



European Wine Market Observatory

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Grape production Costs Forecasting for 2024

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1. Objectives

Objectives

- Describe the grape production costs data (2018-2022) for the selected varieties (3 white, 2 red)
- Describe forecasting method
- Predict the cost **PER HECTARE** of grape production for the growing season 2023-24
- Estimate the **COST PER KG**

2. Data

Data source and preparation

- The data used comes from the Xarxa Comptable Agrària de Catalunya (XCAC) the catalan farms accountancy that feeds into FADN
- The data contains analytical reports per crop (*where total farms costs are attributed to each product based on the type of cost, see methodology in the [XCAC](#) web*) per farm for following grape products and years:

Number of farms per year per variety

	2018	2019	2020	2021	2022
Tempranillo	28	26	27	27	31
Merlot	28	30	31	33	34
Macabeu	25	25	27	30	33
Parellada	21	20	20	19	22
Xarel·lo	22	24	27	26	29

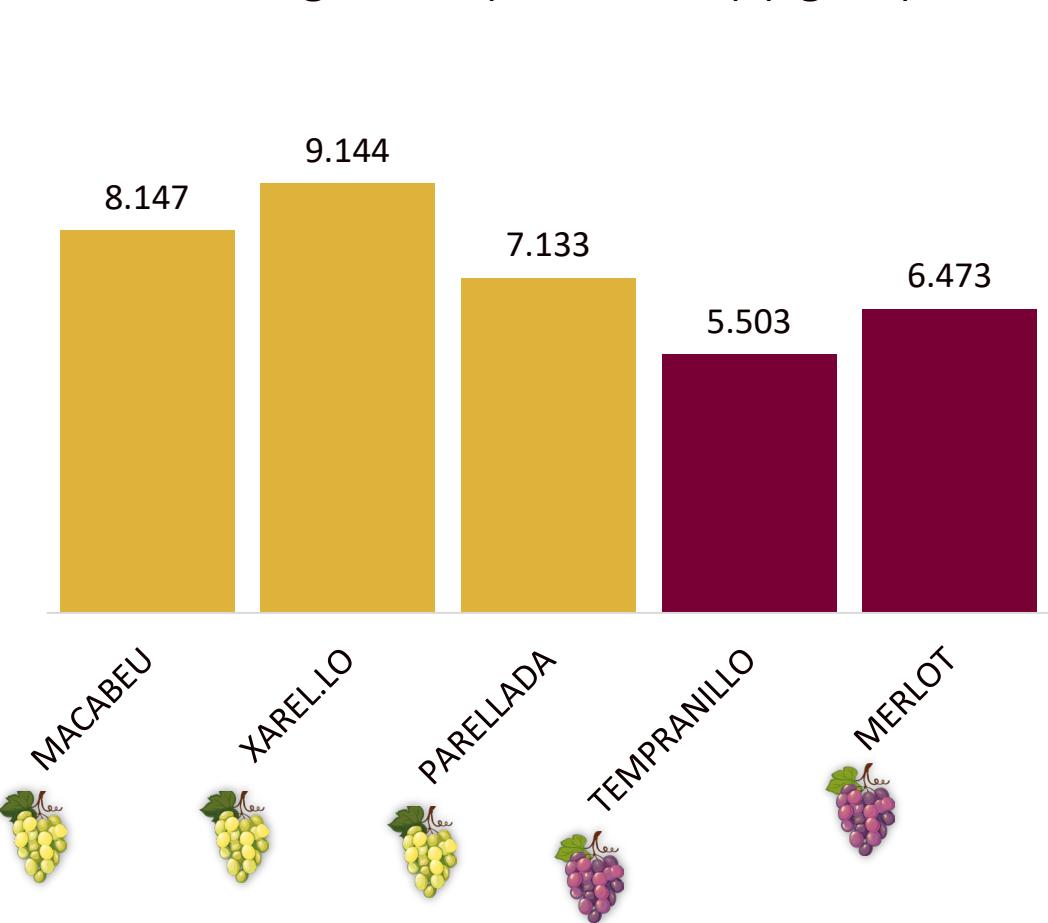
- The costs in nominal euros have been deflated to the same base-year (2020). The deflation has been done by the use of official Agricultural Price Indices (source: [MAPA](#))



