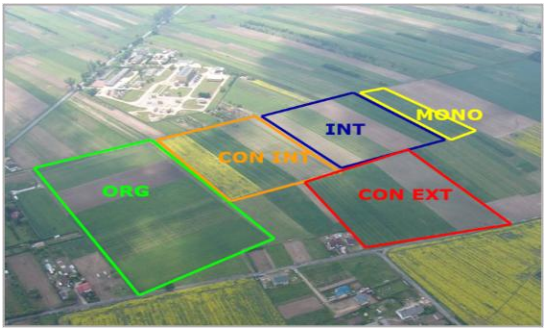
Osiny "Systemy" OLTE, PL



Organic farming since 1994

certified acc. (EU) 2018/848

Organic experimental field

Yield enhancing strategy, what makes the farm special?? The Osiny farm (IUNG-PIB) is a long-term experimental and demonstration site with an established organic system embedded in the OLTE platform. What makes it special is the possibility to assess yield stability and agronomic performance under organic management in a multi-year rotation set-up (5 rotation fields, ca. 5 ha total), supported by consistent long-term records. The site allows direct comparison of organic practices with other management variants tested within OLTE, making it a strong reference point for evidence-based optimisation of organic crop production.

Optimisation wishes and questions: here is growing interest in practical, scalable solutions to improve yields and yield stability in organic rotations on light/sandy soils under variable weather. Key questions include how to optimise the rotation (incl. cover crops and manure management), identify best-performing varieties for local conditions, and translate long-term experimental evidence into clear recommendations for farmers and short supply chains.

Farm: Organic Long-Term Experiment (OLTE) located in "Kępa-Osiny" Research Experimental Farm. 5ha total organic area, 5ha arable land.

Soils: good quality (Fine loamy sand)

Rainfall and temperatures

1990-2020	J	F	M	A	M	J	J	A	S	O	N	D	Year
Rainfall [mm]	27	25	32	37	67	70	83	65	52	40	32	32	562
Temperature [°C]	-2.5	-1.4	2.4	8.7	13.9	17.3	19.3	18.6	13.5	8.1	3.2	-1	8.3

Crops, yields and fertilisation, 2022-2025 [t/ha]

Crop	2022	2023	2024	2025	Mean
W-Wheat	5.64	4.79	5.65	4.3	5.1
S-Wheat	4.02	4.06	2.07	4.11	3.56
Grass-clover mix 1st year	66.3	62.1	37.8	51.8	54.5
Grass-clover mix 2nd year	X	X	33.2	13.4	23.3
Potatoes	34.6	18	35.1	39.2	31.7

Fertilisation [mean kg/ha*year]: **S-Wheat 2023/2025** with Potassium sulphate: 73 K, 31 S, **2024** with Physio Mescal G18: 24 P, 9 Mg 6 S, 195 $CaCO_3$; **W-Wheat: 2023** with Physio Max 975: 3 Mg, 114 $CaCO_3$, **2024** with Potassium sulphate 75 K, 67 S; **Grass clover mix (2024-2025)** with Potassium sulphate **1st year** 42 K 18 S, **2nd year** 52 K 22 S; **Potatoes 2022-2025** with 30-40 t/ha cattle manure 100 N, 35 P, 100 K,14 Mg, with Potassium sulphate and Physio Mescal G18: 24 P, 62 K, 9 Mg, 33 S, 195 $CaCO_3$

Photos: ©Adam Berbeć, IUNG-PIB

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Machinery

Tractors	Power HP
New holland TD80D	80
New Holland TM150	140
New Holland T5070	113
Zetor 3320	51
Fendt 936 Vario	360
Valtra T191	190

Cultivation	Working width (m)
Harrow (disc) BTC30	3
Harrow (disc) BTC60	6
5 skid rotary plow Koja 5-por	2
Weeder harrow P-510/2	6
Potato planter gemini s239	1.4

Harvest	Power HP
Cereal Harvester Wintersteiger Quantum Pro	75

Fertilisation	Working width (m)
suspended fertiliser spreader Amazone za-v	10-36
cereal suspended seed planter Amazone D9	3

Machines in cooperation	Power HP
delivery truck	120

Authorship of this Lighthouse farm description: Adam Berbeć, IUNG-PIB, 04/2026

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