

Workshop for experts from Bosnia and Herzegovina

**Polish system for seeds and planting material
registration**

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Facts about Polish agriculture

- 👉 **Country's surface** - **312,7** thousand km²
- 👉 **Total no. of inhabitants** - **38,2** Mio people
- 👉 **Vegetation period** - **250** Days (on the average)
- 👉 **Precipitation** - **580-620** mm (on the average)
- 👉 **Agricultural land** - **18,8** Mio ha
- 👉 **No. of farms >1 ha** - **1,6** Mio
- 👉 **Average farm size (>1 ha)** - **10,4** ha (ranging from 16-31 ha in Western part to 4-12 ha in Eastern regions)

Structure of Polish territory





Agricultural land	- 60% (18,8 mln ha)
➤ Arable land	- 45% (13,9 mln ha)
➤ Permanent meadows	- 7% (2,3 mln ha)
➤ Permanent pastures	- 5% (1,6 mln ha)
➤ Orchards	- 1% (0,3 mln ha)
➤ Others	- 2% (0,7 mln ha)
Forests	- 31% (9,6 mln ha)
Land under water	- 2% (0,6 mln ha)
Urbanized area	- 5% (1,6 mln ha)
Others	- 2% (0,6 mln ha)

Main crops

	Acreage in 1000 ha	Average yield in dt/ha
Cereals (total)	7715	35,6
Wheat (Winter/Spring)	2159 (1728/430)	42,2 (43,8/34,7)
Triticale (Winter/Spring)	1197 (1057/140)	33,9 (34,4/29,1)
Rye (Winter)	1064	26,2
Cereal interspecies mixtures (Winter/Spring)	1193 (93/1099)	29,7 (30,9/29,6)
Barley (Winter/Spring)	1051 (211/840)	34,5 (38,8/33,3)
Maize (grain/silage)	847 (404/443)	(68,3/477)
Oat	546	26,7
Oilseed Rape (Winter/Spring)	832 (777/55)	24,0 (24,4/17,8)
Potato	393	227
Pulses (for grain and green matter)	200 (183/17)	(22,0/174)
Sugar beet	207	546
Vegetables	171	
(Onion(3)/Cabbage(1)/Carot(1)/Cucumber(3)/Cauliflower(4)/Tomato(7)/Beetroot(1) - 25/24/22/15/10/10/10		
Fruit plants	423	
(Apple(2)/Strawberry(2)/Currant(2)/Cherry(1)/Raspberry(3)/Plum/SweetCherry/Pear183/45/43/34/28/19/12/10		
Organic farming (2012) - 661 687 ha in 25 944 farms		

Legal basis of activities

National regulations:

-  **The Polish Seed Act, of November 9, 2012**
-  **The Law on the Legal Protection of Plant Varieties, of June 26, 2003**
-  **Other (eg organic farming, on genetically modified organisms, the chemical substances and preparations)**
-  **The Law on the Research Centre for Cultivar Testing , of November 25, 2010, and**
 - **Degree of Minister for Agriculture and Rural Development of 21 December 2010 on the statute of the Research Centre for Cultivar Testing**
 - **Degree of Minister for Agriculture and Rural Development of 24 December 2010 on the salary of workers of the Research Centre for Cultivar Testing and for the other benefits related to the work**
 - **Degree of Minister for Agriculture and Rural Development of 7 November 2011 on the method for determining surplus of the financial resources in the Research Centre for Cultivar Testing**

**Centralny Ośrodek Badania Odmian Roślin Uprawnych
The Research Centre for Cultivar Testing
(COBORU)**



Address: The Research Centre for Cultivar Testing

63-022 Słupia Wielka, woj. Wielkopolskie, Poland

Phone: (+48 61) 285 23 41; Fax: (+48 61) 285 35 58

E-mail: sekretariat@coboru.pl; Website: www.coboru.pl

Legal basis of COBORU activities

Relevant EU and international regulations

- **International Convention for Protection of New Varieties of Plants, of 2 December, 1961, as revised at Geneva on 10 November, 1972, on 23 October 1978 and 19 March, 1991**
- **Council Directive 2002/53/EC of 13 June 2002 on the common catalogue of varieties of agricultural plant species**
- **Council Directive 2002/55/EC of 13 June 2002 on the marketing of vegetable seed**
- **Commission Directive 2002/8/EC of 6 February 2002 amending Directives 72/168/EEC and 72/180/EEC concerning the characteristics and minimum conditions for examining vegetable and agricultural varieties respectively**
- **Commission Decision 2004/842/EC of 1 December, 2004 concerning implementing rules whereby Member States may authorize the placing on the market of seed belonging to varieties for which an application for entry in the national catalogue of varieties of agricultural plant species or vegetable species has been submitted**
- **Council Regulation (EC) No 2100/94 of 27 July 1994 on Community plant variety rights**
- **CPVO technical Protocols (TP) and UPOV Test Guidelines (TGP)**

The Research Centre for Cultivar Testing (2)

- **The activity of the Research Centre 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;**

- **The Research Centre shall be comprised of:**
 - 1) **the central office;**
 - 2) **experimental stations for cultivar testing, hereinafter referred to as “regional divisions” (16).**

