2]. The use of medicinal plants for diseases management purposes has been in practice since thousands of years and is known in Algeria as Algerian traditional medicine "Alternative Medicine" or "Herbal Medicine" and researchers have worked a lot in this field [3-7].

In Algeria, the use of medicinal plants is a tradition of a thousand years. The population has a long history of herbal use for the treatment of diseases, this knowledge was collected and transferred from generation to generation. The first works on medicinal plants were made in the 9th centuries by Ishà-Ben-Amran and Abdallah-Ben-Lounès, but the largest production of books was carried out in the 17th and 18th century [7], even during French colonialism from 1830 to 1962. Botanists have managed to catalog a large number of medicinal species. In 1942, Fourment and Roque published a book of 200 plant species of medicinal interest, most of them are from the