

Research Centre for Cultivar Testing

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Facts about Polish agriculture (2024)

Agricultural land on farms

- **14,0** mln ha

- Use of agricultural land:
 - Arable land

- **10**,8 mln ha *(74,6%)*
- > Permanent meadows
- **2,4** mln ha *(19,1%)*
- > Permanent pastures
- 0,3 mln ha (2,6%)
- > Others (including orchards)
- 0,5 mln ha *(3,7%)*

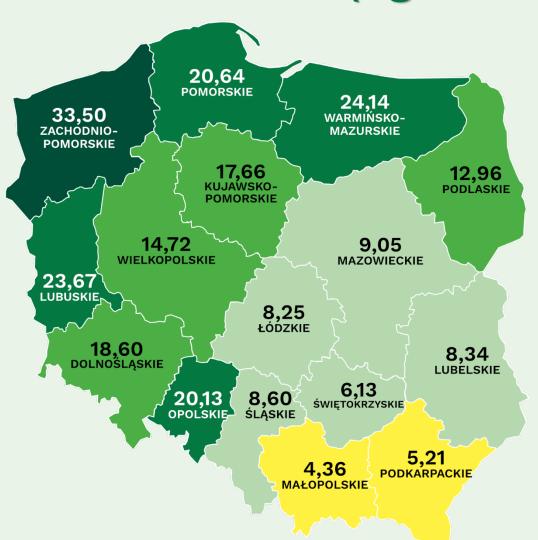
No. of farms >1 ha

- **1,2** mln
- Average farm size (>1 ha) 11,59 ha

(ranging from 14 -33 ha in north-western voivodeships to 4-9 ha in south-eastern ones)



Average farm size in Voivodeships (ha) (wg ARiMR) (2024)



National average 11,59 ha



Main agricultural crops (2024)

| | Acreage in 1000 ha | Average yield in dt/ha | | |
|--|--------------------------------|----------------------------------|--|--|
| Cereals (total) | 7089 | 48,6 | | |
| Wheat (Winter/Spring) | 2384 (2216/169) | 51,8 (52,6/40,9) | | |
| Maize (grain/silage) | 1891 (1270/611) | (70,0/466) | | |
| Triticale (Winter/Spring) | 1156 (1100/56) | 44,0 (44,5/34,3) | | |
| Rye (Winter) | 691 | 35,6 | | |
| Barley (Winter/Spring) | 680 (405/275) | 43,3 (46,8/38,3) | | |
| Oat | 524 | 31,7 | | |
| Cereal interspecies mixtures (Winter/Spring) | 284 (48/236) | 32,5 (37,3/31,5) | | |
| Oilseed Rape (Winter/Spring) Pulses (for grain and green matter) +Soyabean | 1106 (1089/17) 475 (443/32) | 32,9 (35,1/24,9) (22,2) | | |
| Sugar beet | 261 | 650 | | |
| Potato | 195 | 301 | | |



Main horticultural crops (2024)

Vegetables

157 thou. ha + 4,3 tys. ha under cover

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Onion – 22 thou. ha (4 position in EU), Carrot - 15 thou. ha (1), Sweet Maize - 14 thou. Ha, Cabbage - 13 thou. ha (3), Cucurbits - 11 thou. ha, Tomato - 9 thou. ha (8), Beetroot – 8 thou. ha (1), Persley - 7 thou. ha, Cucumber - 6 thou. ha (2), Cauliflower - 4 thou. ha (4)
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Fruit plants 343 thou. ha

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Apple - 148 thou. ha (2 position in EU), Currant - 45 thou. ha (1), Strawberry - 29 thou. ha (1-2), Cherry - 25 thou. ha (2), Raspberry - 19 thou. ha (1), Plum - 18 thou. ha (5), Aronia - 14 thou. ha, Blueberris - 13 thou. ha, Sweet cherry - 10 thou. ha (6), Pear - 6 thou. ha (9)
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Organic farming (2024)

636 thou. ha in 22,4 thou. producers



Legal basis of COBORU activities

National regulations

- The Law of November 25, 2010 on the Research Centre for Cultivar Testing (OJ of 2017 item 2109), and:
- The Polish Seed Act of November 9, 2012 (OJ of 2021 item 129)
- The Law of June 26, 2003 on the Legal Protection of Plant Varieties (OJ of 2021 item 213)
- The Law of 23 June 2022 on organic farming and organic production (OJ of 2023 item 1235)



Research Centre for Cultivar Testing (COBORU)(1)

- 1. COBORU is a Public Finance Sector Unit and possesses legal personality
- 2. COBORU is an Executive Agency as defined by Article 18 of the Act of 27 August 2009 on public finance (OJ 2021, item 305)
- 3. COBORU shall be supervised by the Ministry of Agriculture and Rural Development

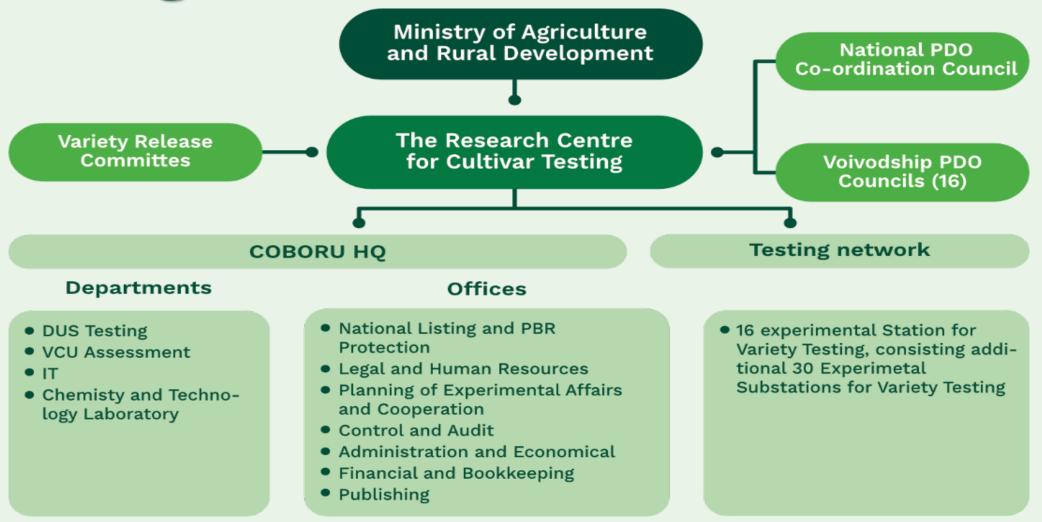


Research Centre for Cultivar Testing (COBORU) (2)

