



European Wine Market Observatory

06-06-2023

Grape production Costs Forecasting for the season 2023-24

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1. Objectives

Objectives

- Present the grape production costs data (2016-2021) for the selected case studies (Designations of origin) and its structure
- Describe forecasting method
- Predict the cost **PER HECTARE** of grape production destined for base-wine for cava for the growing season 2022-23
- 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

Number of farms per year

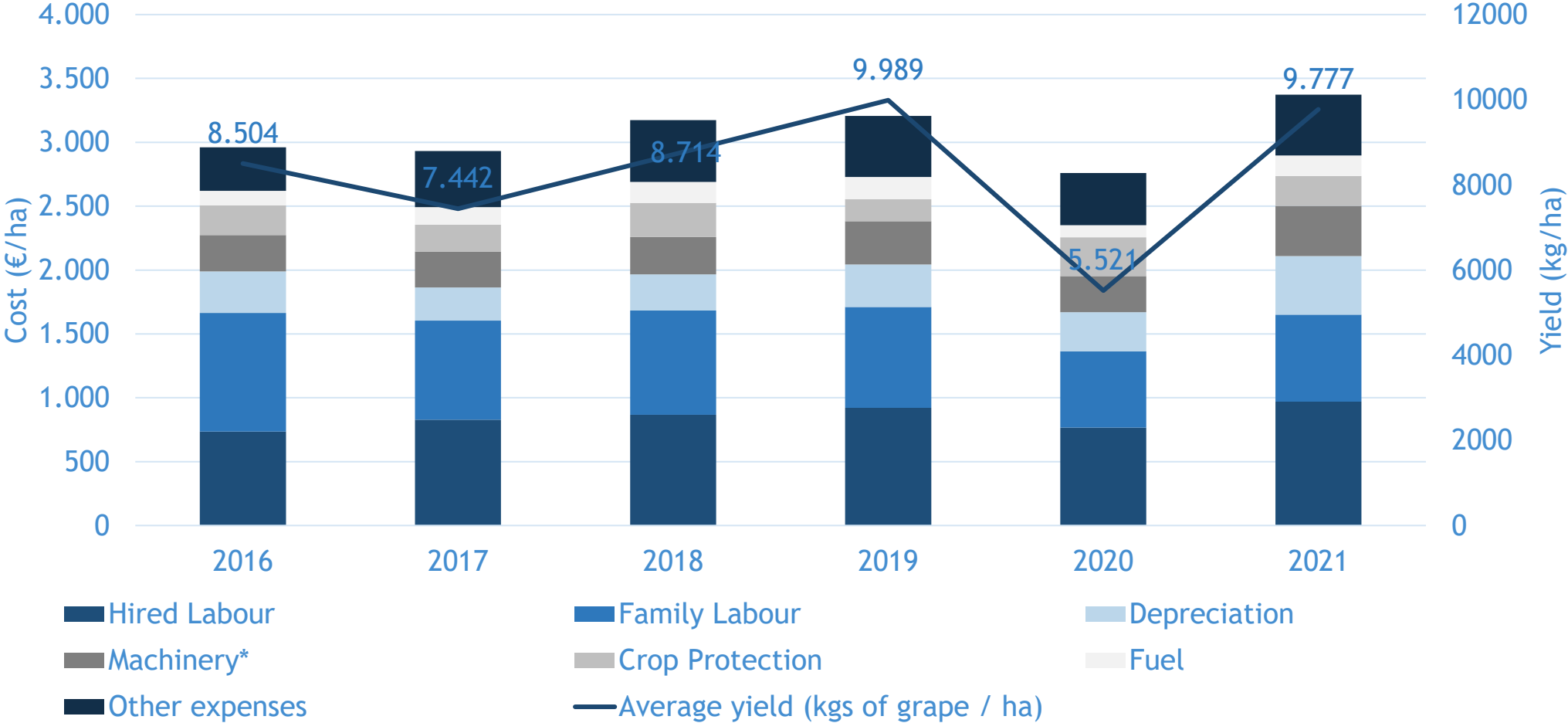
	2016	2017	2018	2019	2020	2021
2860. MACABEU	27	28	25	25	27	30
2863. PARELLADA	22	24	21	20	20	19
2866. XAREL.LO	24	25	22	24	27	26

