



METK
Centre of Estonian
Rural Research
and Knowledge

LEGUMES IN ESTONIA

Küllli Annamaa – Head of the genebank

Lea Narits – legumes' breeder

*ForEVA – Fostering the need of implementation of
the ECPGR's European Evaluation Network (EVA) on
Grain legumes*

10-11 October 2023, Bucharest, Romania



Centre of Estonian Rural Research and Knowledge - METK



Field of activities:

- research, monitoring, assessment, and analysis in the field of agriculture, rural life, and rural economy;
- collection and conservation of plant genetic resources;
- variety breeding and field trials of agricultural crops;
- knowledge transfer, advisory, and innovation services in the field of agriculture and rural life;
- activities necessary for the implementation of the common agricultural policy of the European Union.





Kuressaare
office



Saku
lab



Jäneda
office



Kuusiku
field study
centre



Jõgeva
Research and
breeding station



Viljandi
field study
centre



Tartu
office



Võru
field study
centre

Related projects

- National Programme „Collection, Conservation and Use of Plant Genetic resources for Food and Agriculture“ (since 2002)
- Plant breeding programme on field and garden pea, faba bean and soybean
- Climate-ready faba bean for the Nordic and Baltic region
(FabaNova, 2023-2026)
Partners: Finland (UH); Norway (NIBIO, NMBU); Sweden (SLU); Estonia (METK)
Traits: Chocolate spot, drought, earliness of maturity

Grain legumes collections in METK

- **Genebank**

Pisum sativum (225)

Phaseolus vulgaris (23)

Vicia faba/sativa (51)

- **Breeders' collections**

Pisum sativum (450+250)

Vicia faba (116)

Glycine max (115)

Cicer arietinum (13)

Vicia sativa (11)

Lens culinaris (5)

Lupinus albus (3)

Phaseolus vulgaris (2)



The oldest grain legume
in the genebank (1920)

EST 2658 Liplapi uba

Landraces from home gardens



Kidney bean 'Vändra vahauba'



Kidney bean 'Taevauba'
(Sky bean)

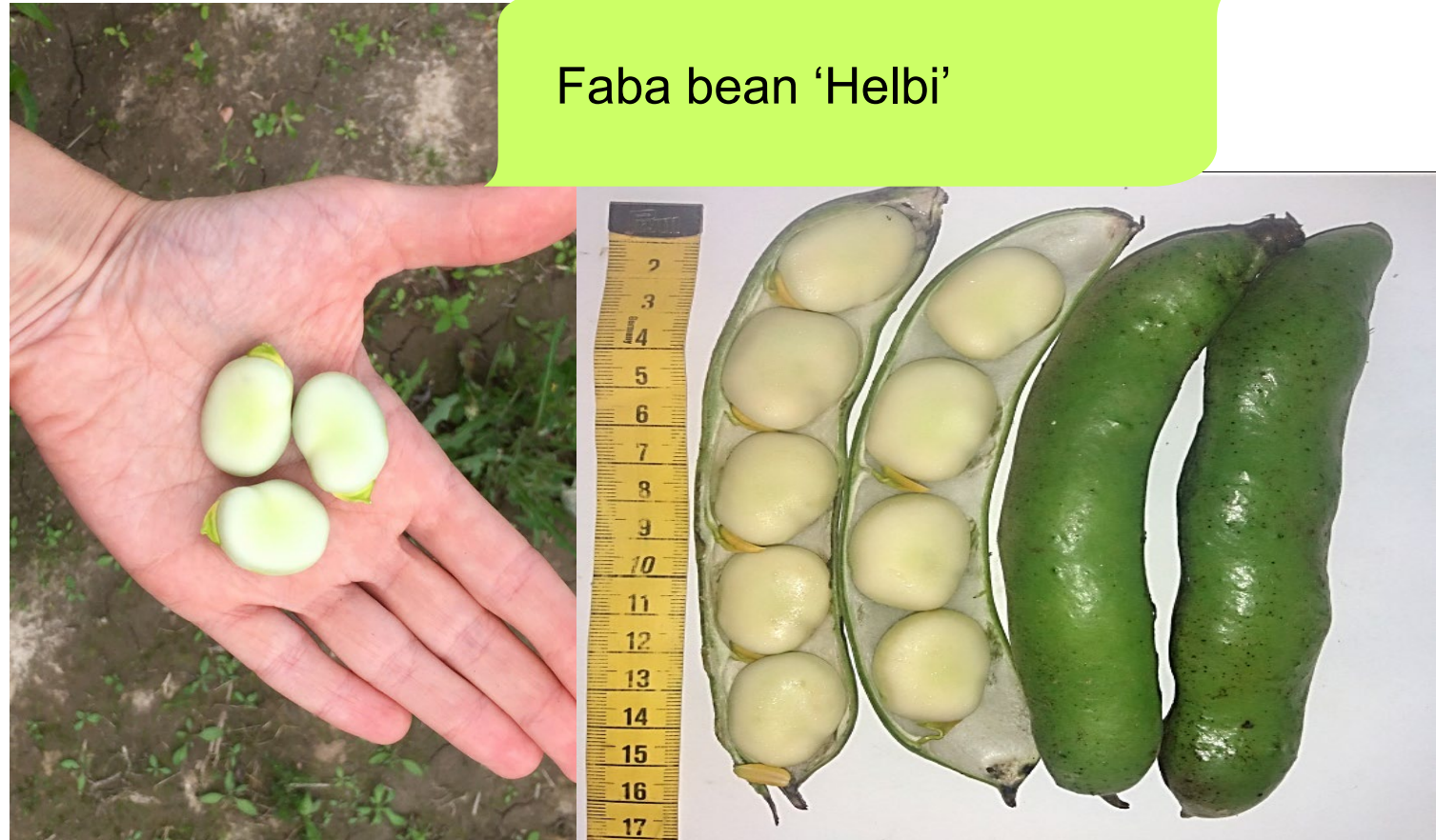


Conservation varieties

Garden pea 'Vanaema hernes'
(Granny's pea)



Faba bean 'Helbi'



The most focused grain legumes in METK



- Breeding activities on:
 - Pisum sativum* (field pea and garden pea)
 - Vicia faba*
 - Glycine max*
- Traits: disease resistance, earliness and yield
- Phenotypic data of 20 genebank accessions of pea in EURISCO
- Seeds availability for sharing based on SMTA - all genebank accessions

Recently introduced grain legumes in Estonia



Soy bean, chick pea,
lentil, white lupine



Expectations from EVA legumes



- The use of material for research and breeding
- Availability of phenotypic and genotypic data in databases
- Easy and quick access to the material
- Capacity of METK – field trials, lab equipment for analysis

