

Medicinal and aromatic plants conservation in Lithuania

Laima Šveistytė, Lithuanian State Forest Service, Pramonės av. 11A, 51327 Kaunas, Lithuania,
laima.sveistyte@amvmt.lt

The gathering and utilization of medicinal plants is an age-old tradition in Lithuania, especially in forested areas of the country. Investigations into medicinal plants in Lithuania were commenced in the 18th century, when Botanical Garden of Vilnius University had been established.

Generally, the conservation of wild plant species and their resources is regulated by the Law on Wild Vegetation (1999), Law on Protected Areas (1993, 2001), Law on National Plant Genetic Resources (2001) and supplementary legal acts. The existing system of conservation of medicinal and aromatic plants includes *ex situ* and *in situ* methods.



About 1/3 of native plant species are being used in both modern and traditional medicine in Lithuania



Harodove Archyvu. Cyfrose. sygn. 1-8-6002-1

The Vilnius (S. John's day) Midsummer market in the first half of the 20th century. The articles of Prof. J. Muszyński provide information on the use of medicinal plants sold in Vilnius.



Ex situ collections of medicinal and aromatic plants of Institute of Botany of Nature Research Centre, Vilnius

Ex situ conservation of medicinal and aromatic plants

The Institute of Botany of the Nature Research Centre, Kaunas Botanical Garden and Agriculture Academy of Vytautas Magnus University are engaged in the activity of collecting, investigating and conserving MAP's. The field collection of the Institute of Botany includes over 140 species of medicinal, aromatic and berry plants, about 90 % of the accessions are plants of wild origin native to Lithuania, collected mainly for the purposes of research and conservation.

In Kaunas Botanical Garden the plants are classified by the pharmacognostic principle in respect of the biologically active compounds. The collection of medicinal plants consists of 470 species, the indigenous species comprise one fifth of the collection. The field collection of caraway, which vary in time of flowering, colour of inflorescence and the amount of essential oils are stored in Agriculture Academy.

Long-term seed storage



The long-term seed storage was established in 1997 in the National Plant Genetic Resources Coordinating Centre. At the present time seeds of 320 accessions representing 47 species of medicinal and aromatic also rare plants are put in long-term storage in the State Forest Service. The majority of the accessions are of Lithuanian origin with rare exceptions of some foreign accessions of special value to Lithuanian growing conditions. The long-term seed storage is annually supplemented with new accessions.

In situ conservation.

In the selection process of *in situ* conservation areas the following criteria were considered: ecological heterogeneity of the site, phenotypic diversity and concentration of the target species, economic value of the target species, the possibility of the site control, the location of the site with regard to protected areas. Target species selected on the basis of socio-economic and scientific values are the following: *Acorus calamus* L., *Arnica montana* L., *Allium* spp., *Crataegus* L., *Origanum vulgare* L., *Thymus* spp., *Hypericum* spp., *Salvia* L., *Vaccinium* spp., and others. Among the most endangered are plant populations in the forest ecosystems because they are greatly subject to forestry activities. In most cases *in situ* conservation of medicinal and small fruits is more reliable within the already existing network of protected areas than outside them. Today the 36 areas for *in situ* conservation of medicinal plants and small fruits as well crop wild relatives in Lithuania are selected

Status of national medicinal and aromatic plant genetic resources.

Today the status of national genetic resources has been granted to 4 collections, 36 areas *in situ* and 227 accessions of medicinal and aromatic plants. The data about these national genetic resources are collected and stored in the Central Database of State Forest Service.

