

National scientific collaboration

Laboratory of Biometry

Poznań University of Life Sciences, Department of Mathematical and Statistical Methods, breeding companies, the Research Centre for Cultivar Testing and partners within the framework of the COST 860 SUSVAR project (www.cost860.dk).

Development and implementation of algorithms for the analysis of breeding and varietal experiments.

Laboratory of Cytogenetics

University of Agriculture in Cracow, Department of Plant Physiology, Faculty of Agriculture and Economics - prof. dr hab. M. Rapacz

Physiological and molecular mechanisms of frost tolerance in forage grasses.

Polish Academy of Sciences in Poznań, Institute of Bioorganic Chemistry - prof. dr hab. M. Stobiecki, dr Ł. Marczak

Application of mass spectrometry in proteomic and metabolomic research in forage grasses.

University of Sciences in Poznań, Department of Plant Physiology, Faculty of Horticulture - dr hab. J. Floryszak-Wieczorek

Identification of components of „cell memory” on the proteomic level in potato after infection of *Phytophthora infestans*.

Laboratory of Distant Hybrids

Plant Breeding and Acclimatization Institute in Kraków, Laboratory of Quality and Resistance Evolution in Cereals - dr Anna Strzembicka

Chromosomal location in triticale of leaf rust resistance genes introduced from *Triticum monococcum*

Plant Breeding and Acclimatization Institute in Radzików - dr Tomasz Góral

Susceptibility genotypes of wheat and triticale to Fusarium head blight

University of Life Sciences in Poznan, Department of Chemistry - prof. dr hab. Piotr Goliński, prof. dr hab. Juliusz Perkowski

Analysis of toxin accumulation in kernels of wheat and triticale

Breeding Station :“DANKO”- Choryń , Strzelce

Breeding of cultivars and lines of wheat and triticale

Laboratory of Genome Analysis

Plant Breeding and Acclimatization Institute at Radzików - doc. dr hab. T. Cegielska-Taras

Statistical and genetic estimation of doubled haploid lines of winter rape

Danko Plant Breeding, Choryń - B. Ługowska, Z. Banaszak

Genetics of effectiveness of components of N-usage in winter wheat

University of Nature, Lublin - prof. dr hab. Eugeniusz Grela

Estimation of a chemical seed composition in a grass pea collection

Institute of Agrophysics, Lublin - prof. dr hab. Bogusław Szot

Estimation of geometric and mechanical characteristics of grain legume seeds

University of Warmia and Mazury, Olsztyn - dr hab. L. Lahuta

Genetic basis of qualitative characters in pea seeds

Plant Breeding and Acclimatization Institute at Radzików - dr L. Boros

Genetic basis of a pea stem resistance to lodging

Plant Breeders, PBS Wiatrowo - P. Barzyk

Managing of *Pisum* and *Lupinus* national collections data base

Laboratory of Molecular Biology

Adam Mickiewicz University of Poznań, Department of Biotechnology,

Common research on functional analysis of resistance genes to biotic and abiotic stresses in Brassica species.

University of Life Sciences in Poznań, Chemistry Department and Food Science Institute,

Analysis of mycotoxins produced by *Fusarium* species and volatile antibiotics produced by *Trichoderma* species.

Danko Plant Breeding, Choryń - B. Ługowska, Z. Banaszak

Genetics of bread baking quality and DNA markers of resistance genes to pathogens in spring and winter wheat.

Laboratory of Quantitative Genetics

Poznan University of Technology, prof. dr hab. B. Deptuła

Characteristics of *Miscanthus* biomass as an energetic stuff.

Akademia Podlaska, prof. dr hab. S. Kalebasa

Evaluation of variability of different *Miscanthus* species with respect to content of chemical elements

Botanical Garden of the Institute of Plant Breeding and Acclimatization in Bydgoszcz, dr W. Majtkowski

Genetic variability of morphological traits in selected energetic grasses (*Miscanthus* sp., *Salix* sp., *Sida* sp.).

Laboratory of Resistance Genetics

Cooperation in the decision support system SPEC

Optimization of time of oilseed rape protection against stem canker of brassicas in Poland - epidemiological studies and mathematical modeling

Institutions:

- ◇ **DuPont Poland, Warsaw**
- ◇ **Central Cultivar Testing Station, Słupia Wielka**
- ◇ **Department of Pesticide Efficacy Testing, Institute of Plant Protection - NRI, Branch Sońnicowice**
- ◇ **Department of Plant Pathology, Faculty of Horticulture, University of Life Sciences, Poznań**
- ◇ **Department of Environmental Biology, Faculty of Biology and Agriculture, University of Rzeszów**
- ◇ **Department of Plant Nutrition and Fertilization, Institute of Soil Science and Plant Cultivation - NRI, Puławy**

Adam Mickiewicz University of Poznań, Faculty of Biology, Department of Botany

Evaluation of resistance to rusts in hybrids between short rotation coppice willow and poplars

University of Warmia and Mazury in Olsztyn, Faculty of Environmental Management and Agriculture

- ◇ **Department of Plant Breeding and Seed Science**
Search for genetic resistance of willows to rust
- ◇ **Department of Plant Protection**
Sequencing of the ITS region of selected yeast-like fungi from wheat grains

Department of Mycology, Institute of Plant Protection - NRI, Poznań

Characterization of plant healthiness and composition of populations of phytopathogenic fungi depending on the protection of oilseed rape

Department of Microbiology, Faculty of Agriculture, University of Life Sciences, Poznań

The influence of Effective Microorganisms on healthiness of oilseed rape

Poznań University of Technology, Faculty of Chemical Technology, Institute of Chemical Technology and Engineering, Department of Polymers

Possibilities of preparation and mechanical characteristics of polymers containing oilseed rape stubble infected with phytopathogenic fungi

Department of Soil Science and Agricultural Chemistry, Faculty of Life Sciences, Podlasie University, Siedlce

Effect of infection by the fungus *Sclerotinia sclerotiorum* on chemical composition of straw of oilseed rape and Virginia mallow

Institute of Agrophysics, Lublin

The use of thermographic methods in studies of plant healthiness

[Laboratory of Structural Genomics](#)

Poznań University of Life Sciences, Faculty of Agronomy, Department of Biochemistry and Biotechnology - prof. dr hab. Cezary Mądrzak, dr. Dorota Narożna

The use of genomic BAC library of *L. angustifolius* for defining sequences of genes coding phenylalanine ammonia lyase (PAL) and chalcone synthase (CHS). Genetic mapping of genes at the *L. angustifolius* genetic map.

Adam Mickiewicz University in Poznań, Faculty of Biology, Institute of Molecular Biology and Biotechnology – dr. Wojciech Karłowski

Functional annotation of the sequences of the ends of BAC clones from the *L. angustifolius* genome library aimed at identification of candidate genes for resistance to pathogenic fungi.