- > The activity of COBORU shall be financed from:
 - 1) the state budget in the form of subsidies:
 - a) subjective for subsidizing current activity of the institution,
 - b) purposeful for financing or subsidizing statutory tasks
 - 2) revenues:
 - a) income from agricultural activity,
 - b) income from experimental services,
 - c) miscellaneous incomes;



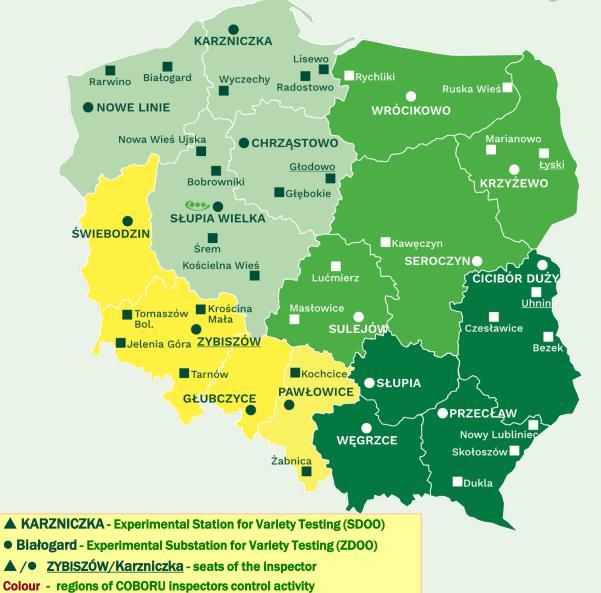
Organizational chart of COBORU



Headquarter's Employment (31.12.2024) - 117 people



COBORU variety testing network



16 Experimental Stations for Variety Testing (SD00) including additional:

30 Experimental Substations for Variety Testing (ZD00)

The size of SD00/ZD00:

< 50 ha - 15 SD00/ZD00
50 - 150 ha - 16 SD00/ZD00
150 - 250 ha - 7 SD00/ZD00
> 250 ha - 8 SD00/ZD00

The total area of land used by COBORU:

6 559 ha

Employment - 445 people, including 185 examiners



The main COBORU tasks

The Office is responsible for:

- national listing (NLI) of varieties
- administration of national PVP system of varieties
- coordination of national post-registration variety testing system and variety recommendation (PDO)
- post-control seed material tests
- **authorization for marketing** (seed belonging to varieties for which an application for entry to the National Catalogue of Varieties has been submitted)
- listing of organic heterogeneous materials
- conducting of official variety examinations:
 - DUS testing
 - **VCU** assessment
- publication of official information on varieties



COBORU mission

To stimulate innovation
in plant breeding and seed production
and
to support implementation
of plant variety
progress into agriculture



Cooperationwith national and international entities

Ministry of Agriculture and Rural Development

Relevant EU Commission Committees



Research Centre for Cultivar Testing



State Plant Health and Seed Inspection Service

Voivodeship Self-Governments (16)

Agricultural Chambers (16)

Polish Seed Trade Association

Research Institutions and Agricultural Universities

INTERNATIONAL

Variety Offices in MS

Council and European Commission (DG SANTE)

Community Plant Variety Office (CPVO)

International Union for the Protection of New Varieties of Plants (UPOV)

Members of UPOV

Variety Offices of non-EU Countries



COBORU publications





Polish Gazette for PBR and National List











Leaflets, folders







Polish National List of Agri., Veg. and Fruit Plant Varieties



LOZ Lista LOZ Zalecanyol







Descriptive Lists of Agricultural, Vegetable and Fruit Plant Varieties





Polish National List

(per plant sector; as of 31.12.2024)

Agricultural plants

Vegetable plants

Fruit plants

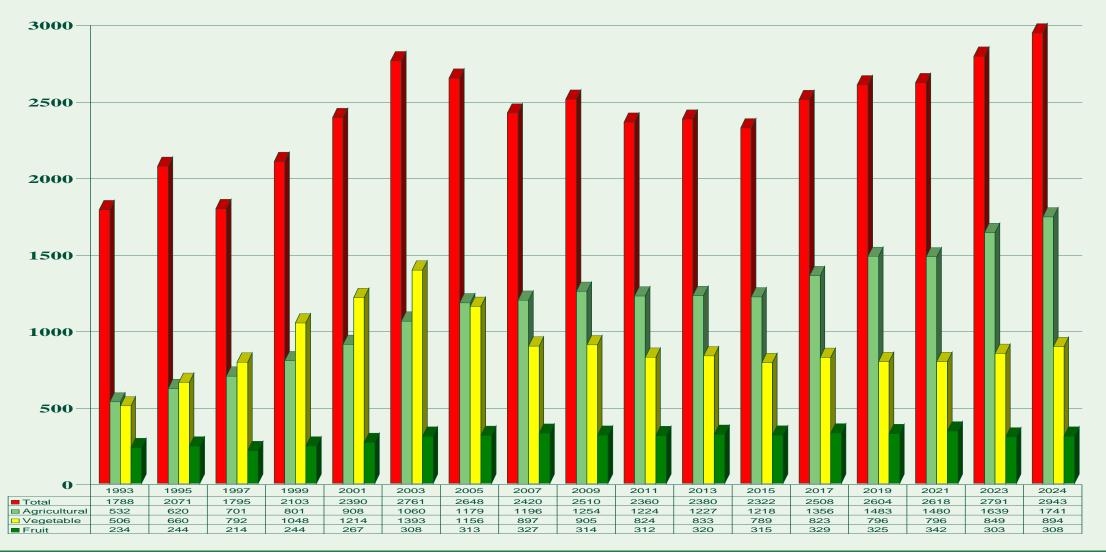
Total

- 1741 varieties (93 species) (6,0 % CCA)
- **894** varieties (58 species) (3,7 % CCV)
- 308 varieties (28 species) (1,8 % FRUMATIS)
- 2 943 varieties (179 species)



Polish National List (NLI)

Number of varieties admitted to Polish National List





Register of Varieties Protected by National Plant Breeders' Rights

(per plant sector; as of 31.12.2024)