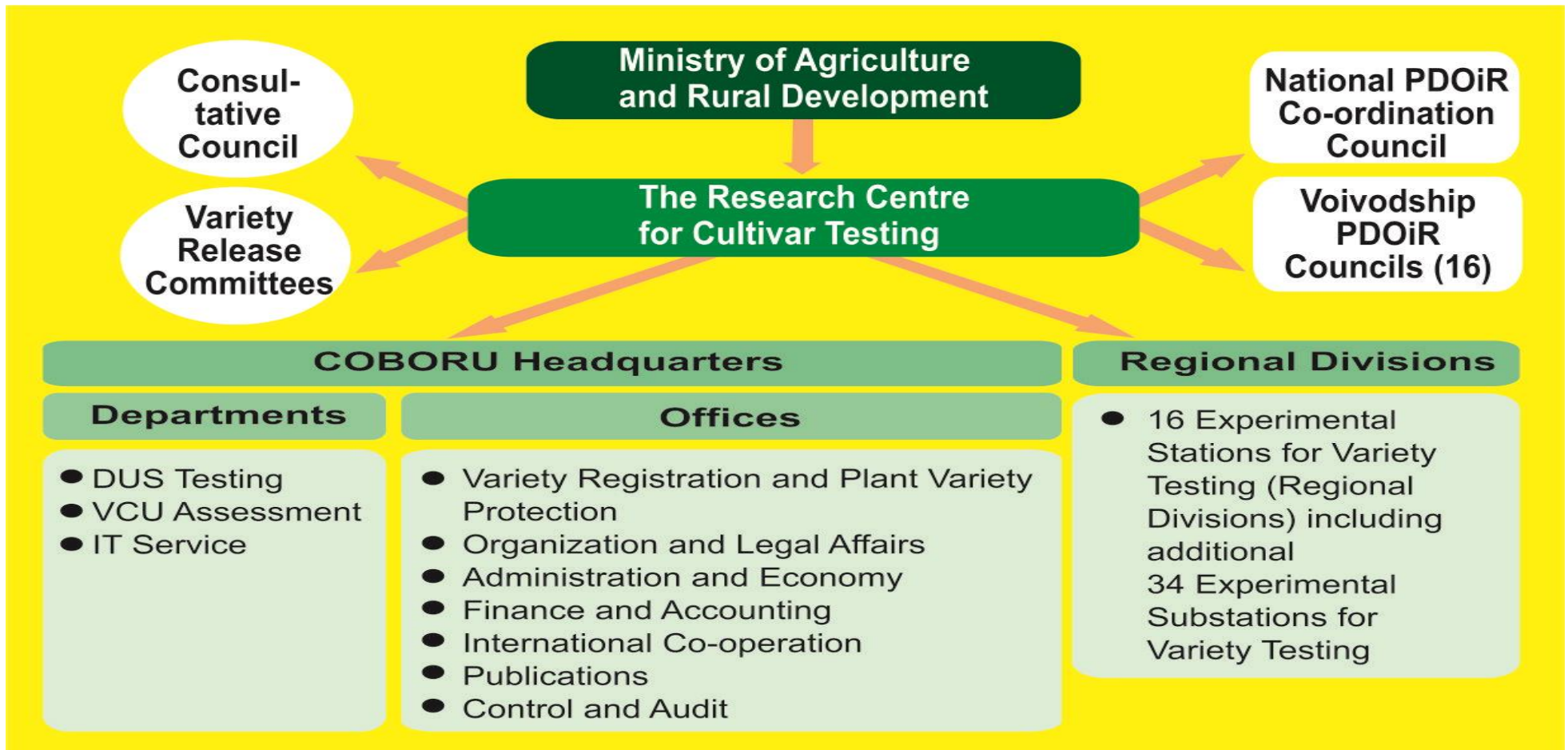


The Research Centre for Cultivar Testing (1)

1. Research Centre for Cultivar Testing is **a Public Finance Sector Unit** and possesses legal personality.
2. The Research Centre is **an Executive Agency** as defined by Article 18 of the Act of 27 August 2009 on public finance. (*O.J. No. 157, Item 1240, as amended*).
3. The Research Centre shall be **supervised by the Ministry of Agriculture and Rural Development**

General information on COBORU

- COBORU is the National Variety Office with headquarters in Słupia Wielka, near Poznan
- COBORU organization structure



- Headquarters Employment - 110 persons, including 44 technical specialists



COBORU variety testing network



16 Experimental Stations for Variety Testing (SDOO)

including additional:

34 Experimental Substations for Variety Testing (ZDOO)

The size of SDOO/PD:

< 50 ha - 19 SDOO/ZDOO

50 - 250 ha - 24 SDOO/ZDOO

> 250 ha - 7 SDOO/ZDOO

Total area of farmland possessed:

5 948 ha

Employment - 558 people, including 162 examiners

■ KARZNICZKA - Experimental Station for Variety Testing (SDOO)

● Białogard - Experimental Substation for Variety Testing (ZDOO)