- 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](#))

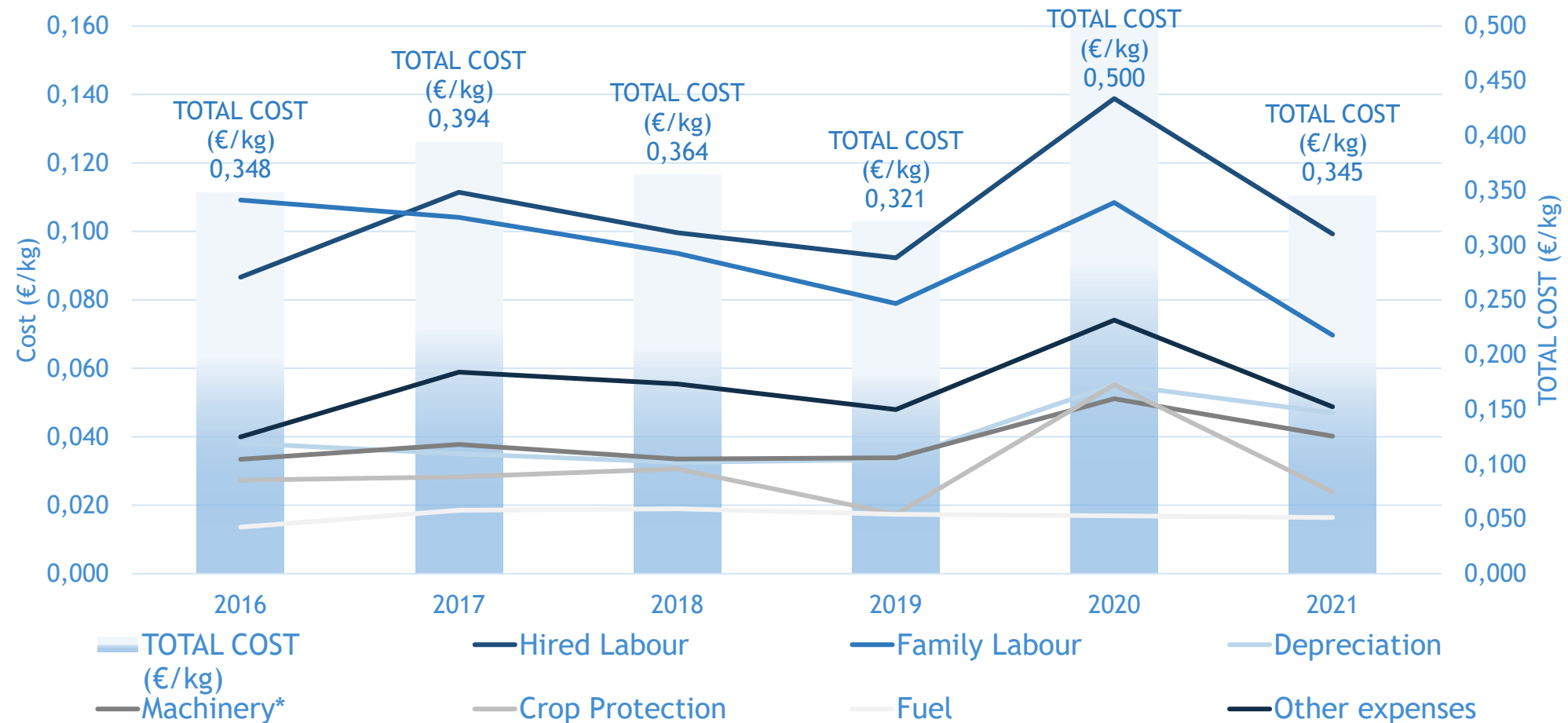
