



Trimerol OÜ Organic Farm, EE

Organic production

certified acc. (EU) 2018/848 since 2013



Farm dog in undersown clover field, farm on the background

Yield enhancing strategy, what makes the farm special?

Most of the year covercropping, green manure crops, polycultures, wide range of crops

Optimisation wishes and questions: Reasonable reduction of tillage, animal integration in future, composting, biodigester

Indrek Soots

Farm: crop production farm, 410 ha arable land, 30 ha permanent grassland

Soil: variable: from sand to heavy clay, mostly sandy loam, less turf

Rainfall and temperatures

2005-2022	J	F	M	A	M	J	J	A	S	O	N	D	Year
Rainfall [mm]	44.8	30.3	34.7	37.9	55.5	76.2	76.9	92.8	56.3	64.6	52.6	50.1	672.7
Temperature [°C]	-4.5	-4.6	-0.4	6.0	12.3	16.2	18.5	17.1	12.6	6.5	2.5	-1.0	6.8

Arable crops, yields, fertilisation, 2019-2024, (rotation 1) [t/ha]:

	2019	2020	2021	2022	2023	2024	Av.
1. Red clover / green manure mix	xxx	xxx	xxx	xxx	xxx	xxx	xxx
2. W-Rapeseed, after harvesting multi-species cover crop	-	-	1.7	1.1	0.7	0.2	1.0
3. Oats (with red clover undersowing)	2.3	2.5	1.5	3.2	1.8	1.6	2.2
4. Field Peas (+ supportive cereal crop) OR	-	- / -	1.3 + 0.8	1.7 + 0.8	0.8 / 1.3	0.6 / 1.2	1.1 / 1.3
4. Common Vetch (+ supportive cereal crop)	-	-	-	-	1.3 + 0.7	1.2 + 0.5	1.3 + 0.6
5. W-Wheat / W-Rye + cover crop	- / 2.8	- / 2.2	2.25 / -	1.5 / -	1.0 / 1.4	1.3 / 1.5	1.3 / 2.0
6. Buckwheat / Phacelia	1.0 / -	- / -	1.2 / -	0.5 / -	2.0 / 0.2	1.8 / 0.25	1.5 / 0.25
Fertilisers							
Lime (according to demand)	-	-	-	3 t/ha (35 ha)	3 t/ha (30 ha)	3/ha (30 ha)	3 t/ha (ca 30 ha p year)

Grains: 88% DM; Given above is a standard crop rotation plan. Year no 4 is choice between peas or vetch according to field's condition; Variable crops at position 4, 5 and 6, choice between these two crops is done according to field's condition; 6-year crop rotation plan. Being always adaptive with species used as green manure, legume crops, winter crops and broadleaves – depending on field performance, nutrients, C/N ratio and possible market; Field peas yield on 2021 & 2022 given as "peas yield" + "supportive cereal crop yield" (grown on the same field together); 2021 & 2023 & 2024 drought in summer. Red Clover / green manure mix – we don't measure biomass t/ha. Wood ash is always applied to the field before W-rapeseed.

Machinery

Tractors

Power HP

Tractor John Deere 6R250	250
Tractor John Deere 6R190	190
Tractor MTZ 1221	150
Tractor MTZ 82	80

Cultivation

Working width (m)

Duck-foot S-tine cultivator Kverneland Combinator	6.4
S-tine cultivator Kverneland Combinator	7
Duck-foot cultivator Unia KOS	3
Front disc cultivator Unia Ares	3
Disc cultivator Unia Ares	4
Plough Kverneland ES-80-200	5- furrows
Tine weeder Einböck	9
Väderstad Spirit 400C seeder	4
John Deere 740a seeder	8

Fertilisation

Manure spreader ROU-6	5
Fertilizer spreader Sulky	16

Harvest

Claas Lexion 670	7.7
------------------	-----



Funded by
the European Union



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the European Commission can be held responsible for them.