■ / ● ZYBISZÓW/Karżniczka - seats of the inspector

Colour - regions of COBORU inspectors control activity



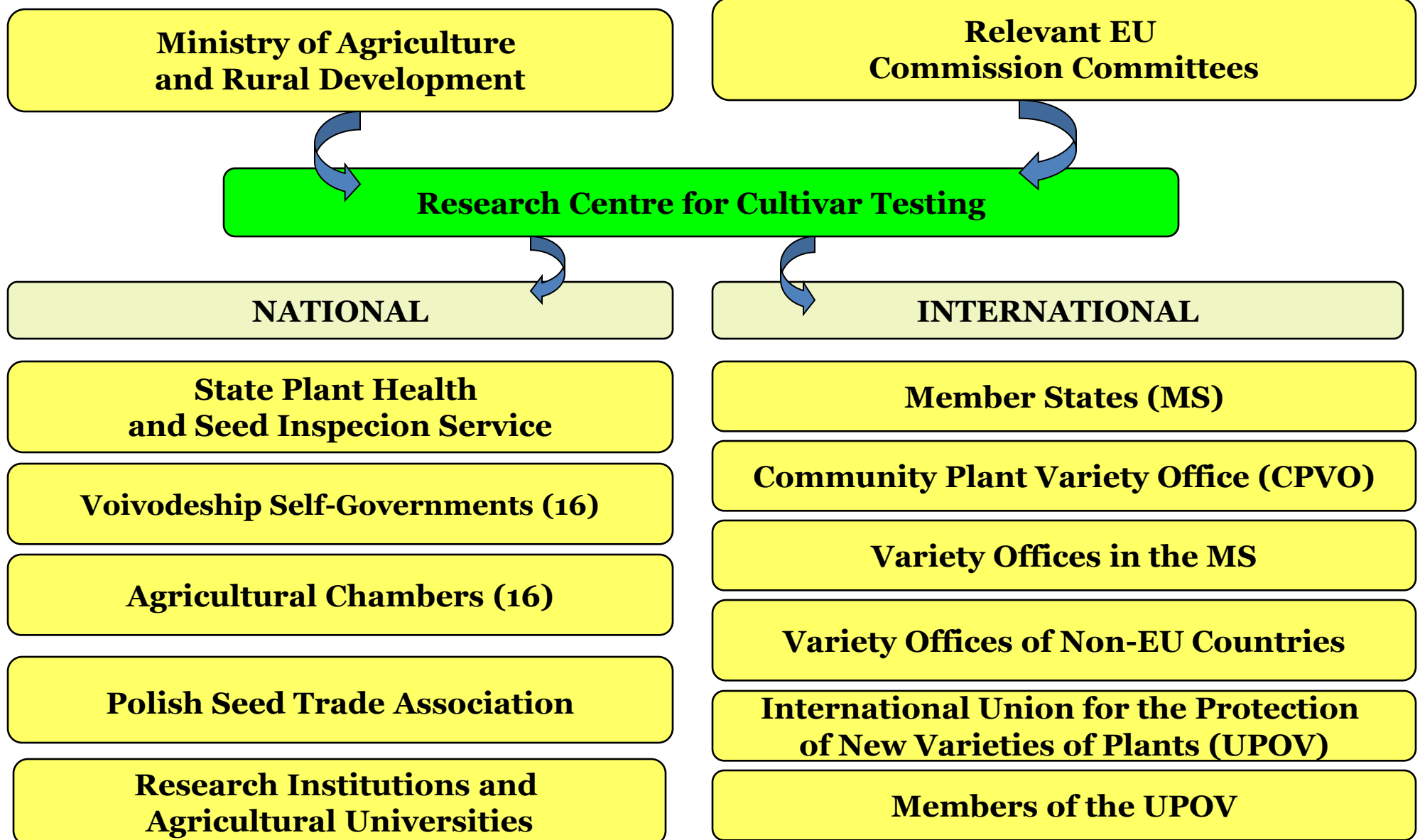
The main tasks of Research Centre for Cultivar Testing

The Office is responsible for:

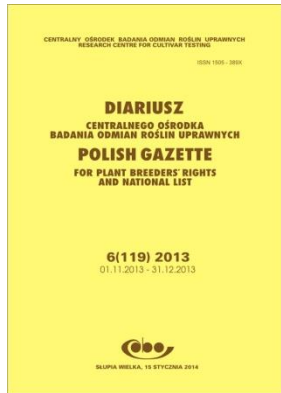
- **national listing (NLI)**
- **the administration of national PVP system**
- **coordination of national post-registration variety testing system and variety recommendation (PDOiR)**
- **conducting of post-control variety tests**
- **authorization for marketing** (seed belonging to varieties for which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



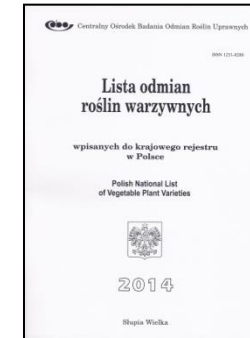
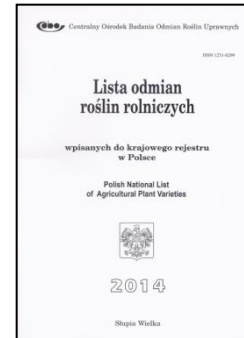
Co-operation between COBORU and national and international units



COBORU publications

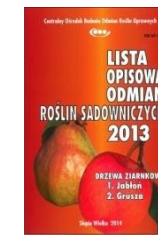
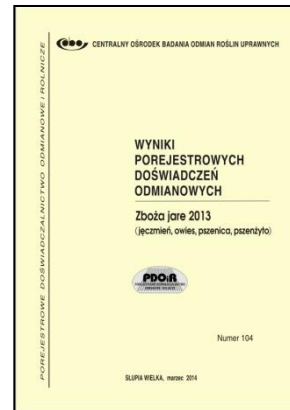


Polish Gazette for Plant Breeders' Rights and National List

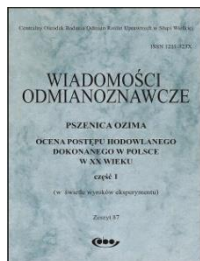


Polish National List of Agricultural, Vegetable and Fruit Plants Varieties

Results of Post-registration Variety Testing (PDOiR) and Official Variety Testing