3. Cost structure

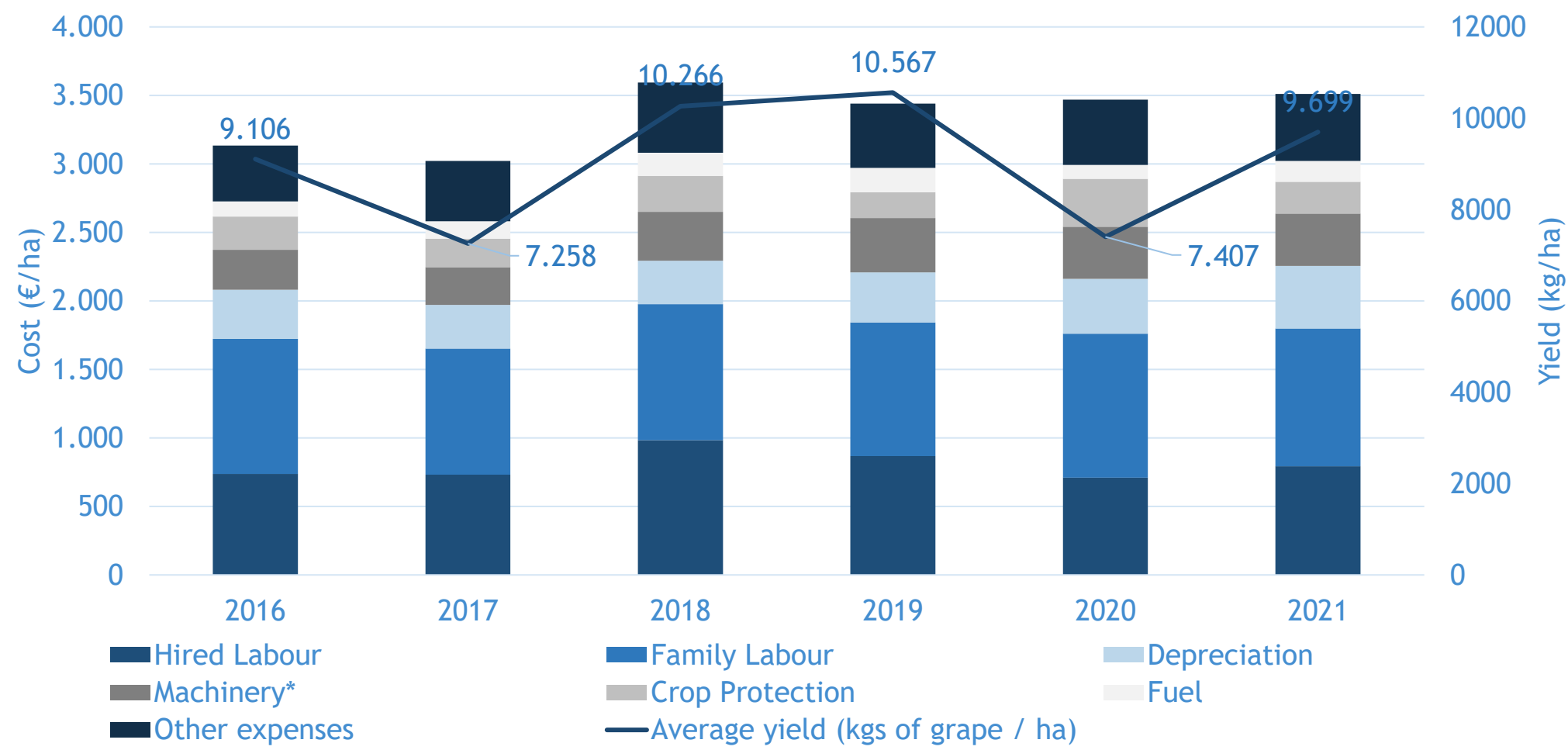
Average costs per year

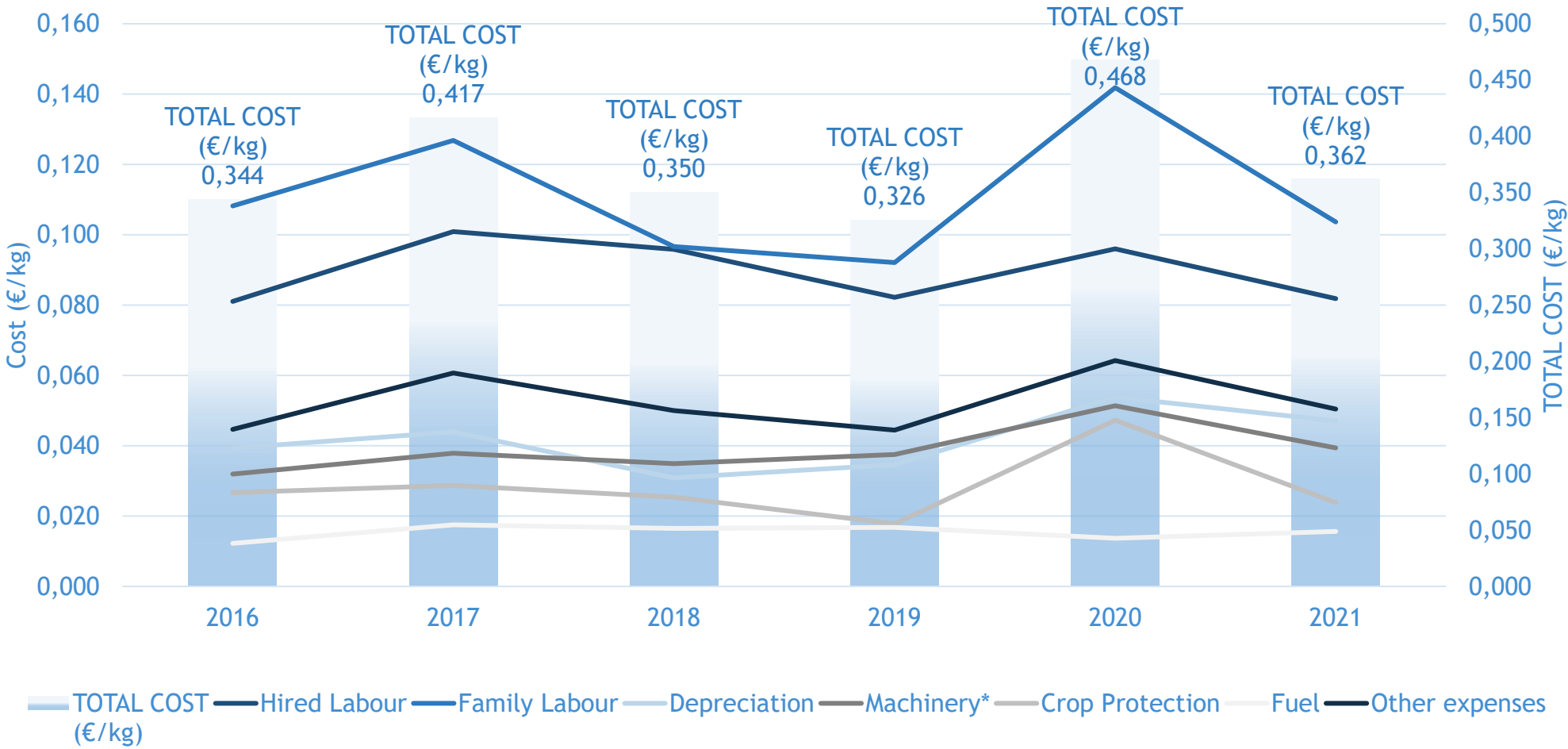
- The following results present the AVERAGE production for each year (weighted by the area of each farm)