Agricultural plants - 737 varieties

Vegetable plants - 210 varieties

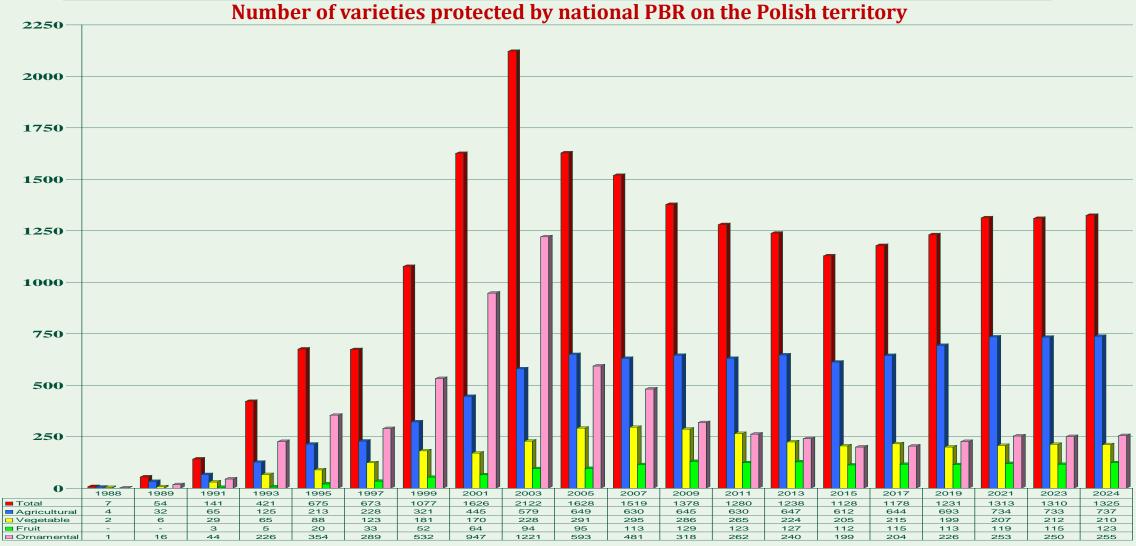
Fruit plants – 123 varieties

Ornamental plants - 255 varieties

Total – 1 325 varieties



Register of Varieties Protected by National Plant Breeders' Rights (PBR)





Official variety testing in COBORU

- DUS testing
- Post-control
- Official VCU assessment
- Post-registration variety testing and variety recommendation (PDO)
- Post-registration variety testing for Descriptive Lists purposes
- Pro-ecological and organic heterogeneous material testing

Yearly, around 2000 varieties are tested (VCU) in more than 1 500 field trials





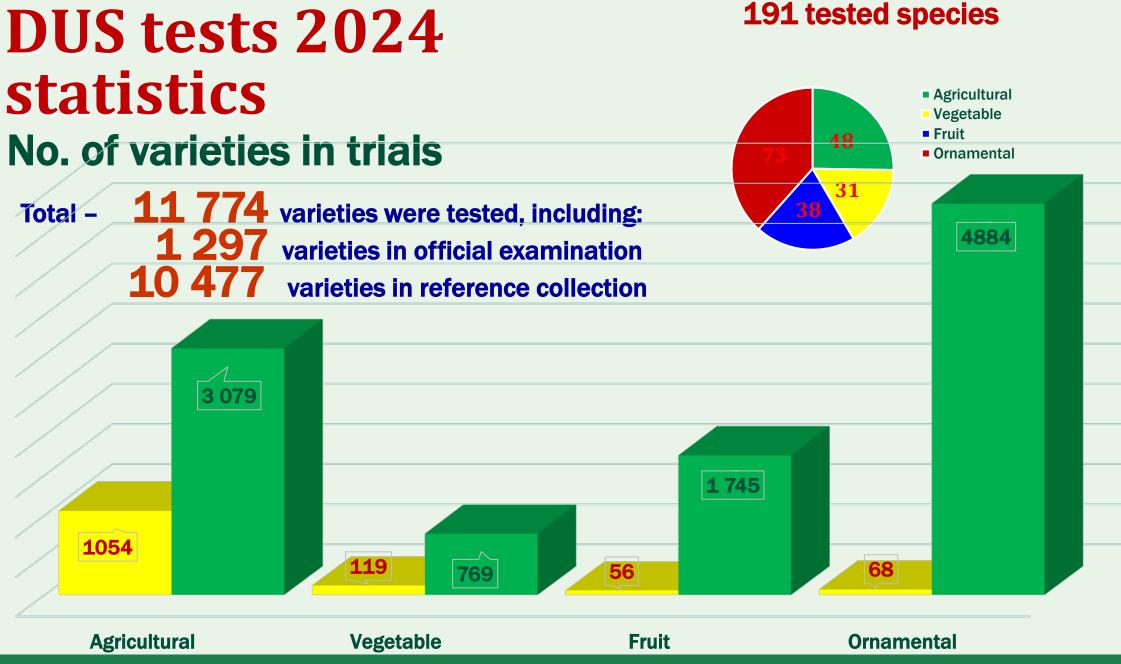


DUS testing network



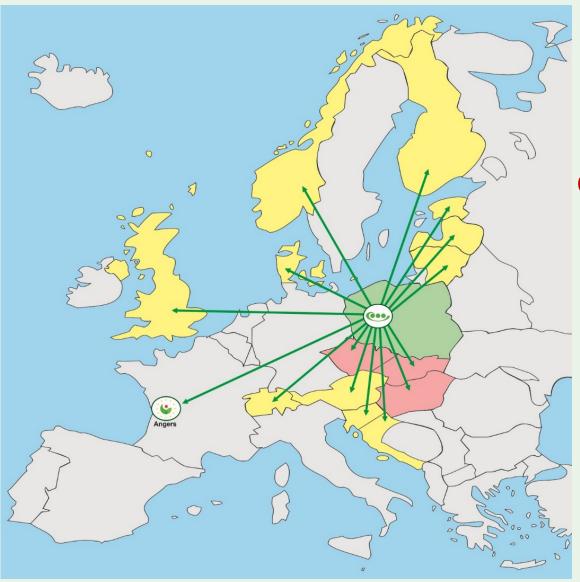
- DUS tests are performed to see if a variety is: distinct, uniform and stable
- DUS testing is conducted within the COBORU testing network
- In each species tests are done in
 1 location, for 1-3 (5) vegetation seasons
- DUS tests are conducted according to CPVO
 Technical Protocols and UPOV Test
 Guidelines and prepared on their basis COBORU Guidelines
- Living collections of the reference collection for each genus or species in which varieties are tested are maintained







