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FOR LIVESTOCK DATA

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Yearly survey on the situation of MILK RECORDING SYSTEMS (Years 2022 and 2023) in ICAR member countries for cow, sheep and goats



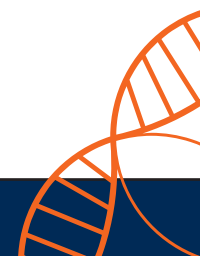


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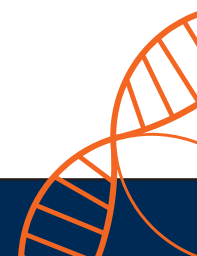
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Preface

Across the globe, billions of people consume milk and dairy products. No longer limited to being a source of nutrients solely for newborns, milk is now recognized as a fundamental provider of protein and energy for all consumers, alongside other dairy products. The dairy industry presents significant opportunities for farmers, processors, retailers, and other stakeholders within the value chain.

At the core of this sector lies raw production, which necessitates understanding the intricate relationships among its various components by consumers, industry players, and governments. To facilitate this understanding, up-to-date information on the economic contribution of milk and dairy products is essential. This includes strategies for developing the dairy industry effectively to enhance food security and maximize income throughout the entire value chain.

Since 1996, ICAR has been collecting data on national milk production, milk recording, and the cost of the entire milk production process. Notably, this publication assesses the productivity of various breeds within the national sector, ensuring even minor breeds are accounted for in national statistics. Originally focused on cow milking, the survey expanded to include sheep and goat milking sectors since 2008.

This collaborative effort by ICAR's national members brings together primary production information from diverse sources, providing a unique perspective on the relationships between farmers, dairying, and dairy industry development. The result is this informative booklet.

In producing this booklet, ICAR aims to provide:

- **Exploring Dairy Production and Nutrition:**

We explore into the critical stages of the dairy chain, examining nutrition and primary production within the national dairy sector—from milk production to consumption.





- **National Distinctions and Scale:**

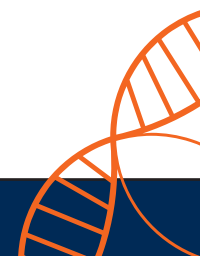
Our analysis paints a realistic picture of the diverse dairy sectors across different countries. We highlight variations in scale and unique characteristics.

- **Unlocking Dairy Potential:**

By presenting targeted stakeholder actions, we offer insights to enhance future dairy production and planning.

The technical editorial team extends their gratitude to all contributors, particularly the ICAR Members who played a vital role in creating this informative booklet

- | | |
|-----------------------------------|---|
| • Australia (DataGene) | • Luxembourg |
| • Austria | • Netherlands (CRV) |
| • Belgium (Flemish Region by CRV) | • Norway |
| • Belgium (Wallonia) | • Pakistan |
| • Bulgaria | • Poland |
| • Chile | • Portugal (ANABLE) |
| • Croatia | • Republic of Srpska |
| • Czech Rep. | • Romania (Asociatia Generala a Crescatorilor de Taurine) |
| • Denmark | • Serbia |
| • Estonia | • Slovak Republic |
| • Finland | • South Africa (ARC) |
| • France | • Spain |
| • Germany (BRS) | • Sweden (Vaxa) |
| • Hungary (LPT) | • Switzerland (ASR) |
| • Iceland | • Taiwan |
| • Ireland | • Tunisia (OEP) |
| • Israel | • UK (by CIS) |
| • Italy (AIA) | • Ukraine |
| • Latvia | |





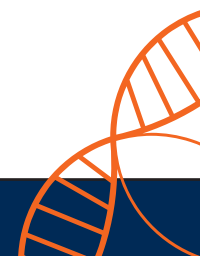
ICAR Member Organisations are encouraged to submit and complete the missing data before the finalisation of the present booklet and its distribution to the Competent Authorities

NOTE:

This publication is based on the data submitted by each ICAR Member Organisation and that are available on the on-line ICAR database at: www.icar.org > Publications > Milk Yearly Surveys

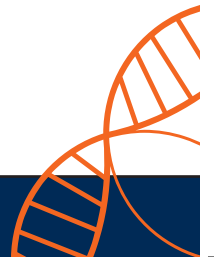
The on-line database is available at: <https://my.icar.org/stats/list>

ICAR also advises that data hereby collected were downloaded on 25 April





Cow Survey (Years 2022 and 2023)