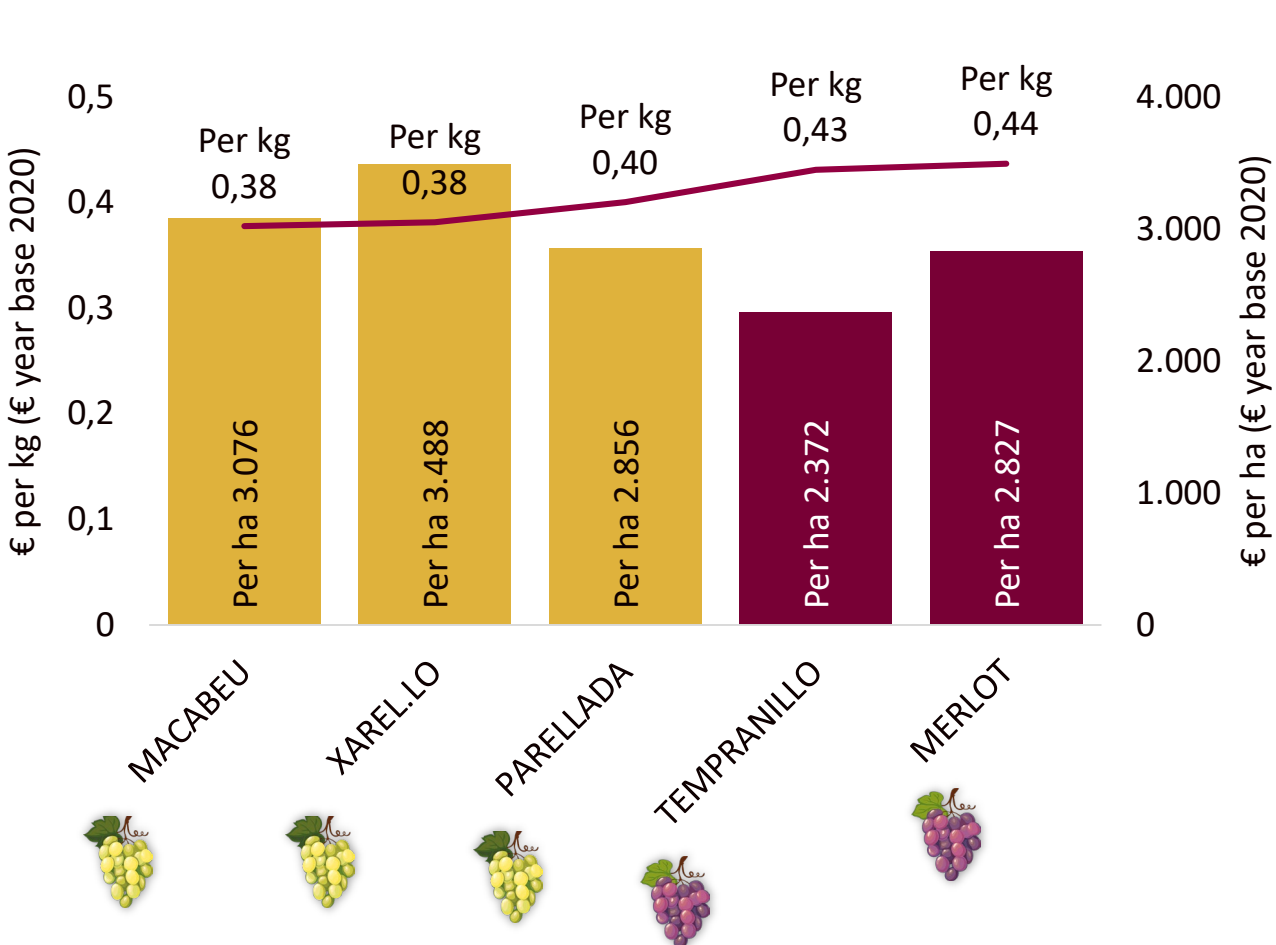
3. Cost structure

Average Yields and Costs per hectare (2018-2022)