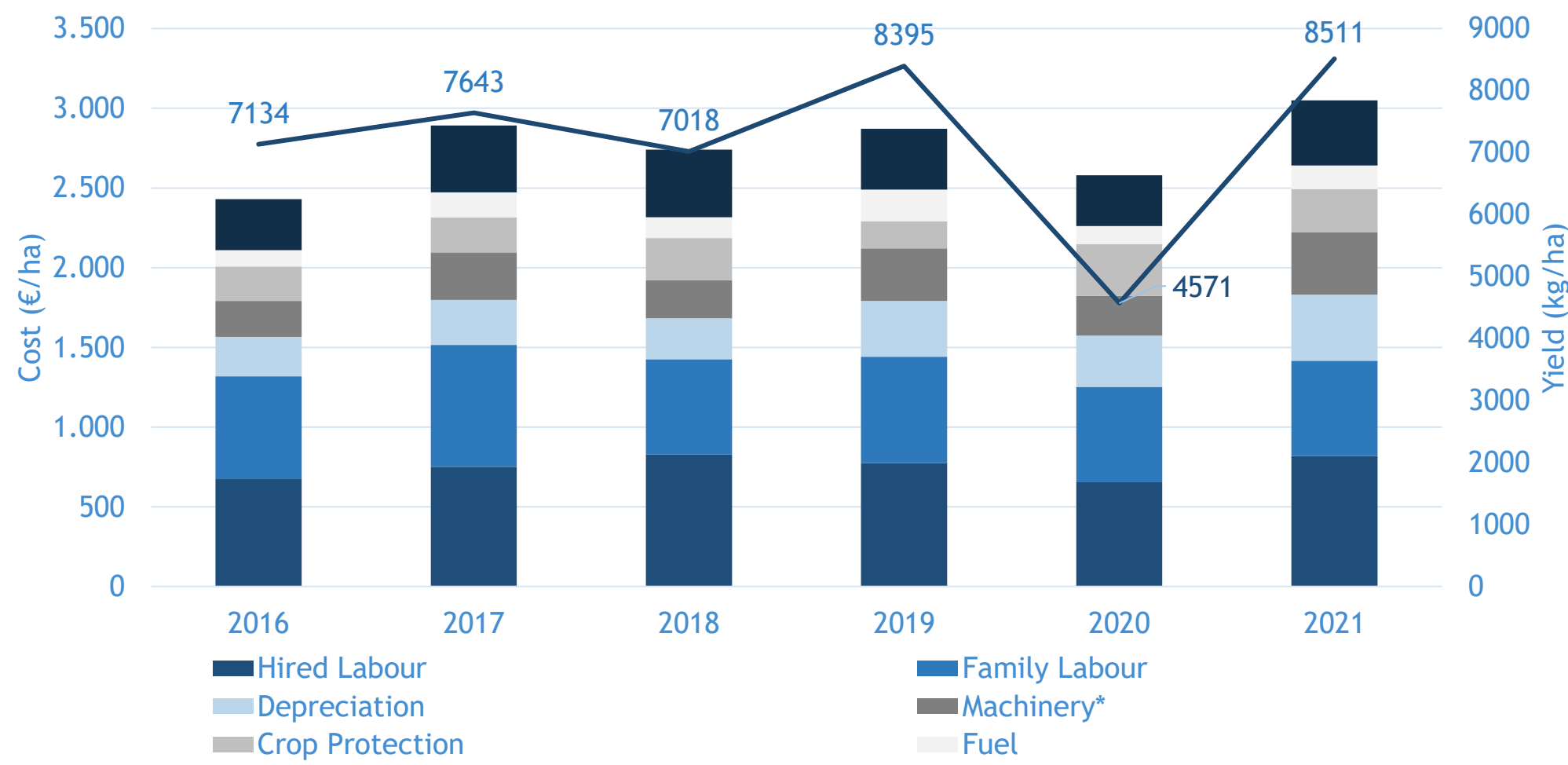


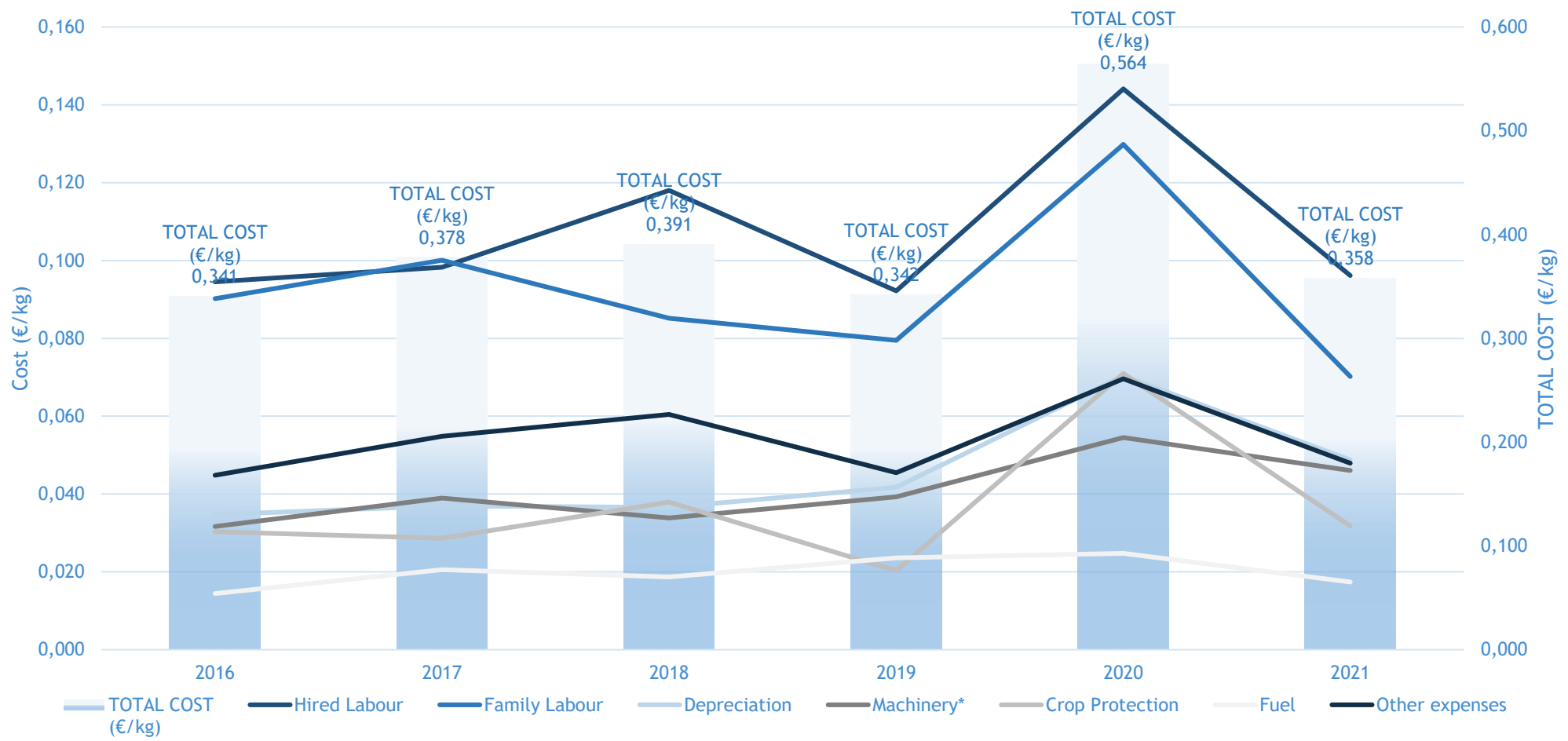
Costs per kg











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 2022/23 (from here 2022):

Each average cost concept (in base € 2020) have been updated/estimated to € 2022, by the use of the Price Indices Paid, Salaries Paid available for 2022.

Forecasting 2023/24 (from here 2023):

Each estimated average cost concept for 2022 has been updated with the interannual variation of the CPI for Catalunya (3,9% Abril 2023, Idescat).



Forecasting the yields

Based on official data published by the DACC¹, we calculate the INCREASE of the total production of Grapes for Transformation between 2022/21 and 2023/22.

With the yields of the sample per each 3 products for 2021, we estimate the yield for 2022 and 2023 by applying the increase/decrease of the total production calculated in the step before.

The assumption behind is that the Total Hectares don't change in the short term for vineyards.