COW SURVEY

Table 1 - National milk production

Country	Year	Total number of dairy cows	Total number of dairy herds	Average of cows per herd	Average milk production per cow per year (kg)	Percent of fat production per cow per year (%)	Percent of protein production per cow per year (%)	Average cell count
Australia (DataGene)	2022	1.340.000	4.420	303	6.203	4,17	3,40	
Austria	2023	546.035	22.419	24,4	7.918	4,16	3,40	
Austria	2022	550.554	26.995	20,4	7.250	4,17	3,42	
Belgium (Flemish Region by CRV) ¹	2023	351.563	3.620	97,1	9.606	4,27	3,51	
Belgium (Flemish Region by CRV) ²	2022	339.482	3.700	91,8	9.444	4,22	3,47	
Belgium (Wallonia)	2022	185.110	2.544	72,8	7.089	3,95	3,34	204
Bulgaria	2022	123.456						
Chile	2023	396.000	2.800	141	5.453	4,02	3,59	
Chile	2022	325.000	4.800	68	7.100	4,12	3,63	
Croatia	2023	96.477	11.459	8,4	4.975	4,07	3,49	276.000
Croatia	2022	102.037	12.397	8,2	4.970	4,10	3,50	273.000
Czech Rep.	2023	352.557			9.266	3,89	3,42	
Czech Rep.	2022	356.123			9.163	3,92	3,42	
Denmark	2022	557.831	2.319	240	10.571	4,33	3,62	221
Estonia	2023	83.700	901	92,9	10.655	3,90	3,40	
Estonia	2022	83.606	995	84	10.183	3,90	3,40	
Finland	2023	242.017	4.656	52	9.332	4,46	3,56	
Finland	2022	243.165	4.749	51,2	9.494	4,44	3,56	
France	2023	3.429.000						
France	2022	3.504.000	49.000	71,5	7.516			
Germany (BRS)	2023	3.712.815	50.581	73,4	8.547	4,12	3,46	
Germany (BRS)	2022	3.809.717	52.895	72	8.557	4,09	3,44	
Hungary (LPT)	2023	173.618	406	422		3,96	3,48	
Hungary (LPT)	2022	177.430	420	422		3,88	3,37	
Iceland	2023	25.876	489	54,1	6.411	4,26	3,40	224
Iceland	2022	25.756	507	51,2	6.313	4,20	3,41	250
Ireland ³	2023	1.643.470	15.312	107	5.301	4,30	3,52	200
Ireland ³	2022	1.626.592	15.505	105	5.587	4,28	3,55	195
Israel	2023	115.716	439	264	12.265	3,88	3,35	238
Israel	2022	120.382	463	260	12.074	3,85	3,36	244
Italy (AIA)	2023	2.009.834	15.050					
Italy (AIA)	2022	2.026.038	15.266					

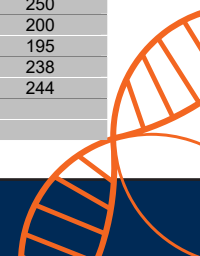


Table 1 - National milk production

Country	Year	Total number of dairy cows	Total number of dairy herds	Average of cows per herd	Average milk production per cow per year (kg)	Percent of fat production per cow per year (%)	Percent of protein production per cow per year (%)	Average cell count
Latvia	2022	131.250	10.297	12,7	7.492			
Latvia	2023	127.803	9.498	13	7.748			
Luxembourg	2023	55.496	570	97,4	8.456	4,18	3,45	
Luxembourg	2022	54.971	589	93,3	8.170	4,15	3,41	
Netherlands (CRV) ⁴	2023	1.576.925	14.294	110,3	9.346	4,45	3,61	
Netherlands (CRV) ⁵	2022	1.570.673	14.729	106,6	9.086	4,38	3,55	
Norway	2023	203.327	6.499	31,2	7.955	4,30	3,55	64
Norway	2022	211.398	6.737	30,8	8.050	4,28	3,54	61
Pakistan	2022	22.500						
Poland ⁶	2023	2.203.900	190.895	11,5	7.596			
Poland	2022	2.037.279	200.942	10,1	7.425			
Portugal (ANABLE)	2023	218.840	3.801	57,6	8.643			
Portugal (ANABLE)	2022	221.540	3.993	55,5	8.354	3,83	3,27	
Republic of Srpska	2023	2.000	94	28	6.785	4,17	3,34	
Republic of Srpska	2022	2.000	86	30	6.698	4,08	3,26	
Romania (Asociatia Generala a Crescatorilor de Taurine)	2023	133.438	9.096	14,7	7.149	3,83	3,45	
Romania (Asociatia Generala a Crescatorilor de Taurine)	2022	126.571	9.086	13,9	7.028	3,93	3,42	
Serbia ⁷	2022	92.000			4.576			
Slovak Republic	2022	114.410			8.362	3,79	3,37	
South Africa (ARC)	2022	403.623	891	453	6.012			
Spain	2022	809.987	10.670	75	9.041	3,77	3,32	