Cooperation in DUS testing



Regular cooperation:UPOV, CPVO, national offices

Bilateral agreements: Czech Republic, Hungary, Slovakia

In 2024 we carried out DUS tests for:
CPVO, Austria, Croatia, Czech Republic, Denmark,
Estonia, Finland, Great Britain, Hungary, Latvia,
Lithuania, Norway, Slovenia, Switzerland
(total: 201 varieties + additional 125 varieties as
reference collection)

In 2024 we provided DUS reports to:
CPVO, Austria, Bosnia and Herzegovina, Croatia,
Czech Republic, Denmark, Estonia, Finland,
France, Great Britain, Ireland, Lithuania,
Netherlands, Romania, Slovenia, Sweden,
Switzerland, Turkey, Ukraine
(total for: 161 varieties and some hybrid
components)



DUS testing for CPVO

COBORU is entrusted for carrying out of DUS tests in favour of CPVO for 237 taxa

The most important taxa are:

Agricultural Plants (36 taxa)

Including: Barley, Buckwheat, Blue Lupine, Field Bean, Field Pea, Maize, Oat, Oilseed Rape, Perennial Ryegrass, Potato, Red Fescue, Rye, Serradella, Smooth-stalked Meadowgrass, Tall Fescue, Triticale, Wheat, White Lupine, White Mustard, Yellow Lupine

Vegetable Plants (13 taxa)

Including: Beetroot, Broad Bean, Brussels Sprouts, Carrot, Cucumber and Gherkin, Dwarf and Climbing French Bean, Onion, Parsley, Pea (Sugar, Wrinkled and Round), Sprouting Broccoli/Calabrese, Tomato

Fruit Plants (27 taxa)

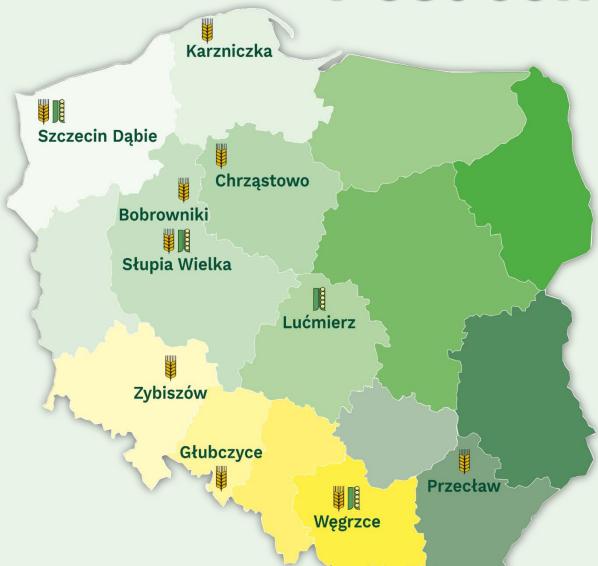
Including: Apple, Black Currant, Blueberry, Plum, Raspberry, Sour Cherry, Strawberry

Ornamental Plants (161 taxa)

Including: Bearberry Cotoneaster, Berberis, Birch, Black Pine, Chrysanthemum, Clematis, Colorado Spruce, Echinacea, Elder, Gerbera, Ginkgo, Hinoki Cypress, Juniper, Kobus Magnolia, Larch, Lawson Cypress, Leucothoe, Maple, Nootka Cypress, Norway Spruce, Poinsettia, Rose, Sawara Cypress, Spirea, Thuja, Virginia Creeper, White Spruce, Willow, Yew



Post control tests



Organization of tests

10 SD00/ZD00
(The same SD00/ZD00 in which DUS test are carried out for particular species)

Tests for the species: at one experimental point

Duration: one growing season



Post control tests. 2024

| | Number of samples | | | |
|---------------------------------------|-------------------|-----------------------------|--|--|
| Group of species | samples | variety standard samples | | |
| Winter cereals | 1046 | 254 | | |
| Spring cereals | 439 | 134 | | |
| Maize | 117 | 58 | | |
| Pulses | 371 | 100 | | |
| Leguminous | 53 | 16 | | |
| Grasses | 154 | 53 | | |
| Oil, Fibre and special species | 8 | 5 | | |
| Oil, Fibre and special spring species | 92 | 24 | | |
| Other agricultural species | 43 | 19 | | |
| Vegetables | 61 | 56 | | |
| Total in 2024 | 2384 | 719 | | |
| Total in 2023 | 2471 | 725 | | |
| Total in 2022 | 2313 | 786 | | |







Integration of official variety testing system with system of PDO in Poland

Official registration tests (DUS, VCU)
(2-3_vears)

Variety Listing in other MS

Variety Listing (NLI)

EU Common Catalogue of Varieties of Agricultural Plant Species (CCA)

Post-registration variety testing system (PDO)

(minimum 2 years)

EU Varieties "Recognition trials" (minimum 2 years)

Variety Recommendation (RL)



Official VCU assessment. 2024 Testing sites



- 46 Experimentalsites belonging to COBORU (SDOO/ZDOO)
- **11** Experimental sites belonging to breeders:
 - Winter Wheat: Danko HR Laski, Danko HR - Szelejewo, HR Smolice, HR Strzelce, PHR - SHR Nagradowice, MHR - HR Polanowice
 - Spring Barley: HR Smolice Bąków , PHR - SHR Nagradowice, MHR - HR Polanowice
 - Spring Wheat: Danko HR Choryń, MHR
 -Kobierzyce, HR Strzelce Kończewice
 Maize: HR Smolice
 - Sugar Beet: KHBC Straszków
- 1 Experimental Points of IHAR-PIB
 - Potato: Młochów



The methodology of official VCU assessment (1) Basic parameters of field trials:

- Number of field trials: 4-14
- ✓ Number of tested factors:
 - Barley, wheat, triticale, rye 2 (agrotechnical levels, varieties)
 - Edible potato v. early varieties 2 series (two harvesting dates, varieties)
 - Other species 1 (varieties)
- **✓** Number of replications:
 - Barley, wheat, triticale, rye 2 replications
 - Others 3 replications
- ✓ Plot size 10-16,5 m² (for harvesting)
- **✓** Randomization:
 - Randomized block design (< 16 varieties)
 - Incomplete block design alpha design (≥ 16 varieties)
 - Grouping of objects (some pulses and soybeans)
- ✓ Number of reference varieties:
 - 3-4 varieties:
 - or in case of combined experiments (official +PDO):
 - o all tested from NLI
 - o or selected from NLI
 - o or all from PDO (NLI+CCA)