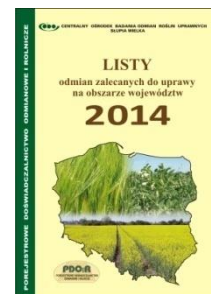
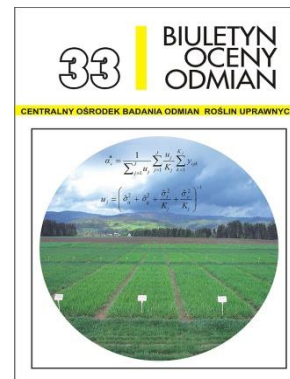


Descriptive Lists of Agricultural, Vegetable and Fruit Plants Varieties



Cultivar News

The COBORU Bulletin



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



National Register of Varieties

(state for 10 march 2015)

Field crops -	1 309 varieties (71 species)	(+24)
Vegetables-	811 varieties (55 species)	(-54)
Fruit plants-	326 varieties (28 species)	(+1)
Total -	2 446 varieties (154 species)	(-29)

Register of Varieties Protected by National Plant Breeders' Rights

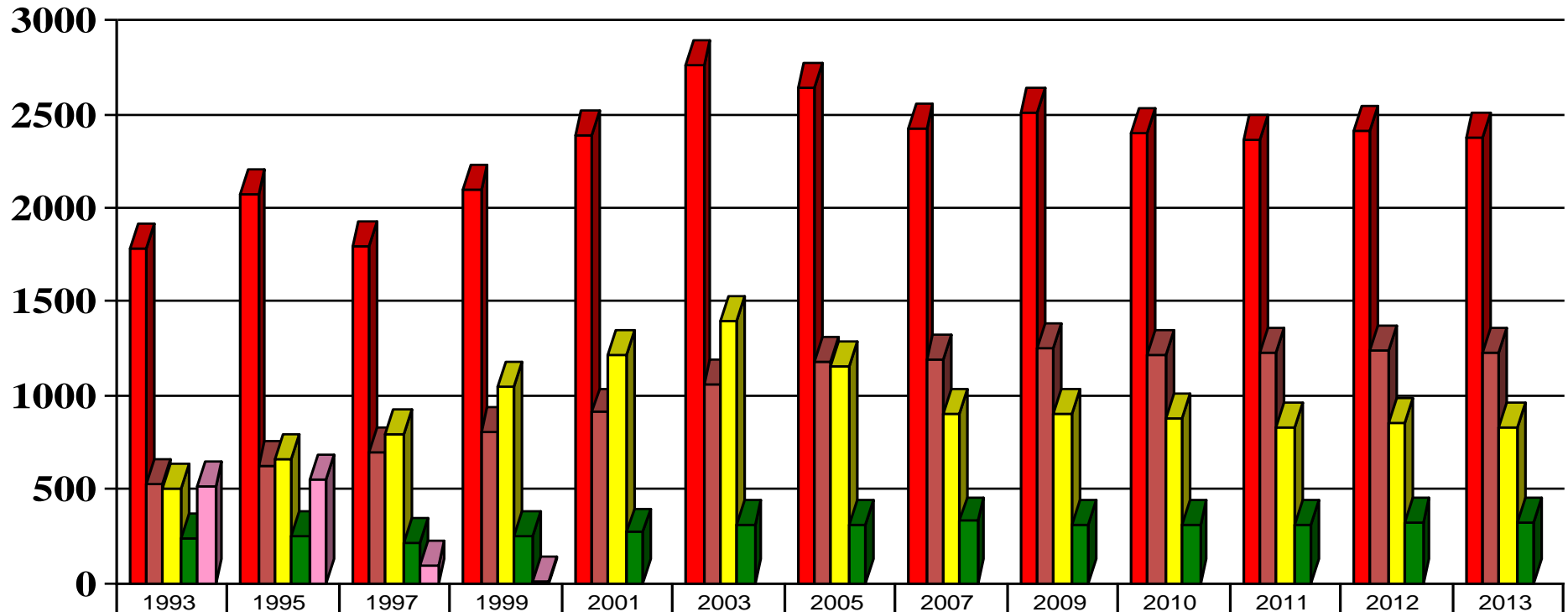
(state for 10 march 2015)

Field crops -	615 varieties	(-25)
Vegetables-	217 varieties	(-7)
Fruit plants-	118 varieties	(-10)
Ornamental plants-	216 varieties	(-38)
Total -	1 166 varieties	(-80)



Polish National List (NLI)