Table 1 - National milk production

Country	Year	Total number of dairy cows	Total number of dairy herds	Average of cows per herd	Average milk production per cow per year (kg)	Percent of fat production per cow per year (%)	Percent of protein production per cow per year (%)	Average cell count
Sweden (Vaxa)	2023	289.182	2.598	111,3	9.747	4,26	3,53	
Sweden (Vaxa)	2022	296.543	2.795	106	9.461	4,25	3,50	
Switzerland (ASR)	2023					4,16	3,37	
Switzerland (ASR)	2022	542.927	23.131	23,5	6.989	4,14	3,36	133.885
Taiwan ¹	2023	64.283	554	116	7.930	4,03	3,38	229
Taiwan ²	2022	64.516	521	123,8	7.719	4,04	3,37	263
Tunisia (OEP)	2022	224.147	10.875	20	5.626	3,52	3,19	620
UK - England (by CIS)	2023	267.322	1.156	231	8.717	4,37	3,42	182
UK - England (by CIS)	2022	265.801	1.189	223	8.699	4,34	3,38	183
UK - Jersey Island	2023	2.078	13	159	5.951	5,49	3,91	163
UK - Jersey Island	2022	2.134	14	152	5.826	5,36	3,88	202
UK - N. Ireland (by CIS)	2023	90.960	583	156	7.666	4,30	3,39	201
UK - N. Ireland (by CIS)	2022	86.799	573	151	7.739	4,29	3,40	178
UK - Scotland (by CIS)	2023	110.265	480	229	8.685	4,24	3,37	179
UK - Scotland (by CIS)	2022	111.402	503	221	8.576	4,24	3,34	191
UK - Wales (by CIS)	2023	44.003	215	204	8.172	4,35	3,39	191
UK - Wales (by CIS)	2022	44.226	226	195	8.076	4,35	3,36	195
Ukraine	2023	970.380						

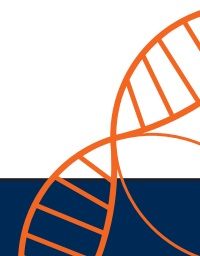
¹ TS(%)=12.73² TS(%)=12.89

Table 2 - Position of milk recording: Methods and Organisations

Country	Year	Number of recorded cows	Percent of recorded cows	Number of recorded herds	Percent of recorded herds	Average number of cows per recorded herd	Cows in automatic milking, %	Herds in automatic milking, %
Argentina	2023	191.319		672		284		
Argentina	2022	198.263		671		295		
Australia (DataGene Limited)	2022	506.707	36,60	1.882	40,8	269		
Austria	2023	437.712	80,20	17.707		25		
Austria	2022	437.033	83,70	18.065		23		
Belgium (Flemish Region by CRV)	2023	202.275	56,80	1.812	53,2	12	20,0	17,0
Belgium (Flemish Region by CRV)	2022	202.026	59,50	1.872	54,3	108	19,0	16,0
Belgium (Wallonia)	2022	61.456	33,20	657	25,8	94	15,1	12,5
Chile	2023	160.748		419		384		
Chile	2022	151.790	46,70	452	9,4	336		
Croatia	2023	68.384	70,10	2.990	26,1	23	6,3	1,9
Croatia	2022	71.642	70,20	3.179	25,6	23	5,9	1,9
Czech Rep. ¹	2023	339.272	96,10	1.182		287		
Czech Rep. ²	2022	342.426	96,20	1.188		288		
Denmark	2022	498.644	91,10	2.014	91,0	248	23,0	26,0
Estonia	2023	81.020	96,80	371	41,2	218	20,9	19,4
Estonia	2022	80.689	96,50	399	40,1	202	20,0	18,8
Finland	2023	189.148	78,20	3.173	68,1	60	56,0	35,0
Finland	2022	195.003	80,20	3.461	72,9	56	52,4	31,6
France	2022	1.968.566	56,20	30.458	62,2	64	13,9	
Germany (BRS)	2023	3.251.621	87,60	34.027	67,3	96		
Germany (BRS)	2022	3.322.619	87,20	35.344	66,8	9		
Hungary (LPT)	2022	177.430		420		422	5,3	6,2