Special experiments

- Cereals:
 - winter hardiness (box, embankment, field)
 - frostresistance (cold chamber)
 - reaction to low soil pH
 - grain sprouting in the ear
- Sugar beet:
 - resistance to beet weevil (*Cercospora eticola*)
- > Potato:
 - resistance of varieties to potato blight
 - resistance to Y virus (IHAR-PIB Radzików Młochów Division)



Laboratory analysis

- Baking value of Wheat, Rye and Triticale varieties
- > Technological value of Durum Wheat varieties for pasta
- Malting value of Barley varieties
- Consumption value of table Potato varieties and for the production of French fries and chips
- > Technological value of Sugar Beet varieties
- Technological value of Flax and Hemp varieties
- Nutrient contents (protein, fat, fatty acids, sugars, starch)
- Content of anti-nutritional components (glucosinolates, alkaloids, tannins, nitrates vegetables, etc.)
- Content of other components (fibre, cellulose, morphine, THC, CBD, essential oils)
- > Density of grain (cereals, corn for grain)
- Digestibility and net lactation energy NEL (leguminous and grasses)
- Fibre fractions: NDF and ADF (minor seed and panicle crops)Seed saturation (Pea)
- Electrophoresis tests (Wheat, Triticale, Barley and Oat varieties) DUS complementary testing



Number of applications for NLI. Agricultural species (VCU Assessment)

| Species | 2015/ 2016 | 2016/ 2017 | 2017/ 2018 | 2018/ 2019 | 2019/ 2020 | 2020/ 2021 | 2021/ 2022 | 2022/ 2023 | 2023/ 2024 | 2024/ 2025 |
|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Total | 552 | 501 | 583 | 596 | 609 | 613 | 602 | 626 | 609 | 661 |
| Winter Barley | 43 | 32 | 35 | 41 | 30 | 39 | 30 | 24 | 31 | 35 |
| Winter Wheat + Durum + Spelt | 101+0+0 | 79+2+1 | 84+2+2 | 88+3+2 | 92+1+1 | 87+1+0 | 87+0+1 | 87+0+0 | 95+0+0 | 90+0+0 |
| Winter Rye | 23 | 22 | 18 | 24 | 25 | 24 | 23 | 28 | 29 | 35 |
| Winter Triticale | 20 | 22 | 21 | 23 | 28 | 24 | 27 | 24 | 29 | 31 |
| Spring Barley | 31 | 32 | 37 | 33 | 34 | 44 | 31 | 27 | 23 | 30 |
| Spring Wheat + Durum | 20+1 | 13+0 | 19+0 | 29+0 | 27+0 | 25+0 | 24 | 22+0+0 | 19+0+0 | 23+0+0 |
| Spring Triticale + Rye | 7+0 | 3+3 | 7+1 | 2+2 | 5+4 | 3+3 | 6+2 | 8+0 | 5+4 | 7+3 |
| Oat: Spring + Winter | 20+1 | 10+1 | 20+1 | 14+1 | 17+0 | 21+0 | 16+0 | 18+2 | 14+1 | 15+4 |
| Maize | 73 | 85 | 104 | 117 | 132 | 116 | 132 | 129 | 125 | 136 |
| Winter Oilseed Rape | 104 | 89 | 100 | 94 | 96 | 90 | 82 | 77 | 93 | 96 |
| Sugar Beet | 57 | 60 | 61 | 62 | 61 | 59 | 60 | 78 | 62 | 60 |
| Potato | 19 | 15 | 22 | 26 | 13 | 18 | 21 | 19 | 16 | 23 |
| Legumes + Soya Bean | 19 | 19 | 25 | 25 | 22 | 29 | 32 | 40 | 18 +2oz+16 | 25 +3oz+25 |
| Herbage Legumes | 0 | 5 | 5 | 2 | 4 | 4 | 6 | 6 | 1 | 2 |
| Grasses (Fodder) | 6 | 0 | 10 | 1 | 7 | 11 | 14 | 14 | 18 | 8 |
| Other species | 7 | 8 | 9 | 7 | 10 | 15 | 8 | 23 | 8 | 10 |

Other: 2025 - Spring Oilseed Rape (9), White Mustard (1)

2024 – Spring Oilseed Rape (3), Flax (1), Fodder Beet (4), 2023 - Spring Oilseed Rape (7), Oilseed Radish (4), Blue Phacelia (3), sunflower (3), Fodder Beet (2), White Mustard (2), flax (2)







Legal basis of PDO activities (1)

DIRECTLY

Seed Act of 9 November 2012 (0) of 2021, item 129) - art. 27)

Art. 27

- 1. The Research Centre, in cooperation with the voivodeship self-governments and with agricultural chambers, shall conduct the Post-registration variety testing, for important from the economic point of view plant species within the territory of the voivodeship, with varieties included in the National Register or in The Common Catalogue.
- 2. Post-registration variety testing shall be conducted according to the methods and procedures elaborated by Director General of the Research Centre.
- 3. The methods and procedures, referred to in paragraph 2, Director General of the Research Centre elaborates in consultation with the minister competent for agriculture.
- 4. For varieties of plant species included in the Post-registration variety testing, variety descriptive lists shall be produced.
- 5. On the basis of the results of the Post-registration variety testing, The Research Centre in consultation with voivodeship self-government and the agricultural chamber shall determine a list of varieties recommended for cultivation within the territory of the voivodeship.



Organization of PDO testing system

National PDO Coordinator COBORU Director General

Entities directly responsible for PDO management

Consultative bodies

Central level

The Research Centre for Cultivar Testing in Słupia Wielka The National PDO Coordination Council

Regional level

The Experimental Station for Cultivar Testing and other experimental units in the voivodeship