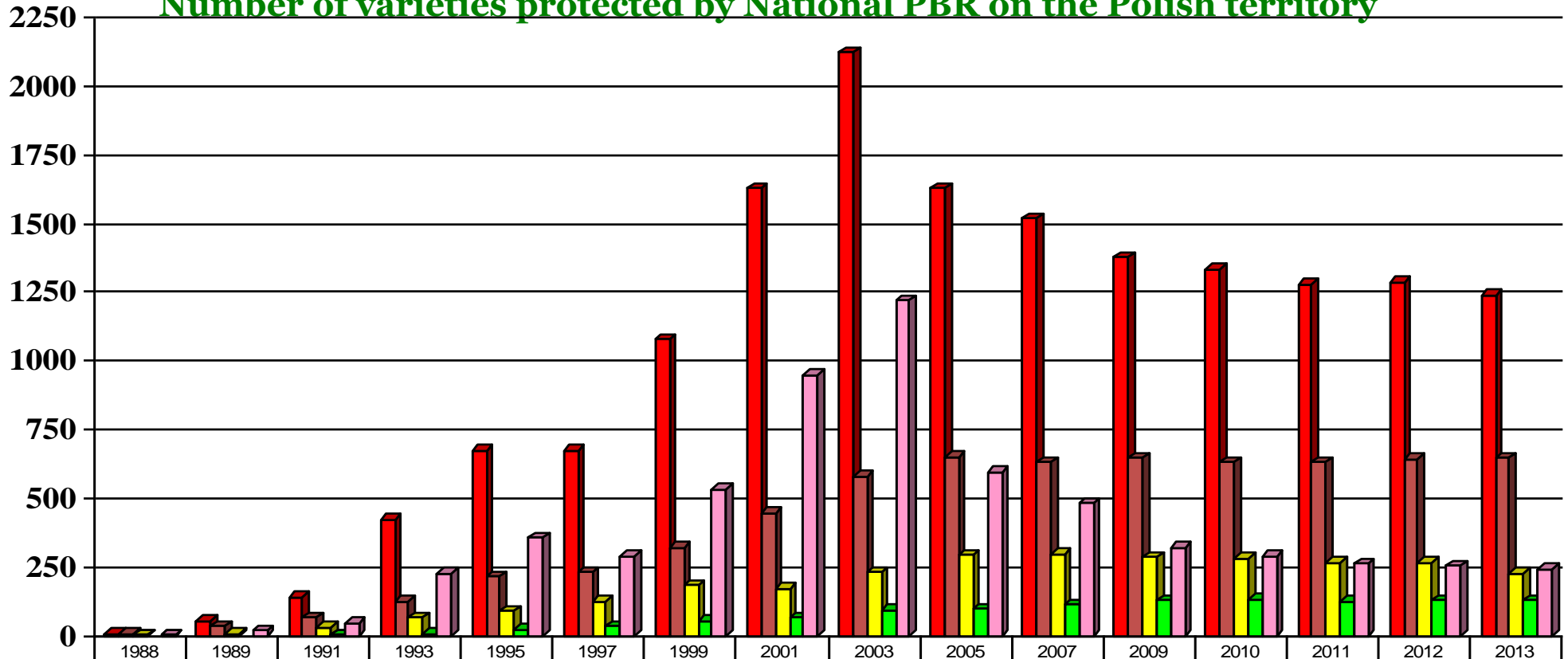
Number of varieties inscribed to The Polish National List



■ Total	1788	2071	1795	2103	2390	2761	2648	2420	2510	2398	2360	2410	2380
■ Agricultural	532	620	701	801	908	1060	1179	1196	1254	1217	1224	1242	1227
■ Vegetable	506	660	792	1048	1214	1393	1156	897	905	872	824	850	833
■ Fruit	234	244	214	244	267	308	313	327	314	309	312	318	320
■ Ornamental	516	547	88	10	-	-	-	-	-	-	-	-	-

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

Number of varieties protected by National PBR on the Polish territory



	1988	1989	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2010	2011	2012	2013
■ Total	7	54	141	421	675	673	1077	1626	2122	1628	1519	1378	1331	1280	1286	1238
■ Agricultural	4	32	65	125	213	228	321	445	579	649	630	645	631	630	641	647
■ Vegetable	2	6	29	65	88	123	181	170	228	291	295	286	280	265	263	224
■ Fruit	-	-	3	5	20	33	52	64	94	95	113	129	133	123	129	127
■ Ornamental	1	16	44	226	354	289	532	947	1221	593	481	318	287	262	253	240

Official Variety Testing in COBORU

- **DUS Testing**
- **Post-control**
- **VCU Assessment**
- **Post-registration variety testing and recommendation**
- **Post-registration variety testing for preparing of Descriptive Lists**
- **Pro-ecological and heterogeneous material testing**

Yearly, around 1 400 varieties are tested (VCU) in above 3 000 field trials

DUS testing

- **DUS tests are performed to see if a variety is: distinct, uniform and stable,**
- **The DUS testing is conducted within the COBORU testing network,**
- **Tests are done in 1–2 locations, for 1–3 (5) years,**
- **DUS tests are conducted according to COBORU Guidelines, prepared on the basis of the UPOV Test Guidelines and the CPVO Technical Protocols,**
- **Living collections of the Reference Collection for each genus or species in which varieties are tested, are maintained.**



