

MAP reservation in Hungary - The current situation

Short report

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The most important (state) institutions

- **Center for Plant Diversity (NÖDIK)** (the former Institute for Agrobotany in Tápiószele)
It implements national coordination tasks as a gene source conservation center from 1993



In case of MAPS at present:

129 species, 2580 taxa, 999 taxa with Hungarian origin

Conservation in ex situ seed bank: 2535 taxa, on field: 45 taxa

Long-term preservation: 707 taxa, medium-long: 2580 taxa

Documented data in database: with passport: 2580 taxa, in Eurisco: 2358 taxa

Most important collections:

***Anethum graveolens*: 119 taxa; *Calendula officinalis*: 31 taxa; *Carthamus tinctorius*: 108 taxa; *Carum carvi*: 33 taxa; *Cichorium intybus*: 43 taxa; *Coriandrum sativum*: 31 taxa, *Cucurbita pepo var. styriaca*: 42 taxa; *Fagopyrum esculentum*: 172 taxa; *Helianthus tuberosus*: 45 taxa; *Linum usitatissimum*: 313 taxa; *Papaver somniferum*: 840 taxa; *Ricinus communis*: 151 taxa; *Satureja hortensis*: 32 taxa; *Sinapis alba*: 37 taxa**

The most important (state) institutions

- **Department of Medicinal and Aromatic Plants of Szent István University – from 1993**

Gene reservation and its methodological development:

- Protected or endangered medicinal plant species
- Preservation of chemical diversity of natural flora
- Reservation of those species which have not yet been cultivated
- Reservation of breeding materials, strains, lines



At present:

112 species, 977 taxa, 683 taxa from Hungarian origin

Conservation in ex situ seed bank: 640 taxa, on field: 43 taxa

Only medium-long preservation



Most important collections:

Achillea collina (47 taxa); *Foeniculum vulgare* (94 taxa); *Hypericum perforatum* (34 taxa); *Hyssopus officinalis* (33 taxa); *Isatis tinctoria* (28 taxa); *Matricaria recutita* (87 taxa); *Melissa officinalis* (29 taxa); *Ocimum basilicum* (38 taxa); *Origanum majorana* (20 taxa); *Papaver somniferum* (123 taxa); *Perilla frutescens* (11 taxa); *Thymus spp.* (42 taxa); *Verbena officinalis* (91 taxa)

The most important institutions

- **Research Institute for Medicinal Plants – established in 1915**

Since its privatization it declines, nobody is responsible for the genebank collection, they do not ask for support to maintain the collection for years

They didn't give us data – so the summary doesn't include their collection



Smaller organizations

- **SF Foundation – „Medicinal Plant Valley” in Zánka, Visitor and Educational Center**

At present:

51 species, 128 taxa, all of them with Hungarian origin (collected from the Balaton Highlands)

Conservation in ex situ seed bank: 125 taxa, on field: 3 taxa

Only medium-long preservation

- **„Körte” eco village in Nagyszékely**

At present:

43 species, 73 taxa, 67 taxa from Hungarian origin

Conservation in ex situ seed bank: 32 taxa, on field: 35 taxa

Only medium-long preservation

- **Others: with 10-30 taxa, these are irrelevant**



Financial support problems: the European Union support will be available only for private sector from 2016, not for state institutions – preservation of more than half of the items is not guaranteed.

Summary

- 234 species (in 2009: 846 species), 3484 taxa (in 2009: 4321 taxa), 1903 taxa from Hungarian origin (in 2009: 1906 taxa)
- Conservation in ex situ seed bank: 3620 taxa (in 2009: 3379 taxa), on field: 145 taxa (in 2009: 1273 taxa), in situ: 0 (in 2009: 85 taxa)
- Long-term preservation: 707 taxa (in 2009: 1161 taxa), medium-long: 3673 taxa (in 2009: 3848 taxa), short-term: 92 taxa (on field) (in 2009: 41 taxa)
- Morphological characterisation: in case of 1450 taxa, molecular: 0, chemical: 500 taxa (in 2009: 1323 / 0 / 367)
- Documented data in database: with passport: 2580 taxa, in Eurisco: 2358 taxa (only from Center for Plant Diversity)
- Distribution of accessions: for domestic use: 5669 (in 2009: 929 taxa), abroad: 98 taxa (in 2009: 749 taxa)

10 priority species:

- *Achillea millefolium*: 14 taxa (in 2009: 12 taxa) ↑
- *Artemisia absinthium*: 5 taxa (in 2009: 9 taxa) ↓
- *Carum carvi*: 42 taxa (in 2009: 32 taxa) ↑
- *Hypericum perforatum*: 50 taxa (in 2009: 54 taxa) ↓
- *Melissa officinalis*: 35 taxa (in 2009: 26 taxa) ↑
- *Mentha spp.*: 19 taxa (in 2009: 19 taxa)
- *Origanum vulgare*: 21 taxa (in 2009: 14 taxa) ↑
- *Salvia officinalis*: 21 taxa (in 2009: 49 taxa) ↓
- *Thymus spp.*: 49 taxa (in 2009: 83 taxa) ↓
- *Gentiana lutea*: 0 taxa (in 2009: 0 taxa)

Thank you for your attention!

