

## Wild Edible Medicinal Plants of the Mediterranean Basin

Petropoulos AS\*

Department of Agriculture, Crop Production and Rural Environment, University of Thessaly, Fytokou Str., 38446 N. Ionia, Magnissia, Greece

### Editorial

The flora of the Mediterranean basin includes many native edible medicinal species that have always represented an important food source for the rural communities of the Mediterranean area. Several studies have demonstrated their important role in the traditional Mediterranean diet, whereas the pharmaceutical properties of many of these species have been confirmed and are attributed to their high content of anti-oxidative agents, phenolic compounds, vitamins, omega-3 fatty acids and essential minerals. The consumption of native species has substantially decreased and now-a-days is limited to rural areas due to the shift from a rural, agriculturally-based economy to a market-oriented one, as dictated by the modern way of living which is mainly based on the consumption of fast-food or ready to cook and eat food. However, the world-wide interest in the so-called “health foods” or “super-foods” with enhanced medicinal and pharmaceutical properties has rekindled the market needs for wild edible species consumed as salad vegetables, whereas some of them (e.g., *Cichorium spinosum*, *Scandix pecten-veneris* etc.) have started to be commercially cultivated. However, so far most of these species are usually gathered by hand from self-seeding wild plants (*Crepis setosa* Haller, *Crithmum maritimum*, *Hymenonema graecum*, *Picris echioides*, *Portulaca oleraceae* L., *Reichardia picroides*, *Salsola vermiculata* L., *Scandix australis* L., *Scolymus hispanicus* L., *Sonchus oleraceus* L., *Taraxacum officinale* L., *Urospermum picroides* etc.) An important issue that has to be considered is that if the ever-growing demand for such products combined with their high market value is not met by their incorporation into agricultural cropping systems, the irrational removal of wild plants from their natural habitats may result in genetic and ecological erosion. Besides, the industrialization of agriculture along with the gradual decrease of the available agricultural land due to human activities threatens all these native species and put their conservation at risk.

For this purpose, ex situ conservation (conservation of biological material outside its natural habitat) is a means for decelerating this continuous loss of biodiversity and many activities are currently being carried out through plant genetic resource networks organized at national and international level allowing the exchange of information and plant material.

Wild edible plants are usually grown under arduous conditions (lack of water, high salinity, soils with high calcium content, or even in highly contaminated areas etc.) within their natural habitat. This ability to resist or tolerate stress conditions suggests they may have a significant role as ameliorative species or as alternative farming options in pedo-climatic conditions where the cultivation of conventional species is difficult or even impossible. Such tolerant wild species may serve as excellent heavy metal hyper-accumulators which may help to phyto-extract undesirable contaminant levels. However, the first step for the exploitation of these plant species it is necessary to determine their precise requirements, in terms of soil, climate conditions and cultivation methods. Additionally, the sustainability of their cultivation must be determined as well as their impact on the agricultural environment, e.g., in terms of energy input/output, soil fertility, water requirements, disease and pest resistance, suitability for inter-cropping and crop rotation. All these steps are prerequisites before their commercial exploitation is well established.

In conclusion, beyond the urgent need to record and characterize native species that could be exploited as horticultural crops, it is also necessary to propagate these species in order to have a continuous flow of genetic material and to determine their seed longevity and conservation methods. Considering the high nutritional value and the medicinal properties of most of these wild edible species, their study is highly important in order not only to extend their commercial use and compile the best cultivation practices, but also to ensure their exploitation and the preservation of native genetic material and minimize the risk of genetic erosion.

---

\*Corresponding author: Petropoulos A. Spyridon, Department of Agriculture Crop Production and Rural Environment, University of Thessaly, Fytokou Str., 38446 N. Ionia, Magnissia, Greece, Tel: +30-2421093196; E-mail: [spetropoulos@uth.gr](mailto:spetropoulos@uth.gr)

Received March 28, 2016; Accepted March 29, 2016; Published April 01, 2016

Citation: Petropoulos AS (2016) Wild Edible Medicinal Plants of the Mediterranean Basin. Med Aromat Plants 5: e173. doi:10.4172/2167-0412.1000e173

Copyright: © 2016 Petropoulos AS. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.