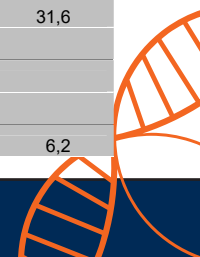


Table 2 - Position of milk recording: Methods and Organisations

Country	Year	Number of recorded cows	Percent of recorded cows	Number of recorded herds	Percent of recorded herds	Average number of cows per recorded herd	Cows in automatic milking, %	Herds in automatic milking, %
Iceland	2023	25.309	100,00	489	100,0	54	70,9	54,4
Iceland	2022	25.032	100,00	507	100,0	51	64,9	50,0
Ireland	2023	1.184.263	72,00	10.021	64,0	118	1,5	1,6
Ireland	2022	1.114.331	69,00	9.564	62,0	116	1,3	1,5
Italy (AIA) ³	2023	1.407.368		14.007		101	5,4	6,2
Italy (AIA) ³	2022	1.433.749		14.502		99	4,9	5,6
Latvia, LVA	2023	106.175	83,00	3.038	32,0	34		
Latvia, LVA	2022	110.440	84,10	3.309	32,1	33		
Luxembourg	2023	50.836	91,60	499	87,5	102	44,5	41,1
Luxembourg	2022	50.003	91,00	508	86,2	98	43,5	39,9
Netherlands (CRV)	2023	1.455.909	92,30	12.793	89,5	114	45,0	40,0
Netherlands (CRV)	2022	1.468.680	93,50	13.230	89,8	111	40,0	36,0
Norway	2023	178.897	97,70	6.338	97,5	31	62,9	41,0
Norway	2022	185.890	87,90	6.602	98,0	31	63,1	39,1
Poland	2023	807.719	38,00	16.209	8,5	46	6,1	3,0
Poland	2022	803.530	39,60	17.125	8,5	44	4,9	2,3
Portugal (ANABLE)	2023	92.149	42,10	1.342	35,3	69		
Portugal (ANABLE)	2022	90.183	40,70	1.367	34,2	66		
Republic of Srpska	2023	2.000	6,50	94	3,6	28	36,2	11,7
Republic of Srpska	2022	2.000	6,50	86	3,3	30	23,9	10,5
Romania (Asociatia Generala a Crescatorilor de Taurine)	2023	133.438		9.096		15		
Romania (Asociatia Generala a Crescatorilor de Taurine)	2022	126.571		9.086		14		
Serbia ⁴	2023	52.309	56,90	2.189		24		
Serbia ⁴	2022	52.469	57,00	2.244		23		



Table 2 - Position of milk recording: Methods and Organisations

Country	Year	Number of recorded cows	Percent of recorded cows	Number of recorded herds	Percent of recorded herds	Average number of cows per recorded herd	Cows in automatic milking, %	Herds in automatic milking, %
Slovak Republic	2023	101.392	89,90	356		285	1,4	2,5
Slovak Republic	2022	102.123	89,30	363		281	1,3	2,2
South Africa (ARC)	2022	17.565	4,30	106	11,9	166		
Spain	2022	541.071	67,00	4.760	44,0	99		12,2
Sweden (Vaxa) ⁵	2023	179.681	74,20	1.766	76,0	102	49,7	41,3
Sweden (Vaxa) ⁵	2022	185.090	75,00	1.872		99	53,6	42,4
Switzerland (ASR)	2023	416.068		17.653		24	14,4	7,7
Switzerland (ASR)	2022	420.632	77,50	17.978	77,7	26	13,7	7,1
Taiwan	2023	27.203	42,30	167	30,1	160	3,8	5,9
Taiwan	2022	28.707	44,50	175	31,1	164	2,8	5,7
Tunisia (OEP)	2022	14.320	6,40	600	5,5	23		
UK - England (by CIS)	2023	267.322		1.156		231	9,7	11,4
UK - England (by CIS)	2022	265.801		1.189		223	9,0	10,8
UK - Jersey Island	2023	2.078		13		159	0,5	7,7
UK - Jersey Island	2022	2.134		14		152	0,6	7,1
UK - N. Ireland (by CIS)	2023	90.960		583		156	1,9	1,7
UK - N. Ireland (by CIS)	2022	86.799		573		151	1,9	1,8
UK - Scotland (by CIS)	2023	110.265		480		229	12,9	13,3
UK - Scotland (by CIS)	2022	111.402		503		221	11,7	12,1
UK - Wales (by CIS)	2023	44.003		215		204	5,7	6,0
UK - Wales (by CIS)	2022	44.266		226		195	5,5	5,8

