



Sunflower fields

# Società Agricola Preci, IT

Bologna (BO) Emilia-Romagna, Italia

Organic farming since 2014 acc. to EU 2018/848



## Yield enhancing strategy, what makes the farm special?

Crop rotation with alfalfa every 5 years, use of microorganism-based biostimulants as foliar applications on cereals, specialized equipment for product harvesting and dryer, use of local organic soil amendments.

**Optimisation wishes and questions:** Annual and perennial weeds, soil preparation after rainfall, sourcing and distributing organic amendments, wildlife control, climate change management. Willingness to experiment with minimal tillage but difficulty in finding suitable equipment.

## Manuel and Mattia Preci

**Farm:** 70 hectares of arable farm, with the intention to implement a laying hen farm. Fields in two locations: Zola Predosa (BO) and Villa D'Aiano (BO).

**Soils:** silty clay, clay loam.

## Rainfall and temperatures

2003-2023		J	F	M	A	M	J	J	A	S	O	N	D	Year
<b>Zolo Predosa (BO)</b>	Rainfall [mm]	49	68	66	82	79	62	48	54	71	82	95	69	825
	Temperature [°C]	3.5	4.7	9	13	17.6	22.4	25.1	24.6	19.5	14.7	9.3	4.5	14.0
<b>Villa d'Aiano (BO)</b>	Rainfall [mm]	73	86	89	117	113	94	75	76	102	128	135	97	1185
	Temperature [°C]	2.4	3.1	7	11.1	15.3	19.9	22.2	22	17.2	12.9	7.7	3.5	12.0

## Crops, yields and fertilisation, 2019-2024 [t/ha]

Crop rotation	2019	2020	2021	2022	2023	2024	Mean
1 Durum wheat	-	-	-	4.99	-	-	4.99
2 Soft wheat	-	3.26	5.03	3.14	3.64	2.09	3.43
3 Chickpeas	-	-	2.5	1.2	3.8	1.04	2.13
4 Einkorn	-	-	1.0	1.8	1.83	-	1.54
4 Barley	-	4.71	3.0	-	-	-	3.85
5 Faba bean	-	-	-	-	1.45	1.16	1.3
6 Lentils	-	-	1.8	1.1	7.5	2.36	3.19
7 Sunflower	-	-	1.24	2.12	1.57	1.33	1.57
8 Alfalfa	-	11	10	14	13.5	12	12.1
9 Leek seeds	-	-	-	-	0.75	-	0.75

Grains: 86% DM, Alfalfa 32% DM

Fertilisation (t/ha average per year):

Manure compost (Villa d'Aiano) 22 22 22 22 22 22

For other cereal and cash crops sometimes organic-based fertilisers, such as Zefir Plus (4-4-4 NPK with microorganisms) is applied at around 500 kg/ha; Organo-mineral fertilisers, such as BIO N, are applied at 150 kg/ha (12.5% N, 23% SO<sub>3</sub>, and 35% organic carbon)

Photos: © M Preci

## Machinery

### Tractors

### Power HP

New Holland T5060	105
Case MAXXUM 140	140
Fiat 640 DT	64
Fiat 605 CSuper	60
Fiat 1355	50-70
Fiatagri 80/75	79

### Cultivation

### Working width (m)

Faza harrow	6
Three-share mounted plough	1.2
Three-share trailed plough	1.2
Siderman subsoiler with shanks and discs	4
Comas old-school cultivator with discs and shanks	5

### Machines in cooperation

Trailed mechanical and pneumatic seeders	4
--	---

### Harvest

Laverda 3350 AL	4.80
Hesston mounted header	6
Mower-conditioner	3.5
Tedder	8
Rake	7
Round baler	2.2

Sant'Anna School of Advanced Studies, EcorNaturaSi, University of Pisa, Società Agricola Preci, 05/2025