VCU Assessment

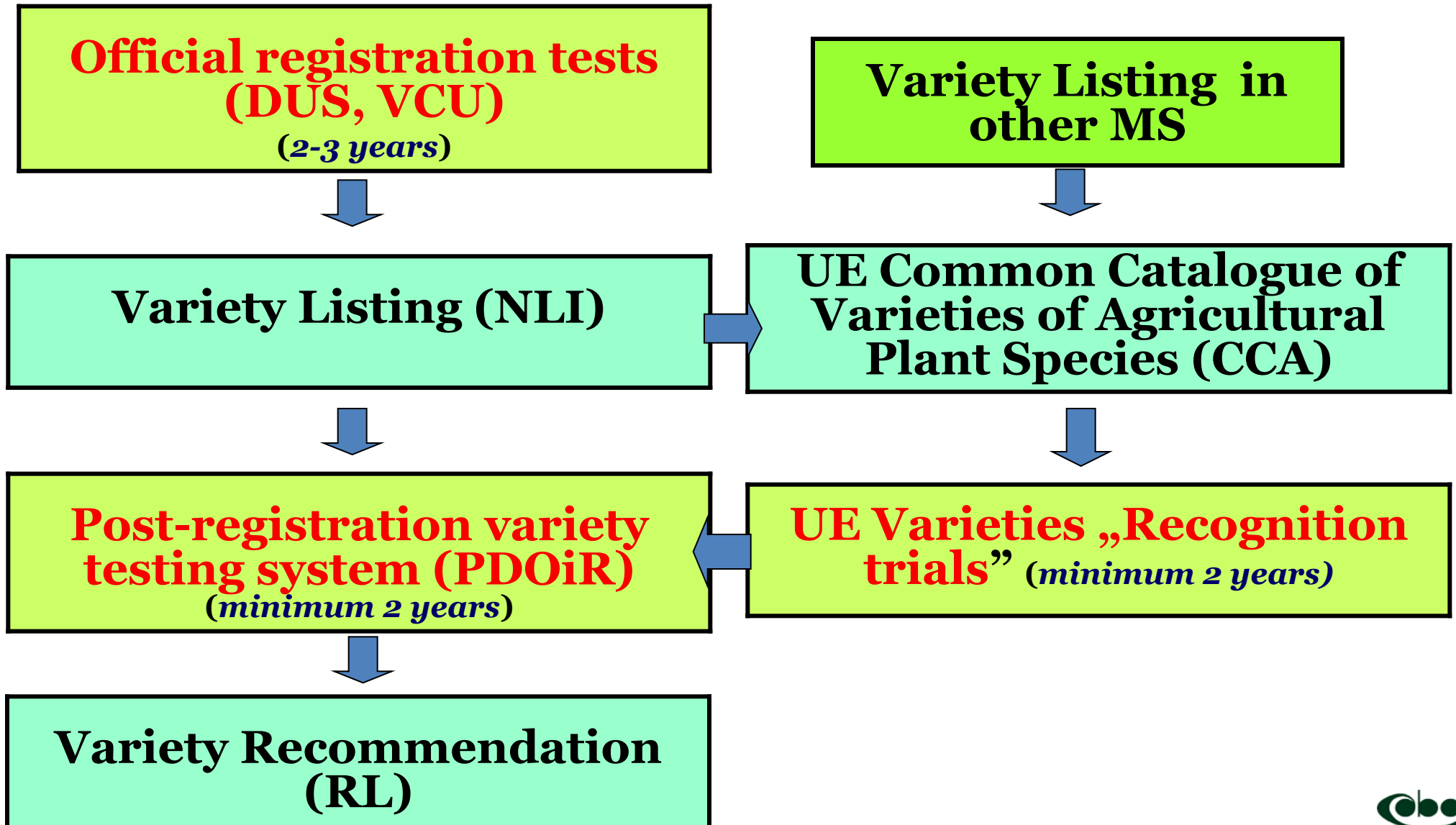
V – Value for

C – Cultivation

U - and Use

in Poland

Integration of Official Variety Testing for Variety Listing with Variety Recommendation in Poland



The methodology of Official VCU assessment

- * Breeders supply seeds directly to experimental sites or to SDOO Słupia Wielka
- * Seeds are chemically treated by breeders (Maize, Sugar Beet), by SDOO Słupia Wielka (Oilseed Rape) or by Experimental Points (Cereals)
- * Two levels of input intensity in cereal trials (Wheat, Barley, Triticale and part of Sugar Beet)
- * All trials are obligatorily protected against weeds and insects
- * Some trials are obligatorily protected against:
 - *Phytophthora infestans* (Potato)
 - *Cercospora beticola* (part of Sugar Beet)
- * Trial designs:
 - Randomised block design (< 16 varieties)
 - Incomplete block design - alpha design (\geq 16 varieties)

**Post–registration variety
testing system (PDOiR)
and
variety recommendation**

Legal basis of PDOiR activities

Post–registration cultivar testing system (PDO) activities are regulated by the following acts:

DIRECTLY

Seed Law from 9 November 2012 (*O. J. from 2012, item 1512*) – art. 27

Art. 27.1. The Research Centre, in co-operation 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

INDIRECTLY

☉ **Law on council of voivodeship** from 5 June 1998 (*O. J. from 1998., No. 91, item 576, with later changes*) – art. 14.1 point. 1 and 6

☉ **Law on Agricultural Chambers** from 14 December 1995 (*O. J. from 1996, No. 1, item 3 and from 2001, No. 81, item 875*) – art. 5.1, points 5 and 6

☉ **Law on Agricultural Advisory Centres** from 22 October 2004 (*O. j. from 2004, No. 251, item 2507*) – art. 4, points 2.6

Description of the PDOiR System

- ☯ Voivodeship-based, inter-institutional variety testing system for the most important cultivated plants, aimed at variety recommendation
- ☯ Large synergy effects arising from co-operation of different parties engaged in variety testing, both on regional and national levels
- ☯ The Research Centre for Cultivar Testing in co-operation with local Self-governments and Agricultural Chambers is responsible for PDO co-ordination in the whole country
- ☯ On the basis of PDO results „The lists of recommended varieties for cultivation within the territory of the voivodeships”, are produced

VARIETY RECOMMENDATION

Lists of varieties recommended for cultivation within the territory of the voivodeships in 2014