The Voivodeship PDO Council

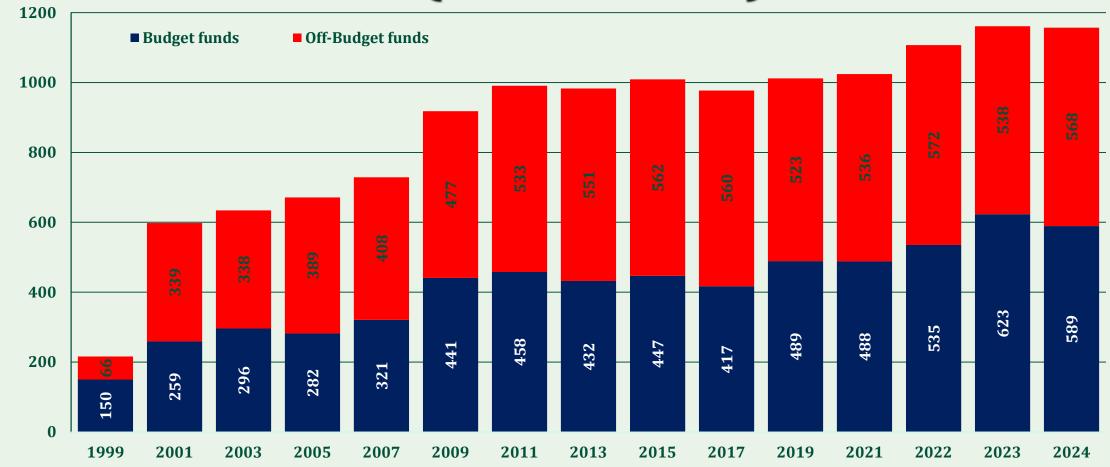


Some methodological aspects of PDO trials

- GUIDELINES: all trials are carried out in compliance with COBORU methodology and guidelines
- > STANDARD VARIETIES: in all trials the same standard varieties defined by COBORU are used (mostly 3-4 varieties per species)
- > <u>TESTED VARIETIES</u>: all newly listed and the "best" varieties from National List (NLI) and some varieties from CCA tested in "EU Recognition trials"
- > <u>SEED MATERIAL</u>: seed material of each variety for all experiments originates from one source (supplied by breeders or taken from commercial seed lots); it is ordered by COBORU and distributed to experimental sites by SDOO in Slupia Wielka
- MONITORING/SUPERVISION: all experiments are obligatorily monitored by local COBORU inspectors (obligatory three times per season) and by COBORU technical staff
- TRIAL ACCESS: trials can also be visited by applicants, maintainers or breeders, members of National and Voivodeship PDO Councils, advisers, farmers and other variety users



Number of PDO trials (1999 - 2024)



In 2024, in PDO system we carried out 1157 field trials, in which we tested 734 varieties of the most important species, mainly agricultural



PDO experimental network in Poland. 2023



99 Experimental sites

- COBORU Experimental Stations (46)
- Breeding and seed companies stations (21)
- Agricultural Advisory Centers (11)
 and their Experimental Points (\$\ightarrow\$)
- Experimental units belonging to other institutions (21)



"The Protein Initiative of COBORU"(1)

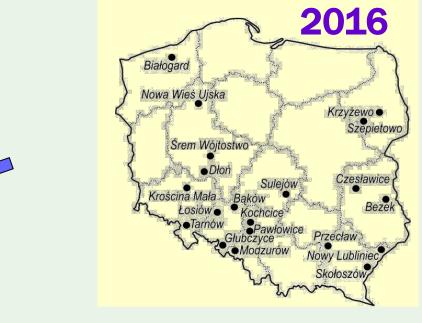
(since 2017)

- Main objective to support efforts to increase the area under protein crops and consequently reduce the country's dependence on GMO Soya Bean
- Aims of the program:
 - regular verification of the suitability of all regions of the country for the cultivation of pulses varieties (Field Bean, Field Pea, Narrow-leaved Lupine, Yellow Lupine) and Soya Bean
 - creation of a recommendation system of varieties in those species at the voivodeship level by determining the suitability of pulses and Soya Bean varieties for cultivation, including:
 - identifying their yielding and its stability
 - identifying of earliness and adaptability of varieties in different cultivation regions, especially Soya Bean varieties
 - identifying of tolerance of varieties to biotic stresses (diseases, pests etc.) and abiotic stresses (drought and other extreme environmental conditions)



Trials location with Soya Bean varieties





2016

- Number of trials 21
- Number of varieties 21 (13Bo + 6KR + 2CCA)

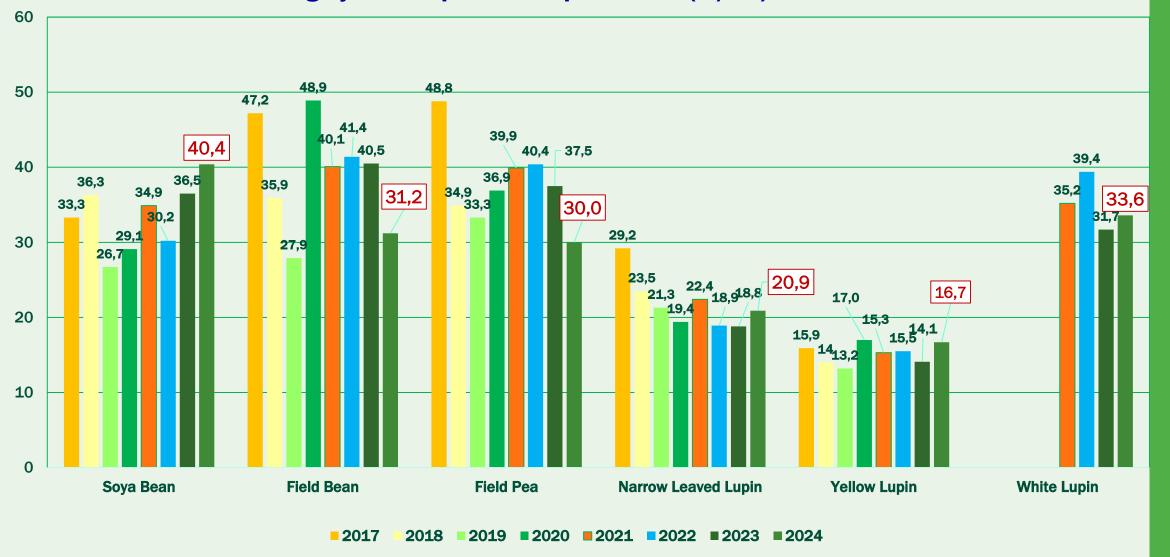
2025

- Number of trials 113 (36, 37, 32 +11 spec.)
- Number of varieties 88 (33 Bo + 24 KR + 13 CCA_{PDO} +14 CCA_{Roz})



Protein Initiative of COBORU

Average yields of protein crop varieties (dt/ha) 2017-2023





Variety testing for organic farming in COBORU



Location of COBORU's own experimental stations conducting varietal trials under the organic farming regime



