

7th Global Summit on

Plant Science

October 07-08, 2019 | Madrid, Spain

The Garden of Medicinal Plants in Plewiska

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The Garden of Medicinal Plants at the Institute of Natural Fibers and Medicinal Plants in Plewiska is one of 40 Polish botanical gardens. It was founded in 1946 on the historic area of 3 hectares in the old manor park from the end of the 19th century.

Currently the Garden has rich collection of medicinal plant comprising at present about 1200 taxa. It is divided into two areas, in which one is open for public. It consists of plant taxonomy division of 399 species and division of trees and shrubs (about 200 species). The other one consists of division of experimental cultivation (500 species) and small division of greenhouse plants. There is also the collection of rare and legally protected medicinal plants obtained from natural site. There are species such as: *Arnica montana*, *Angelica archangelica*, *Asarum europaeum*, *Helichrysum arenarium* and *Rhodiola rosea*. Experimental cultivation of these species are being conducted as part of Multiannual Programme 'Protection of crop genetic resources'.

Worth noticing is also the collection of wild growing rose which consist of rare species such as: *R. agrestis*, *R. zalana*, *R. jundzillii*, and *R. villosa*.

Unique collections are used primarily for scientific research, but also for dissemination of the knowledge about medicinal plants. The scientific investigations are focused mainly on the content of active compounds in plants and are also devoted to agrotechnical conditions for cultivation of herbs. The raw material obtained from the garden is also the basis for further research in the field of biotechnology, pharmacology, immunology, microbiology and genetics.

The garden staff participates in the organization of the practical trainings on herbal medicine for: schoolchildren, university students of Pharmacy and Horticulture, farmer and any others which are acquainted with medicinal plants and their cultivation.



The Garden of Medicinal Plants.

Recent Publications

1. Buchwald W. et al. 2015. Effect of fertilization on roseroot (*Rhodiola rosea* L.) yield and content of active compounds. *Acta Scientiarum Polonorum Hortorum Cultus* 14 (2): 109-121
2. Mikołajczak PŁ. et al. 2015. Evaluation of anti-inflammatory and analgesic activities of extracts from herb of *Chelidonium majus* L. *Central European Journal of Immunology* 40 (4): 400-410
3. Damianakos H. et al. 2016. Pyrrolizidine alkaloids from *Cynoglossum columnae* ten. (Boraginaceae). *Phytochemistry Letters* 15: 234-237
4. Ożarowski M. et al. 2017. Determination of phenolic compounds and diterpenes in roots of *Salvia miltiorrhiza* and *Salvia przewalskii* by two LC-MS tools: Multi-stage and high resolution tandem mass spectrometry with assessment of antioxidant capacity. *Phytochemistry Letters* 20: 331-338
5. Bilińska E, Buchwald W. 2018. Characteristics of seed material and seedlings of *Conium maculatum* L. *Herba Polonica* 64 (4): 50-54

Biography

Elzbieta Bilińska is a graduate of the Faculty of Biology at the Adam Mickiewicz University in Poznan (Poland). Since 2006, she has been associated with the Institute of Natural Fibers and Medicinal Plants in Poznan. She works at the Department of Botany, Breeding and Agro technical Technology of Medicinal Plants. She is involved in maintain the collection of medicinal plants of Botanical Garden in Plewiska and co-creating the Index Seminum. Her research activities are focused on seed quality assessment and seed science. She is interested in the following fields: Pharmacognosy, landscape architecture and photography.

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