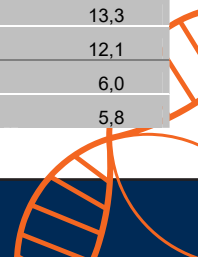


Table 3 - Costs and financing

Country	Year	Method, % of rec cows A	Method, % of rec cows B	Method, % of rec cows C	Avg nr of recording days per herd and year	Avg nr of sampled recordings per herd and year	Sampling scheme, % of rec cows P	Sampling scheme, % of rec cows E	Sampling scheme, % of rec cows M	Sampling scheme, % of rec cows Z	Sampling scheme, % of rec cows T	Sampling scheme, % of rec cows C	Sampling scheme, % of rec cows I
Austria	2023	100,0									100,0		
Austria	2022	100,0									100,0		
Belgium (Flemish Region by CRV)	2023	48,0	52,0		8,5	8,5							
Belgium (Flemish Region by CRV)	2022	48,0	52,0		8,5	8,5							
Belgium (Wallonia)	2022	84,1	15,9		9,7			59,7		15,1	25,2		
Chile	2023	99,9	0,1		11,0	11,0	40,0				60,0		
Chile	2022	99,9	0,1		11,0	11,0	35,0				65,0		
Croatia	2023	57,0	43,0		11,0	11,0				31,5	68,5		
Croatia	2022	58,7	41,3		11,0	11,0				30,3	69,7		
Czech Rep.	2023	100,0			12,0	12,0	28,9			70,1	1,0		
Czech Rep.	2022	100,0			12,0	12,0	33,4			65,5	1,0		
Denmark	2022	10,0	90,0		10,0	10,0					76,0	24	
Estonia	2024		100,0		12,0	12,0							
Estonia	2023		100,0		12,0	12,0							
Estonia	2022		100,0		12,0	12,0							
Finland	2023	4,1	94,2	1,7	11,7	6,9	6,1			93,9			
Finland	2022	3,9	94,2	1,9	11,6	6,8	7,6			92,4			
France	2023	76,1	21,6	2,3				69,6		3,2	27,2		
France	2022	76,6	21,3	2,1				70,3		2,8	26,9		
Hungary (LPT) ¹	2022	93,0		7,0	11,0	11,0				30,0		70	
Iceland	2023		100,0		12,0	8,6	29,1				70,9		
Iceland	2022		100,0		12,0	7,7	35,1				64,9		
Ireland	2023	52,0	48,0							99,0			
Ireland	2022	53,0	47,0							99,0			
Israel	2023	59,0	41,0		12,0	12,0							
Israel	2022	59,0	41,0		12,0	12,0							
Italy (AIA)	2023	100,0					0,0			2,4	97,6		
Italy (AIA)	2022	100,0					0,0			2,1	97,9		