Variety testing for organic farming in COBORU Test guidelines





Variety testing for organic farming in COBORU

Number of trials in 2023/2024 season

| In | Species | Number of trials | Number of tested | | |
|-----|--------------------------------|------------------|------------------|--|--|
| Lp. | Species | Number of trials | varieties | | |
| 1 | Winter Barley | 5 (5) | 6 | | |
| 2 | Spring Barley | 10 (5) | 11-25 | | |
| 3 | Oat | 10 (6) | 8-15 | | |
| 4 | Spring Spelt Wheat | 5 (5) | 2 | | |
| 5 | Winter Spelt Wheat | 5 (5) | 5 | | |
| 6 | Spring Wheat | 8 (5) | 11 | | |
| 7 | Winter Wheat | 9 (6) | 16 | | |
| 8 | Winter Triticale | 11 (6) | 11-21 | | |
| 9 | Winter Rye | 10 (6) | 12-28 | | |
| 10 | Buckwheat | 5 (5) | 4 | | |
| 11 | Field Pea | 5 (5) | 6 | | |
| 12 | Narrow-leaved Lupine | 10 (5) | 11-25 | | |
| 13 | Yellow Lupine | 10 (6) | 8-15 | | |
| 14 | Soya Bean | 5 (5) | 2 | | |
| 15 | Silage Maize | 5 (5) | 5 | | |
| 16 | Grain Maize | 8 (5) | 11 | | |
| 17 | Potato (three maturity groups) | 9 (6) | 16 | | |
| 18 | Oil Flax | 1(1) | 3 | | |
| 19 | Camelina | 1(1) | 2 | | |
| 20 | Red Beet | 1(1) | 5 | | |
| 21 | Carrot | 1(1) | 5 | | |
| | Total | 139 (102) | 225 | | |

(...) - Number of trial in SD00/ZD00



Financing of PDO activities

- State budget (via COBORU)
- Voivodeship Self-governments
- Agricultural Chambers
- Breeding Stations, Seed Companies and Agricultural Advisory Entities
- Sugar Beet industry
- Polish Union of Maize Producers
- COBORU own resources from agricultural activity
- Others (producers of fertilizers and plant protection products and other agricultural organizations and unions, etc.)



Lists of varieties recommended for cultivation within the territory of the voivodeship

- The Lists ... are produced separately in each voivodeship and final decisions are taken by directors of Coordination Stations after opinion by the relevant Voivodeship PDO Council
- Varieties tested in PDO trials at least for two years can be recommended only
- Crops covered with recommendation:
- (Cereals, Winter and Spring Oilseed Rape, Table Potato, Maize, Legumes)
- > The Lists ... are published regionally and additionally on the COBORU website





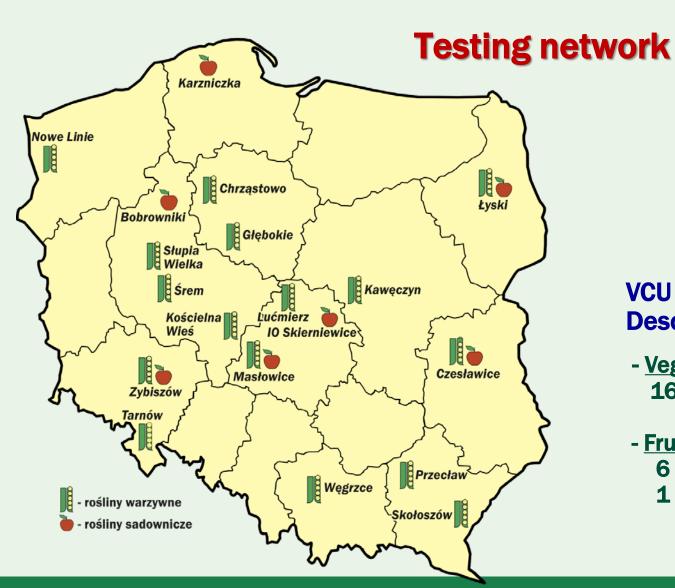
Lists of varieties recommended for cultivation within the territory of the voivodeships in 2025

| Voivodeship | Winter Wheat | Winter Barley | Winter Triticale | Winter Rye | Spring Wheat | Spring Barley | Oat | Spring Triticale | Spring rye | Maize (grain) | Maize (silage) | Winter Oilseed Rape | Spring Oilseed Rape | Potato | Field Bean | Field Pea | White Lupin | Narrow Leaved Lupin | Yellow Lupin | Soya Bean | No. Species recom- mended in voivodeship |
|--|--------------|---------------|------------------|------------|--------------|---------------|-----|------------------|------------|---------------|----------------|---------------------|------------------------|--------|------------|-----------|-------------|---------------------|--------------|-----------|--|
| dolnośląskie | 9 | 10 | 6 | 10 | 6 | 8 | 8 | 3 | | 15 | | 11 | | 10 | 4 | 8 | | 7 | 3 | 9 | 16 |
| kujawsko-pomorskie | 14 | 8 | 7 | 11 | 7 | 8 | 5 | 4 | | 17 | 14 | 14 | 3 | 16 | 6 | 10 | | 8 | 4 | 13 | 18 |
| lubelskie | 12 | 8 | 8 | 7 | 6 | 9 | 5 | | | 6 | | 8 | | 14 | 5 | 8 | 2 | 4 | 3 | 12 | 16 |
| lubuskie | 12 | 7 | 6 | 9 | 7 | 10 | 6 | 4 | | 15 | | 12 | | | | 6 | | 8 | 3 | 14 | 14 |
| łódzkie | 10 | 11 | 11 | 13 | 9 | 11 | 5 | 5 | 1 | 14 | 12 | 21 | | 14 | 5 | 9 | | 10 | 3 | 11 | 18 |
| małopolskie | 9 | 5 | 6 | 5 | 7 | 7 | 8 | | | 5 | | | | 19 | 4 | 5 | | 5 | 2 | 8 | 14 |
| mazowieckie | 14 | 8 | 7 | 11 | 6 | 11 | 8 | 4 | | 21 | 7 | 14 | | | 5 | 9 | | 7 | 3 | 11 | 16 |
| opolskie | 12 | 7 | 8 | 9 | 5 | 10 | 5 | | | 9 | | 12 | | 12 | 6 | 8 | | | | 12 | 13 |
| podkarpackie | 10 | 6 | 5 | 7 | 6 | 6 | 6 | | | 7 | | 8 | 3 | 4 | 3 | 6 | | 6 | 2 | 12 | 16 |
| podlaskie | 14 | 9 | 5 | 13 | 7 | 8 | 6 | 5 | 3 | 14 | 12 | 8 | | | 6 | 9 | | 6 | 2 | 8 | 17 |
| pomorskie | 14 | 5 | 4 | 5 | 5 | 5 | 3 | 4 | | 5 | 8 | 12 | | 9 | 4 | 7 | | 6 | 2 | 3 | 17 |
| śląskie | 17 | 9 | 11 | 10 | 10 | 12 | 8 | 5 | | 20 | | 19 | | 11 | 6 | 9 | | 9 | 3 | 12 | 16 |
| świętokrzyskie | 6 | 6 | 6 | 7 | 8 | 9 | 6 | | | | | 12 | | 15 | 6 | 7 | 2 | 5 | 3 | 8 | 15 |
| warmińsko-mazurskie | 15 | 4 | 5 | 8 | 8 | 11 | 4 | | | 11 | | 15 | | 10 | 6 | 6 | | 5 | 3 | 5 | 1 5 |
| wielkopolskie | 13 | 8 | 6 | 7 | 7 | 8 | 7 | | | 11 | 9 | 10 | | 12 | | 7 | | 4 | 3 | 9 | 15 |
| zachodniopomorskie | 12 | 5 | 7 | 10 | 6 | 5 | 4 | 5 | | 6 | | 16 | | 23 | 8 | 9 | | 4 | 3 | 7 | 16 |
| No. varieties recomended within the species in all | 51 | 24 | 16 | 30 | 24 | 35 | 19 | 11 | 3 | 40 | 23 | 39 | 4 | 30 | 11 | 21 | 2 | 15 | 5 | 27 | 430 |
| No. Voivodeships with recomended lists | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 9 | 2 | 15 | 6 | 15 | 2 | 12 | 14 | 16 | 2 | 15 | 15 | 16 | 252 |