Voivodeship	Winter Wheat	Winter Barley	Winter Triticale	Winter Rye	Spring Wheat	Spring Barley	Oat	Spring Triticale	Winter Rape	Spring Rape	Potato	Narrow Leaved Lupin	Yellow Lupin	Field Pea	No. Species recommended in voivodeship
dolnośląskie	7	3	4	4	5	4	6		6		15				9
kujawsko-pomorskie	10	4	6	6	4	8	6	3	11	6	12	5	3	5	14
lubelskie	12	4	8	7	8	7			8		10			4	9
lubuskie	12		9	10	7	7	6	6	16						8
łódzkie	10	3	10	10	9	10	3	3	10		15				10
małopolskie	13		6	7	9	9	8				16				7
mazowieckie	10	4	10	7	7	10	4	3			15				9
opolskie	13	8	7	7	7	7	4		12		17				9
podkarpackie	9	5	7	7	7	8	7		6	8					9
podlaskie	10	3	8	6	5	6	7	3						3	9
pomorskie	15	4	8	6	4	5	3	2	9	4	19			5	12
śląskie	13	7	8	6	7	10	10	4	16		15			6	11
świętokrzyskie	13		9	8	9	9	9				16				7
warmińsko-mazurskie	10	4	8	8	8	7	4		11		16				9
wielkopolskie	6	5	5	6	6	5	4		9		21				9
zachodniopomorskie	7	3	5	8	4	4	4	4	12	4	23				11
No. varieties recommended within the species in all voivodeship	38	14	23	18	16	25	16	6	40	11	36	5	3	10	261
No. Voivodeship with recommended lists	16	13	16	16	16	16	15	8	12	4	13	1	1	5	152



Laboratory analyses

Laboratory analyses of plant material from the experiments are carried out in the Chemical-Technological Laboratory of the SDOO Słupia Wielka.

Each year, 7-8 thousand samples of plant material are analysed.

In the frame of VCU assessment the following qualitative features are tested:

- *content of nutriments: protein, fat, carbohydrates, etc.*
- *content of antinutriments: alkaloids, glucosinolates, nitrates, tannins, etc.*
- *baking properties*
- *malting value*

The electrophoretical analysis of the storage proteins of some self-pollinated crops is used as a supplementing test in the DUS examination. Ploidy for grasses.



„EU variety recognition trials“

(for varieties from CCA)

- The same testing procedure as in whole PDOiR system is applied**
- Varieties from CCA are tested within the regular PDOiR trials**
- EU variety recognition trials results are published separately**
- All costs of EU variety recognition trials are covered by the applicants (breeders)**

VCU tests for Descriptive Lists

(18 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 plants varieties inscribed to the Polish National List (NLI)

Vegetables	No. trials	No. tested varieties
Onion	30 (+5)	29
Red Beet	6	8
Leek	12 (+5)	11
Carrot	12 (+6)	23
Persley	(+6)	12
Pepper	9	16
Tomato	12	27
Cucumber	21 (+9)	32
French bean	18	29
Total in 2013	120 (+31)	187

Fruits	No. trials	No. tested varieties
Apple	45	36
Pear	6	6
Plum	6	4
Cherry	17	7
Blackcurrant	4	5
Raspberry	6	8
Strawberry	11	15
Total in 2013	95	81



Post control tests

Group of species	Number of samples			
	2010	2011	2012	2013
Agricultural	2564	2583	2860	2863
- <i>spring</i>	<i>1068</i>	<i>1037</i>	<i>1171</i>	<i>1259</i>
- <i>winter</i>	<i>1043</i>	<i>1068</i>	<i>1187</i>	<i>1169</i>
- <i>perennial plants</i>	<i>453</i>	<i>478</i>	<i>502</i>	<i>435</i>
Vegetable	213	229	241	199
In total	2777	2812	3101	3062

Pro-ecological research activities in COBORU

- Pro-ecological variety testing
(Experimental Station in Węgrzce near
Kraków)**
- Testing of heterogeneous material (intra-
and interspecies mixtures of Cereals and
Legumes) mostly in marginal areas**
- Grass-Legumes mixture experiments
(mostly in mountain areas)**



CENTRALNY OŚRODEK BADANIA ODMIAN ROŚLIN UPRAWNYCH



Search for variety ...

Contact

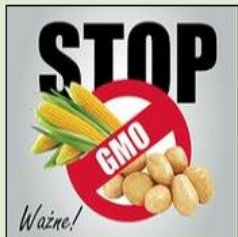
- Home
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- Plant Variety Protection
- Authorizations to place seed on the market
- DUS testing
- VCU assessment
- Post-registration variety testing system and variety recommendation
- Co-operation
- Publications