AC: 63%, AZ:30%, CC: 7%



Table 3 - Costs and financing

Country	Year	Method, % of rec cows A	Method, % of rec cows B	Method, % of rec cows C	Avg nr of recording days per herd and year	Avg nr of sampled recordings per herd and year	Sampling scheme, % of rec cows P	Sampling scheme, % of rec cows E	Sampling scheme, % of rec cows M	Sampling scheme, % of rec cows Z	Sampling scheme, % of rec cows T	Sampling scheme, % of rec cows C	Sampling scheme, % of rec cows I
Luxembourg	2023	82,4	17,6										
Luxembourg	2022	81,9	18,1										
Netherlands (CRV)	2023	30,0	70,0		9,0	9,0							
Netherlands (CRV)	2022	30,0	70,0		9,0	9,0							
Norway	2023	0,0	100,0	0,0	10,9	7,4	0,0	52,5	0,0	47,5	0,0	0	0
Norway	2022	0,0	100,0	0,0	10,9	7,5	0,0	53,0	0,0	47,0	0,0	0	0
Poland	2023	100,0						23,0		1,0	76,0		
Poland	2022	100,0						22,1		1,1	76,8		
Portugal (ANABLE)	2023	100,0			11,0	11,0		26,8		13,0	60,2		
Portugal (ANABLE)	2022	100,0			11,0	11,0		26,7		10,5	62,8		
Republic of Srpska	2023	100,0			11,0	335,6					100,0		
Republic of Srpska	2022	100,0			11,0	276,7					100,0		
Romania (Asociatia Generala a Crescatorilor de Taurine)	2023	100,0			11,0	11,0					100,0		
Romania (Asociatia Generala a Crescatorilor de Taurine)	2022	100,0			11,0	11,0					100,0		
Serbia ²	2023	100,0				11,0					100,0		
Serbia ²	2022	100,0				11,0					100,0		
Slovak Republic	2023	100,0			11,0			33,1			66,9		
Slovak Republic	2022	100,0			11,0			33,2			66,8		
Spain	2022	100,0				11,0		1,0		12,2	86,8		
Sweden (Vaxa)	2023		100,0										
Sweden (Vaxa)	2022		100,0										



Table 3 - Costs and financing

Country	Year	Method, % of rec cows A	Method, % of rec cows B	Method, % of rec cows C	Avg nr of recording days per herd and year	Avg nr of sampled recordings per herd and year	Sampling scheme, % of rec cows P	Sampling scheme, % of rec cows E	Sampling scheme, % of rec cows M	Sampling scheme, % of rec cows Z	Sampling scheme, % of rec cows T	Sampling scheme, % of rec cows C	Sampling scheme, % of rec cows I
Switzerland (ASR)	2023	94,8	5,1		11,0	222,6	18,6			9,1	72,2		
Switzerland (ASR)	2022	96,0	4,0		11,0		4,8	4,2	10,1	7,1	73,8		
Taiwan	2023	100,0			11,0	11,0							
Taiwan	2022	100,0			11,0	11,0							
Tunisia (OEP)	2022	24,5	75,5		8,0	8,0							
UK - England (by CIS)	2023	53,0	46,0		9,0	9,0	32,3	0,0	0,0	47,7	20,1		
UK - England (by CIS)	2022	53,0	44,0		9,0	9,0	33,3	0,0	0,0	46,5	20,2		
UK - Jersey Island	2023	85,0	15,0		11,0	11,0	69,2	0,0	0,0	15,4	15,4		
UK - Jersey Island	2022	78,0	21,0		11,0	11,0	64,3	0,0	0,0	14,3	21,4		
UK - N. Ireland (by CIS)	2023	75,0	22,0		8,0	8,0	31,7	0,0	0,0	33,1	35,2		
UK - N. Ireland (by CIS)	2022	75,0	21,0		8,0	8,0	34,7	0,0	0,0	29,8	35,4		
UK - Scotland (by CIS)	2023	64,0	27,0		9,0	9,0	52,3	0,0	0,0	42,3	5,4		
UK - Scotland (by CIS)	2022	66,0	24,0		9,0	9,0	53,5	0,0	0,0	40,6	6,0		
UK - Wales (by CIS)	2023	48,0	47,0		9,0	9,0	20,5	0,0	0,0	41,4	38,1		
UK - Wales (by CIS)	2022	48,0	48,0		8,0	8,0	23,9	0,0	0,0	38,5	37,6		

