

Report of trial

Crop: Spring wheat
Type of experiment: varietal
Test place (locality): Hněvčeves

Established: 2024
Harvest year of the experiment: 2024

Production type, subtype: Ø1, T3
District: Hradec Králové

Region: Hradec Králové Post office nr.: 50315

General data

Experimental hunt: sowing procedure 5-hundred
Location: slope 0

altitude: 265 m
evenness of the land - even

Soil: type, subtype, substrate HMi
topsoil: type – clayey loam

depth cm.....30 – 40 cm

Climate:

annual precipitation normal (1991 - 2020): 565.4 mm annual temperature normal (1991 - 2020): 9.23°C

Pre-crops and their fertilization:

Year	Pre-crop	yield t/ha	Dose of nutriti clear on kg/ha					other type amount. in t/ha			
			N	P	K	Mg	Ca				
2023	Spring barley		75								
2022	Winter wheat		145								
2021	Field pea										
2020	Winter wheat		170				194				
Nutrient supply in the soil (according to the analysis of the day)		22.4.2024		P 129,1	K 191	Mg 244	Ca 2224	Humus 1,97	pH 5,14		

Preparation of the trial plot: (type of work, number of operations, date)

20/09/2023 – stubble cleaning
27/11/2023 – ploughing, Kverneland
14/03/2024 – hauling, compactor - tearing down the rough furrow
15/03/2024 – hauling, compactor - pre-seeding preparation
15/03/2024 - sowing Astrid



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Experiment scheme - distribution of repetitions and experimental variants according to reality:

C	2	1	4	3	5
B	1	3	5	4	2
A	5	4	3	2	1

Trial variants

1	control	300 kg NPK
2	ekofertile 10 %	300 kg NPK
3	ekofertile 5 % + microfertile 5 %	300 kg NPK
4	microfertile 10 %	300 kg NPK
5	ekofertile 5 % + microfertile 5 %	240 kg NPK

Dimensions of the harvesting unit: 10 m²
 net length: 8 m,
 net width: 1.25 m
 harvest net area: 10 m²

Dimensions of the separation spaces and edges:
 separation width - transverse cm 200
 longitudinal 50 cm
 length of edges - front 5 m
 rear 5 m

Number of rows: 10,
 Number of repetitions: 3

distance: 12.5 cm

Sowing trial - date:..... 15.3.2024, Wintersteiger carried
 Soil condition at sowing (moisture, structure): moist

Agrotechnical interventions after sowing (mechanical and chemical treatment of the trial - date, type of work, number of operations, preparation and dosage)

- 15.3.2024 - NPK fertilization according to variants (manual)
- 11.4.2024 - fertilization 60 N (230 kg DASA/ha)
- 30.4.2024 - spraying HE – Agritox 1.5 l/ha, Hardi sprayer
- 20.5.2024 - fertilization 20 N (74 kg LAV/ha)
- 20.5.2024 - spraying HE – Zypar 1.0 l/ha, Hardi sprayer
- 10.6.2024 - spraying FU + INS – Alterno 0.5 l/ha + Curbatur 0.5 l/ha + Nexide 0.08 l/ha, Hardi sprayer
- 12/08/2024 - trial harvest, small plot combine Sampo 2010

Description of the growth and the influence of the weather during the growth period (detail all the favorable and unfavorable circumstances that influenced the result of the experiment.

August 2023 was well above normal in precipitation but was followed by a very dry September with almost no precipitation. The months of November 2023 to February 2024 were highly above normal in terms of precipitation. Therefore, the soil was moist to wet during ploughing. The winter was mild, the snow cover only lasted a few days at the turn of November and December. Soil preparation before sowing was tied to soil moisture and took place at the earliest possible date. The April frosts came when the wheat was in the 3-leaf

stage to the beginning of tillering and probably affected the number of tillers produced. The vegetation was quite sparse.

The yields for individual variants of the biostimulant were higher compared to the untreated control:

- for variant 2 (Ekofertile 10%) by 4,3%,
- for variant 3 (Ekofertile 5% + Microfertile 5%) by 5,6%,
- for variant 4 (Microfertile 10%) by 6,2%,
- for variant 5 (reduction of NPK to 80%, Ekofertile 5% + Microfertile 5%) by 2,8%.

The harvest was carried out by the Sampo 2010 small-plot harvester on 12 August 2024 and took place without technical complications.

In...Hněvčeves.....on.....23.8.2024.....

Experimenter:
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Head of experimental station:
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Use value - economic characteristics of spring wheat

Locality :		Year of the harvest: 2024										Hmškovce				
Spec. Nr.	Varietas	Yield in 14% humidity (t/ha)	Milk resistance					Resistance against blight down I (mg dm ⁻²) (9.1)	Resistance against blight down II (mg dm ⁻²) (9.1)	Volumeic weight (mg/kg)	Average height of the plants (cm)	height 1	height 2	height 3	height 4	height 5
			proteiny ušledek leuze (9.1)	proteiny ušledek sar (9.1)	šledek leuze (9.1)	šledek sar (9.1)	šledek leuze (9.1)									
A	1	Kontrola	6.84							68.4	73.4	72	70	71	77	77
B	1	Kontrola	6.60							68.9	79.2	77	82	83	77	77
C	1	Kontrola	6.56							67.1	77.8	82	80	73	78	76
	Průměr	Kontrola	6.58							68.00	78.50					
A	2	ekoferile 10 %	6.52							68.4	79.1	79	77	77	82	82
B	2	ekoferile 10 %	7.48							69.3	80.6	82	85	80	76	80
C	2	ekoferile 10 %	6.25							69.3	78.4	77	75	76	80	84
	Průměr	ekoferile 10 %	6.86							69.30	79.50					
A	3	ekoferile 5 % + mikroferile 5 %	6.75							68.6	74.8	78	72	80	71	73
B	3	ekoferile 5 % + mikroferile 5 %	6.86							68.8	77.8	76	75	80	80	78
C	3	ekoferile 5 % + mikroferile 5 %	7.04							67	77.8	77	87	76	70	79
	Průměr	ekoferile 5 % + mikroferile 5 %	6.95							67.90	77.80					
A	4	mikroferile 10 %	6.86							68.5	78.4	78	76	78	77	83
B	4	mikroferile 10 %	6.92							70	77.8	76	78	81	73	81
C	4	mikroferile 10 %	7.06							68.5	78.8	83	83	74	73	81
	Průměr	mikroferile 10 %	6.99							69.25	78.30					
A	5	ekoferile 5 % + mikroferile 5 %	6.85							68.9	79	77	80	77	80	81
B	5	ekoferile 5 % + mikroferile 5 %	7.00							68	79.4	81	81	78	74	83
C	5	ekoferile 5 % + mikroferile 5 %	6.53							68.6	78.6	81	77	78	80	77
	Průměr	ekoferile 5 % + mikroferile 5 %	6.77							68.30	79.00					

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