Mission statement

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

IMPORTANT NOTICE: NEW APPLICATION DOCUMENTS TO THE POLISH NATIONAL LIST

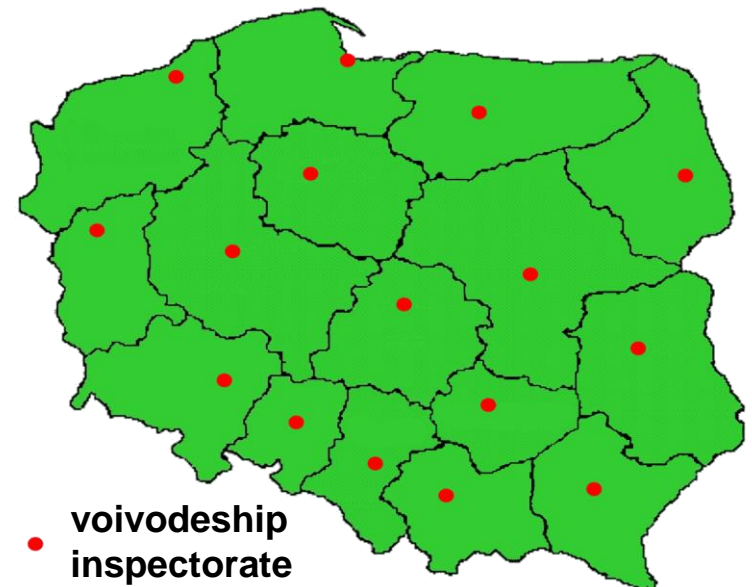




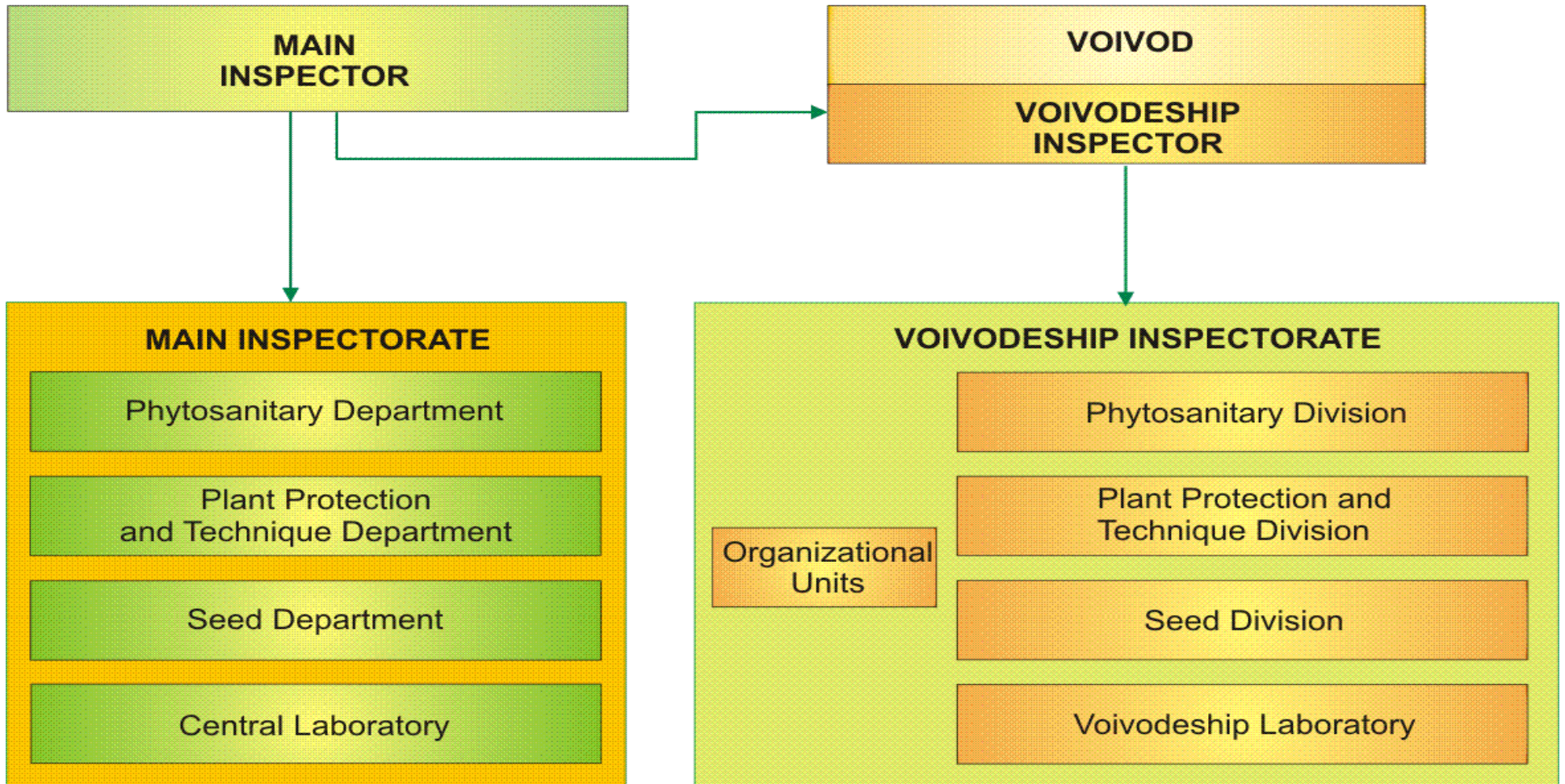
State Plant Health and Seed Inspection Service (SPHSIS)

Organizational Indicators

- 16 voivodships include 379 poviats according to administrative division of the country
- 16 voivodship inspectorates include 271 field units and 12 border divisions.
- SPHSIS's staff – 2 248 workers



Organizational Chart - SPHSIS





Tasks of State Plant Health and Seed Inspection Service

- supervision of plant health
- supervision of the marketing and use of plant protection products
- production supervision, evaluation and marketing of seed



Production supervision, evaluation and marketing of seed

- field and laboratory evaluation, as well as evaluation of external features of seed;
- control of the identity of seed;
- control of the observance of principles and requirements regarding manufacturing, evaluation, storage and trading in seed, including genetically modified seed;
- accreditation regarding sampling and evaluation of seed and control of the conditions for their processing;
- issue of official labels control of seed imported from third countries and establishment of the level of eligibility of this seed;
- evaluation of seed in case of an appeal against an evaluation conducted by accredited entities

Thank you for your attention