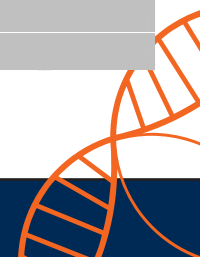


Table 4.1 - All breeds together - All recorded cows

Country	Year	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Australia (DataGene)	2022	506.707	321	7.069	7.069	4,10	3,30	
Austria	2023	368.067	299		7.918	4,16	3,40	
Austria	2022	366.812	299		7.867	4,17	3,42	
Belgium (Flemish Region by CRV) ¹	2023	103.222	348	10.554		4,20	3,48	
Belgium (Flemish Region by CRV) ²	2022	103.832	345	10.301		4,25	3,49	
Belgium (Wallonia)	2022	38.942	350	8.976	8.032	4,13	3,40	
Chile	2023	140.900	328	7.678	8.347	4,02	3,59	
Chile	2022	103.288	352	8.205	8.328	4,12	3,63	
Croatia	2023	52.283	372	8.240	6.953	4,20	3,40	276.000
Croatia	2022	54.546	369	8.206	6.934	4,10	3,40	
Czech Rep.	2023	290.161	296	9.741	9.962	3,89	3,42	
Czech Rep.	2022	292.771	296	9.530	9.747	3,92	3,42	
Denmark ³	2022	498.644	365	10.543		4,32	3,61	221
Estonia	2023	80.341	330	11.114	10.679	3,87	3,35	221
Estonia	2022	80.456	332	10.628	10.422	3,88	3,37	225
Finland	2023	139.027	305	10.162	10.243	4,34	3,56	184
Finland	2022	143.750	305	10.030	10.125	4,37	3,59	180
France	2023	1.878.620	346	8.938	8.798	4,02	3,40	
France	2022	1.968.566	345	8.878	8.765	4,00	3,39	
Germany (BRS)	2023	3.267.085	323	9.379	9.146	4,09	3,48	
Germany (BRS)	2022	3.311.609	323	9.127	8.997	4,07	3,45	
Iceland ⁴	2023	25.309	365	6.411		4,26	3,40	286
Iceland ⁴	2022	25.032	365	6.313		4,20	3,41	250
Iceland ⁴	2023	1.035.866	287	5.767	6.211	4,21	3,54	176
Iceland ⁴	2022	977.738	292	6.342	6.508	4,15	3,56	173
Israel ⁵	2023	78.667	363	13.792	12.634	3,88	3,36	
Israel ⁵	2022	80.556	364	13.723	12.469	3,85	3,36	

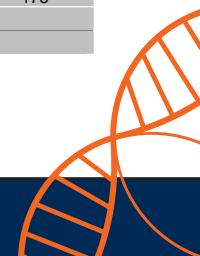
¹ 810 kgs fat+protein² 798 kgs fat+protein

Table 4.1 - All breeds together - All recorded cows

Country	Year	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Italy (AIA) ⁶	2023	863.322	305	9.979	9.979	3,86	3,36	
Italy (AIA) ⁶	2022	888.180	305	9.925	9.925	3,87	3,36	
Latvia, LVA	2023	87.908	378	9.449	8.814	3,99	3,39	
Latvia, LVA	2022	89.763	379	8.562	8.572	4,05	3,41	
Luxembourg	2023	50.836	321	9.049		4,23	3,46	
Luxembourg	2022	50.003	320	8.708		4,13	3,40	
Netherlands (CRV) ⁷	2023	925.052	357	10.376		4,39	3,58	
Netherlands (CRV) ⁸	2022	941.156	356	10.301		4,40	3,59	
Norway	2023	132.689	305	7.956	7.556	4,30	3,55	62
Norway	2022	138.669	305	8.050	7.699	4,27	3,54	61
Poland	2023	807.719	305	9.150	9.150	4,08	3,43	
Poland	2022	803.529	305		9.037	4,07	3,41	
Portugal (ANABLE)	2023	92.149	357	11.292	10.001	3,81	3,31	298
Portugal (ANABLE)	2022	90.183	349	11.044	9.964	3,81	3,30	290
Republic of Srpska	2023	374	305	7.013	6.785	4,17	3,34	
Republic of Srpska	2022	403	305	6.850	6.698	4,08	3,26	
Romania (Asociatia Generala a Crescatorilor de Taurine)	2023	72.577	344	7.149	6.890	3,83	3,45	
Romania (Asociatia Generala a Crescatorilor de Taurine)	2022	69.803	344	7.028	6.784	3,93	3,42	
Serbia ⁹	2023	37.424	365	8.669	7.550	3,81	3,28	
Serbia ⁹	2022	40.671	346	8.214	7.339	3,84	3,27	
Slovak Republic	2023	80.014	297	9.189	9.374	3,96	3,41	
Slovak Republic	2022	80.463	297	9.090	9.217	3,88	3,39	
South Africa (ARC)	2022	38.558	209	5.071	7.450	4,29	3,51	
Spain	2022	345.400	366	12.692	10.900	3,80	3,27	
Sweden (Vaxa)	2023	187.824	365	10.584		4,29	3,63	231
Sweden (Vaxa)	2022	194.242	365	10.419		4,27	3,60	240
Switzerland (ASR)	2023	316.160	301	7.836	7.921	4,08	3,36	93
Switzerland (ASR)	2022	318.549	301	7.833	7.914	4,10	3,30	93