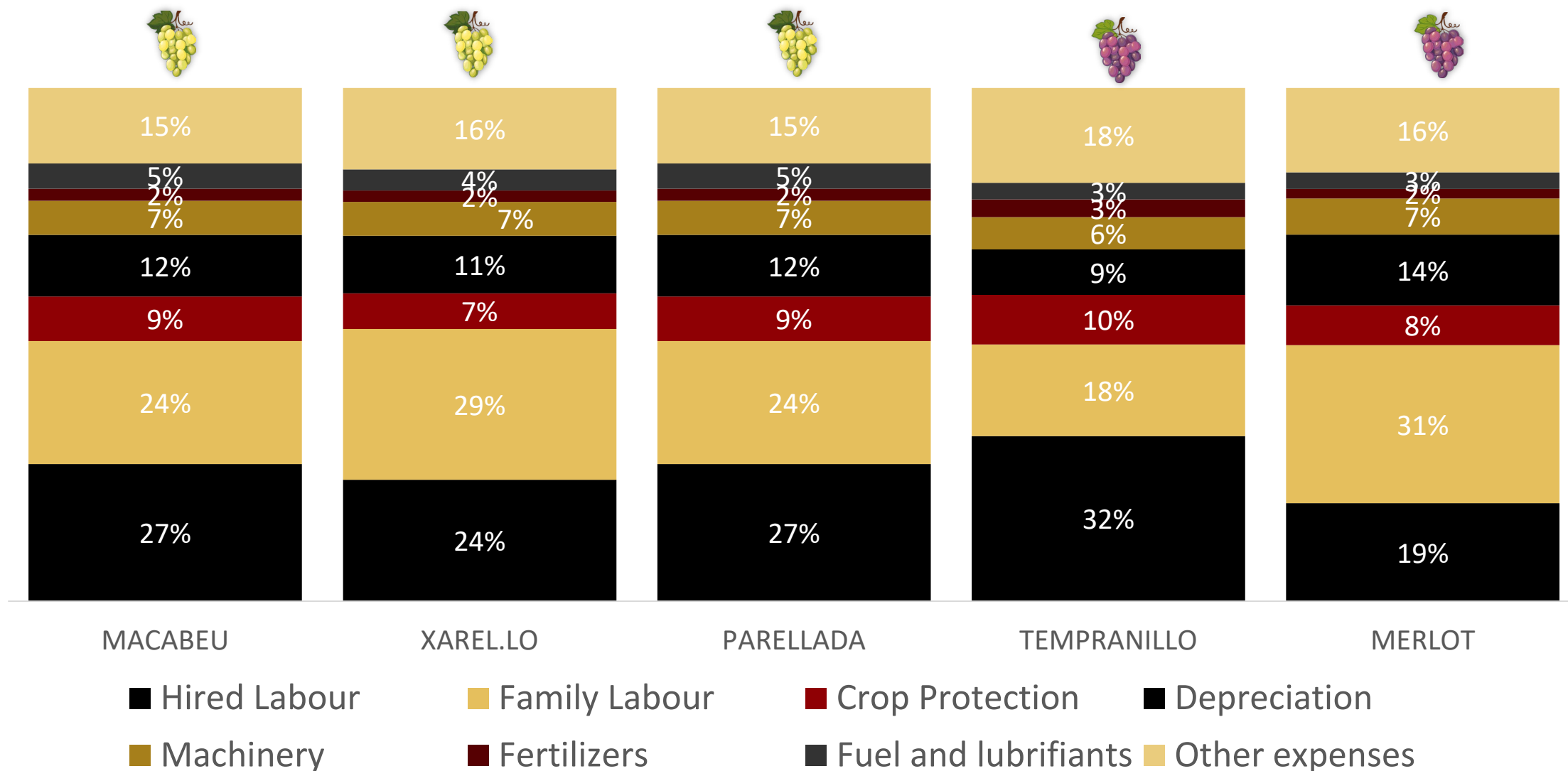
Average Yield (2018-2022) (kg/ha)



Average cost (€ base 2020) per kg and per ha



Average Structure of the costs (2018-2022)



4. Forecasting method

Average costs of the total period

- The costs per each concepts have been weighted by the area of each farm and year.