Vineyard for grapes for transformation ¹	2021	2022	2023	Increase 2022/21	Increase 2023/22
Superfície	53.939	54.192	n.a.	0,47%	
Producció	397.638	349.635	358.237	-12,07%	2,46%

1) Source: [AVANÇOS DE SUPERFÍCIES I PRODUCCIONS AGRÍCOLES - Abril 2023](#)

Forecasting the costs per kg

We divide the Costs per ha by the estimated yield per year to come to a cost per kg estimate for 2022 and 2023.



5. Results

Cost per hectare forecast for 2022 and 2023



MACABEU



MACABEU	Average cost per ha per year	Estimate 2022	Estimate 2023
CS139 Crop specific costs	868	1.047	1.088
CS131 Plants and seeds	0	0	0
CS133 Fertilizers	77	171	178
CS134 Crop protection products	236	294	306
CS135 Other crop specific costs	33	49	51
CS143 Water	2	3	3
CS401 Temporary hired labour	429	438	455
CS405 Land rental	92	92	95
CS420 General costs	1.436	1.752	1.821
CS141 Electricity	13	31	32
Fuels (CS142 + 661)	141	284	295
CS144 Insurances	35	43	44
CS402 Fixed hired labour	421	441	458
Machinery maintenance	194	210	218
CS404 Services and machinery rental	118	142	148
CS406 Amortization	327	378	393
CS407 Financial costs	22	26	27
CS408 Other general expenses	164	198	205
CS601 Family labour	764	799	830
Total cost (without Family labour)	2.304	2.800	2.909
Total cost (with Family labour)	3.067	3.599	3.739



Cost per hectare forecast for 2022 and 2023



XAREL.LO



XAREL·LO	Average cost per ha per year	Estimate 2022	Estimate 2023
CS139 Crop specific costs	943	1.133	1.177
CS131 Plants and seeds	1	1	1
CS133 Fertilizers	79	176	182
CS134 Crop protection products	248	310	322
CS135 Other crop specific costs	42	63	66
CS143 Water	4	4	4
CS401 Temporary hired labour	466	477	495
CS405 Land rental	103	103	107
CS420 General costs	1.436	1.763	1.832
CS141 Electricity	15	36	38
Fuels (CS142 + 661)	140	282	293
CS144 Insurances	38	46	48
CS402 Fixed hired labour	337	353	366
Machinery maintenance	209	226	235
CS404 Services and machinery rental	140	168	175
CS406 Amortization	372	429	446
CS407 Financial costs	18	22	23
CS408 Other general expenses	167	201	209
CS601 Family labour	989	1.035	1.075
Total cost (without Family labour)	2.378	2.897	3.010
Total cost (with Family labour)	3.367	3.931	4.085



Cost per hectare forecast for 2022 and 2023



PARELLADA



PARELLADA	Average cost per ha per year	Estimate 2022	Estimate 2023
CS139 Crop specific costs	766	944	981
CS131 Plants and seeds	0	0	0
CS133 Fertilizers	78	175	181
CS134 Crop protection products	244	304	316
CS135 Other crop specific costs	27	40	41
CS143 Water	2	2	2
CS401 Temporary hired labour	353	361	375
CS405 Land rental	62	62	65
CS420 General costs	1.354	1.667	2.501
CS141 Electricity	18	43	45
Fuels (CS142 + 661)	143	288	870
CS144 Insurances	37	44	46
CS402 Fixed hired labour	398	416	432
Machinery maintenance	184	199	405
CS404 Services and machinery rental	106	128	133
CS406 Amortization	313	362	376
CS407 Financial costs	15	18	19
CS408 Other general expenses	140	169	175
CS601 Family labour	646	676	703
Total cost (without Family labour)	2.120	2.611	3.482
Total cost (with Family labour)	2.766	3.287	4.185



Cost per kg forecast for 2022 and 2023 (published expected yields)