The annual meeting of the ESCAA, Krakow, 7-9th May 2025



VCU assessment for Variety Descriptive Lists purposes



VCU assessment for Variety Descriptive Lists:

- Vegetable Plants:16 SD00/ZD00
- Fruit Plants:
 - 6 SD00/ZD00
 - 1 IO Skierniewice



VCU assessment for Variety Descriptive Lists puposes

(17 species of vegetable and 8 species of fruit plants)

The aim of this post-registration VCU examination is to prepare the Descriptive Lists which contain information about value for cultivation and use of vegetable and fruit plant varieties inscribed into the Polish National List (NLI)

| Vegetables | No. of trials | No. of tested varieties | | | | |
|--------------------|----------------|-------------------------|--|--|--|--|
| French Bean | 6 | 8 | | | | |
| White Cabbage | 6 | 7 | | | | |
| Carrot | 6 | 12 | | | | |
| Cucumber | 18 (6) | 11 | | | | |
| Pepper | 15 | 17 | | | | |
| Lettuce | 6 | 13 | | | | |
| Tomato | 6 | 10 | | | | |
| Broad beans | 6 | 8 | | | | |
| Total in 2024 | 69 (6) | 86 | | | | |
| Total in 2023 | 78 (12) | 111 | | | | |
| Total in 2022 | 72 (12) | 102 | | | | |

| Fruits | No. of trials | No. of tested varieties | | | | |
|---------------|------------------|-------------------------|--|--|--|--|
| Apple | 2 | 12 | | | | |
| Black Currant | 4 | 13 | | | | |
| Strawberry | 4 | 6 | | | | |
| Total in 2024 | 10 | 31 | | | | |
| Total in 2023 | 20 | 46 | | | | |
| Total in 2022 | 32 | 46 | | | | |

(...) - including special tests (storage, pickling of cucumbers)



Training and dissemination activities of COBORU. 2024

- COBORU specialists gave 163 lectures and talks at various conferences, seminars, trainings (86 COBORU Headquarters staff, 77 SDOO/ZDOO staff)
- ➤ SDOOs on their own territory organized, either independently or in cooperation with other units, 248 events such as: field days, open days, training courses, workshops or received tours of farmers, students, schoolchildren, etc. Nearly 18,000 people visited the SDOO grounds during these events
- COBORU, and mainly SDOO/ZDOO actively participated in 75 different types of fairs, exhibitions, harvest festivals, etc., organized outside the SDOO area, which were attended by several hundred thousand visitors





SDOO Węgrzce

- established in 1952 year in Sciborzyce, relocated in 1956 year to Węgrzce
- location 4 km north-west of Kraków,
- altitude 285 m
- average annual temperature: 7.90 °C
- average annual precipitation: 650 mm
- total area of SDOO 75.2 ha (including 66,0 ha of arable land)
- area under trials: 16 ha
- class of soil: I IIIb, mainly IIb (good and very good wheat and beet soil quality)
- average employment: 14 persons, including 4 examiners of professional staff, with high qualifications, dealing with experiments



Distinctness, Uniformity and Stability Tests (DUS)

- ■Garlic
- Chives
- Leek
- **■Welsh Onion**
- **■Cucumber, Gherkin**
- ■Parsnip
- Beetroot
- ■Winter Pea
- ■Field Pea
- Sugar Pea
- ■Wrinkled Pea
- ■Melon















Post-Control Tests (varietal identity and purity tests of seed material):

- Beetroot
- Cucumber,Gherkin
- Welsh Onion
- Field Pea
- Wrinkled Pea
- Chives











Trials for the Variety Descriptive Lists (LOO) of vegetable plants :

- French Bean
- Red Cabbage
- White Cabbage
- Pepper











Official Value for Cultivation and Use Trials (VCU):

- Winter Wheat
- Winter Barley
- Spelt Wheat
- Winter Oilseed Rape
- Fodder Beet
- Maize
- Potato















Post-registration variety testing system (PDO):

- Winter Wheat
- Winter Barley
- Triticale
- Winter Spelt Wheat
- Spring Wheat
- Spring Barley
- Spring Oat
- Maize
- Potato
- Field Bean
- Field Pea
- Narrow Leaved Lupine
- Soya Bean















Organic trials - 9 trials financed from budgetary sources:

Winter Barley Spring Wheat

Winter Wheat Spring Spelt Wheat

Winter Spelt Whaet Soya Bean

Spring Barley Potato

Organic trials - 6 trials financed from non-budgetary sources:

Triticale Sunflower

Winter Rye Potato

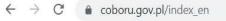
Oats Flax



Agricultural production:

- Winter Wheat 24 ha
- Winter Oilseed Rape 10 ha
- Maize 7,0 ha
- Sugar Beet 6,0 ha













RESEARCH CENTRE FOR **CULTIVAR TESTING**





NOTICE! 1