Forecasting the costs per hectare

Forecasting 2024:

Each average cost concept (in base € 2020) have been updated/estimated to € 2024, by the use of the Price Indices Paid, Salaries Paid last month available for 2024 (March-May 2024).



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Forecasting the yields → to estimate the Cost per kg

Based on official data published by the DARPA¹, we calculate the INCREASE on the yearly total YIELD of grapes for transformation in Catalunya, between 2022 to 2024.

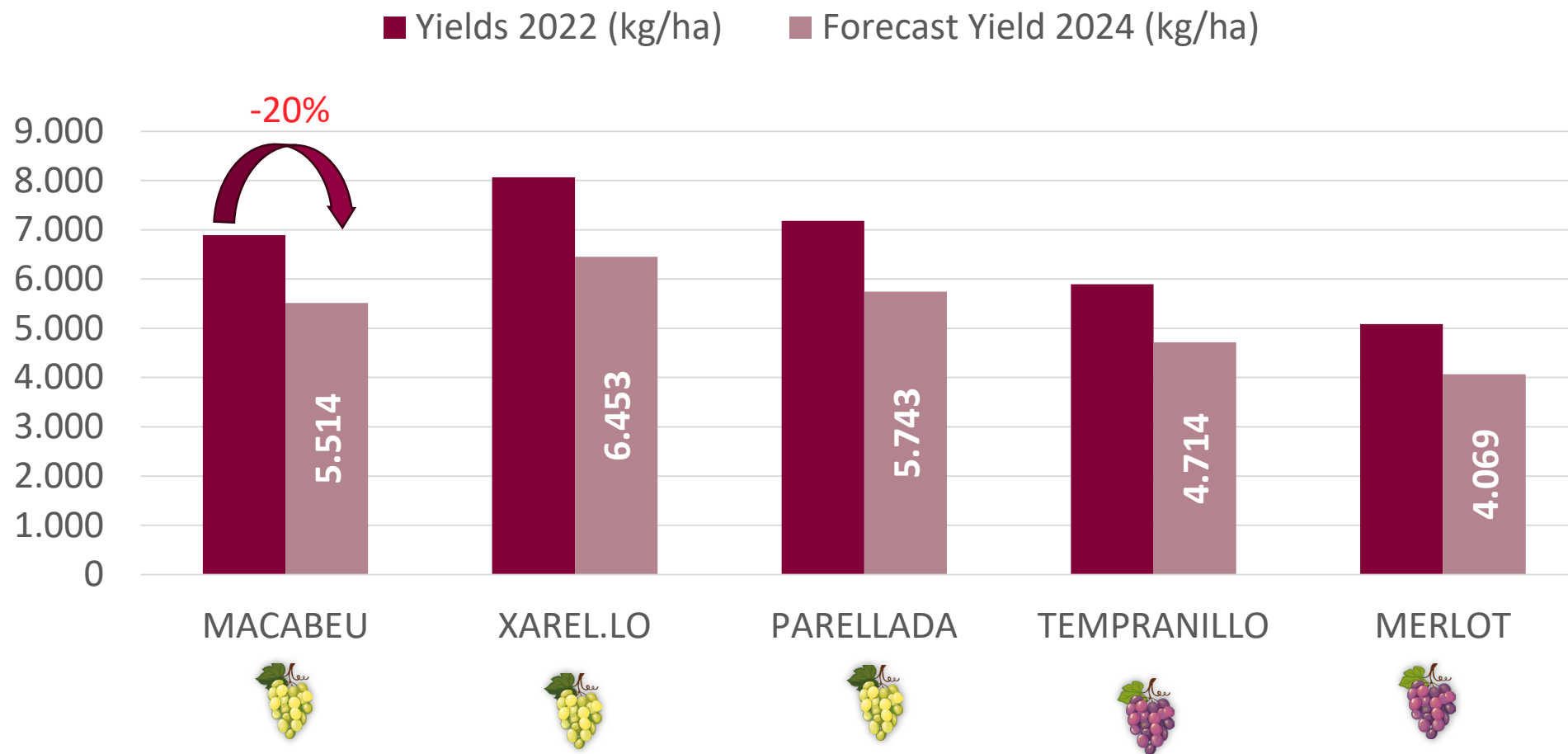
This increase/reduction is applied to the yields of the sample, to estimate the yield in 2024.