Cost Concept	Cost per kg (2016-2021)	Forecast 2022	Forecast 2023
MACABEU			
CS139 Crop specific costs	0,089	0,122	0,124
CS420 General costs	0,147	0,204	0,207
CS601 Family labour	0,078	0,093	0,094
Total cost (without Family labour)	0,236	0,326	0,330
Total cost (with Family labour)	0,314	0,419	0,425
XAREL·LO			
CS139 Crop specific costs	0,097	0,133	0,135
CS420 General costs	0,148	0,207	0,210
CS601 Family labour	0,102	0,121	0,123
Total cost (without Family labour)	0,245	0,340	0,344
Total cost (with Family labour)	0,347	0,461	0,467
PARELLADA			
CS139 Crop specific costs	0,090	0,126	0,128
CS420 General costs	0,159	0,223	0,326
CS601 Family labour	0,076	0,090	0,092
Total cost (without Family labour)	0,249	0,349	0,454
Total cost (with Family labour)	0,325	0,439	0,546

Data from [AVANÇOS DE
SUPERFÍCIES I
PRODUCCIONS
AGRÍCOLES](#) - Abril 2023

FOR both 2022 and
2023:

2022/2021 = -12,07%

2023/2022 = +2,46%

Cost per kg forecast for 2022 and 2023 (Scenario 1: yields reduction 10%)

Cost Concept	Cost per kg (2016-2021)	Forecast 2022	Forecast 2023
MACABEU			
CS139 Crop specific costs	0,089	0,122	0,141
CS420 General costs	0,147	0,204	0,235
CS601 Family labour	0,078	0,093	0,107
Total cost (without Family labour)	0,236	0,326	0,376
Total cost (with Family labour)	0,314	0,419	0,483
XAREL·LO			
CS139 Crop specific costs	0,097	0,133	0,153
CS420 General costs	0,148	0,207	0,239
CS601 Family labour	0,102	0,121	0,140
Total cost (without Family labour)	0,245	0,340	0,392
Total cost (with Family labour)	0,347	0,461	0,532
PARELLADA			
CS139 Crop specific costs	0,090	0,126	0,146
CS420 General costs	0,159	0,223	0,371
CS601 Family labour	0,076	0,090	0,104
Total cost (without Family labour)	0,249	0,349	0,517
Total cost (with Family labour)	0,325	0,439	0,621

Data from [AVANÇOS DE SUPERFÍCIES I PRODUCCIONS AGRÍCOLES](#) - Abril 2023
 FOR 2022 (2022/2021 = **-12,07%**) and for 2023 applying **-10%** on yields

Cost per kg forecast for 2022 and 2023 (Scenario 2: yields reduction 25%)

Cost Concept	Cost per kg (2016-2021)	Forecast 2022	Forecast 2023
MACABEU			
CS139 Crop specific costs	0,089	0,122	0,169
CS420 General costs	0,147	0,204	0,282
CS601 Family labour	0,078	0,093	0,129
Total cost (without Family labour)	0,236	0,326	0,451
Total cost (with Family labour)	0,314	0,419	0,580
XAREL·LO			
CS139 Crop specific costs	0,097	0,133	0,184
CS420 General costs	0,148	0,207	0,286
CS601 Family labour	0,102	0,121	0,168
Total cost (without Family labour)	0,245	0,340	0,471
Total cost (with Family labour)	0,347	0,461	0,639
PARELLADA			
CS139 Crop specific costs	0,090	0,126	0,175
CS420 General costs	0,159	0,223	0,446
CS601 Family labour	0,076	0,090	0,125
Total cost (without Family labour)	0,249	0,349	0,620
Total cost (with Family labour)	0,325	0,439	0,746

Data from [AVANÇOS DE SUPERFÍCIES I PRODUCCIONS AGRÍCOLES](#) - Abril 2023
 FOR 2022 (2022/2021 = **-12,07%**) and for 2023 applying **-25%** on yields

Grape production Costs -
Forecasting for the year
2022-23

Thank you!



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH



Parc Mediterrani de la Tecnologia, Edifici EEABB
Esteve Terrades 8, 08860 Castelldefels

Tel + 34 935 521 124 | Fax + 34 935 521 121 | E-mail: creda@creda.es