Vineyard for grapes for transformation ²	2022	2023	2024
Catalunya Total Production (MT)	358.263	277.223	285.337
Catalunya Total Productive Area (ha)	54.192	53.977	53.977
Average Yield (Kg/ha)	6.611	5.136	5.286

-20%

Then we divide the Costs per ha for 2024 (estimated previously), by the yield Forecast for 2024 → cost per kg for 2024.




Yield FORECAST for 2024



5. Results

Cost forecast for 2024



	COST PER HA		Average	Forecast
			2018-2022	2024
			€ 2020 /ha	€ 2024 /ha
 CS139 Crop specific costs			741	869
CS131 Plants and seeds			1	1
CS133 Fertilizers			81	121
CS134 Crop protection products			230	283
CS135 Other crop specific costs			19	25
CS143 Water			58	68
CS401 Temporary hired labour			303	322
CS405 Land rental			48	48
CS420 General costs			1.208	1.447
CS141 Electricity			3	2
Fuels (CS142 + 661)			78	135
CS144 Insurances			40	47
 CS402 Fixed hired labour			460	499
Machinery maintenance			150	183
CS404 Services and machinery rental			136	158
CS406 Amortization			209	267
CS407 Financial costs			12	14
CS408 Other general expenses			120	140
 CS601 Family labour			423	460
Total cost (without Family labour)			1.949	2.315
Total cost (with Family labour)			2.372	2.775

COST PER KG	Average	Forecast
	2018-2022	2024
	€ 2020 /kg	€ 2024 / kg
Yield	5.503	4.714
CS139 Crop specific costs	0,135	0,184
CS420 General costs	0,219	0,307
CS601 Family labour	0,077	0,098
Total cost (without Family labour)	0,354	0,491
Total cost (with Family labour)	0,431	0,589

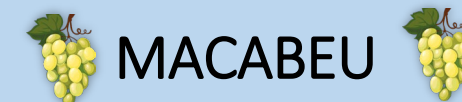
Cost forecast for 2024



COST PER HA	Average 2018-2022	Forecast 2024
	€ ₂₀₂₀ /ha	€ ₂₀₂₄ /ha
CS139 Crop specific costs	749	863
CS131 Plants and seeds	0	1
CS133 Fertilizers	52	78
CS134 Crop protection products	219	270
CS135 Other crop specific costs	52	66
CS143 Water	4	5
CS401 Temporary hired labour	339	360
CS405 Land rental	83	84
CS420 General costs	1.207	1.496
CS141 Electricity	4	3
Fuels (CS142 + 661)	92	160
CS144 Insurances	32	37
CS402 Fixed hired labour	200	217
Machinery maintenance	199	244
CS404 Services and machinery rental	132	154
CS406 Amortization	390	497
CS407 Financial costs	11	12
CS408 Other general expenses	147	171
CS601 Family labour	871	946
Total cost (without Family labour)	1.956	2.359
Total cost (with Family labour)	2.827	3.305

COST PER KG	Average 2018-2022	Forecast 2024
	€ ₂₀₂₀ /kg	€ ₂₀₂₄ / kg
Yield	6.473	4.069
CS139 Crop specific costs	0,116	0,212
CS420 General costs	0,186	0,368
CS601 Family labour	0,135	0,233
Total cost (without Family labour)	0,302	0,580
Total cost (with Family labour)	0,437	0,813

Cost forecast for 2024



COST PER HA	Average 2018-2022	Forecast 2024
	€ ₂₀₂₀ /ha	€ ₂₀₂₄ /ha
CS139 Crop specific costs	833	957
CS131 Plants and seeds	2	2
CS133 Fertilizers	67	100
CS134 Crop protection products	225	277
CS135 Other crop specific costs	42	54
CS143 Water	5	6
CS401 Temporary hired labour	405	430
CS405 Land rental	87	88
CS420 General costs	1.451	1780
CS141 Electricity	12	10
Fuels (CS142 + 661)	134	233
CS144 Insurances	40	46
CS402 Fixed hired labour	426	463
Machinery maintenance	195	239
CS404 Services and machinery rental	121	141
CS406 Amortization	348	444
CS407 Financial costs	22	26
CS408 Other general expenses	153	179
CS601 Family labour	729	793
Total cost (without Family labour)	2.285	2.738
Total cost (with Family labour)	3.014	3.530

COST PER KG	Average 2018-2022	Forecast 2024
	€ ₂₀₂₀ /kg	€ ₂₀₂₄ / kg
Yield	8.147	5.514
CS139 Crop specific costs	0,102	0,174
CS420 General costs	0,178	0,323
CS601 Family labour	0,089	0,144
Total cost (without Family labour)	0,280	0,496
Total cost (with Family labour)	0,370	0,640

Cost forecast for 2024



COST PER HA	Average 2018-2022 € ₂₀₂₀ /ha	Forecast 2024 € ₂₀₂₄ /ha
CS139 Crop specific costs	924	1.057
CS131 Plants and seeds	1	1
CS133 Fertilizers	69	103
CS134 Crop protection products	236	291
CS135 Other crop specific costs	53	67
CS143 Water	5	5
CS401 Temporary hired labour	454	482
CS405 Land rental	107	108
CS420 General costs	1.492	1.840
CS141 Electricity	13	12
Fuels (CS142 + 661)	138	240
CS144 Insurances	43	51
CS402 Fixed hired labour	363	395
Machinery maintenance	222	271
CS404 Services and machinery rental	152	178
CS406 Amortization	383	488
CS407 Financial costs	20	23
CS408 Other general expenses	157	182
CS601 Family labour	1.008	1.095
Total cost (without Family labour)	2.416	2.897
Total cost (with Family labour)	3.423	3.992

COST PER KG	Average 2018-2022 € ₂₀₂₀ /kg	Forecast 2024 € ₂₀₂₄ / kg
Yield	9.144	6.453
CS139 Crop specific costs	0,101	0,164
CS420 General costs	0,163	0,285
CS601 Family labour	0,110	0,170
Total cost (without Family labour)	0,264	0,449
Total cost (with Family labour)	0,374	0,619

Cost forecast for 2024



COST PER HA	Average 2018-2022	Forecast 2024
	€ ₂₀₂₀ /ha	€ ₂₀₂₄ /ha
CS139 Crop specific costs	700	817
CS131 Plants and seeds	-	-
CS133 Fertilizers	65	97
CS134 Crop protection products	242	299
CS135 Other crop specific costs	33	42
CS143 Water	2	2
CS401 Temporary hired labour	298	316
CS405 Land rental	60	60
CS420 General costs	1.444	1.769
CS141 Electricity	18	15
Fuels (CS142 + 661)	140	245
CS144 Insurances	42	49
CS402 Fixed hired labour	457	497
Machinery maintenance	183	224
CS404 Services and machinery rental	120	139
CS406 Amortization	336	429
CS407 Financial costs	14	16
CS408 Other general expenses	133	155
CS601 Family labour	672	730
Total cost (without Family labour)	2.144	2.586
Total cost (with Family labour)	2.816	3.316

COST PER KG	Average 2018-2022	Forecast 2024
	€ ₂₀₂₀ /kg	€ ₂₀₂₄ / kg
Yield	7.133	5.743
CS139 Crop specific costs	0,098	0,142
CS420 General costs	0,202	0,308
CS601 Family labour	0,094	0,127
Total cost (without Family labour)	0,301	0,450
Total cost (with Family labour)	0,395	0,577

¡Gracias!



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