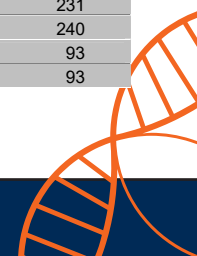
⁶ Reference period: Oct 1st, 2022- Sept 30, 2023⁷ 827 kgs fat + protein

Table 4.1 - All breeds together - All recorded cows

Country	Year	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Taiwan	2023	27.203	349	8.905	8.450	4,05	3,44	227
Taiwan	2022	28.707	345	8.732	8.297	4,04	3,38	263
Tunisia (OEP)	2022	4.891	400	5.602	4.693	3,58	3,19	620
UK - England (by CIS)	2023	297.223	324	9.707	8.570	4,21	3,33	213
UK - England (by CIS)	2022	295.607	319	9.503	8.513	4,19	3,29	243
UK - Jersey Island	2023	2.342	324	7.283	6.439	5,61	3,79	281
UK - Jersey Island	2022	2.295	339	7.504	6.660	5,54	3,81	279
UK - N. Ireland (by CIS)	2023	94.223	323	9.070	8.031	4,20	3,32	270
UK - N. Ireland (by CIS)	2022	91.201	321	9.139	8.122	4,19	3,31	202
UK - Scotland (by CIS)	2023	124.820	321	9.648	8.593	4,10	3,26	210
UK - Scotland (by CIS)	2022	126.135	321	9.609	8.600	4,08	3,24	218
UK - Wales (by CIS)	2023	49.166	323	9.104	8.102	4,26	3,30	229
UK - Wales (by CIS)	2022	49.651	322	8.970	8.006	4,22	3,27	204

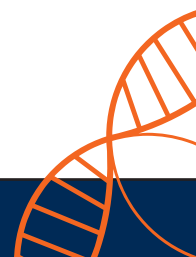


Table 4.2 - All breeds together - Cows in herdbook

Country	Year	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Australia (DataGene)	2022	47.821	337	7.712	7.712	4,15	3,33	
Austria	2023	348.544	299		7.973	4,16	3,41	
Austria	2022	347.285	299		7.919	4,17	3,42	
Belgium (Flemish Region by CRV) ¹	2023	73.041	346	10.705		4,20	3,48	
Belgium (Flemish Region by CRV) ²	2022	73.721	344	10.452		4,25	3,49	
Czech Rep. ³	2023	281.080	296	9.789	10.011	3,89	3,42	
Czech Rep. ³	2022	282.581	296	9.585	9.803	3,91	3,42	
Denmark	2022	498.644	365	10.543		4,32	3,61	221
Estonia	2023	75.899	330	11.242	10.771	3,87	3,35	
Estonia	2022	75.665	332	10.753	10.513	3,87	3,37	
Finland	2023	67.495	305		10.456	4,37	3,59	
Finland	2022	69.524	305		10.370	4,34	3,57	
France	2023	1.878.620	346	8.938	8.798	4,02	3,40	
France	2022	1.968.566	345	8.878	8.765	4,00	3,39	
Germany (BRS)	2023	2.488.010	323	9.595	9.332	4,09	3,48	
Germany (BRS)	2022	2.525.586	323	9.342	9.182	4,07	3,46	
Iceland	2023	25.309	365	6.411		4,26	3,40	286
Iceland	2022	25.032	365	6.313		4,20	3,41	250
Italy (AIA) ⁴	2023	863.322	305	9.979	9.979	3,86	3,36	
Italy (AIA) ⁴	2022	888.180	305	9.925	9.925	3,87	3,36	
Latvia, LVA	2023	66.419	377		9.045	4,00	3,34	
Latvia, LVA	2022	66.252	380		8.900	3,93	3,32	

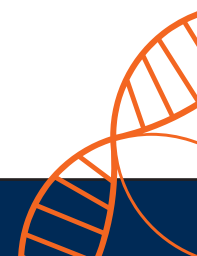
¹ 823 kgs fat+protein² 809 kgs fat+protein³ Holstein and Fleckvieh breeds⁴ Reference period: Oct 1st, 2022- Sept 30, 2023

Table 4.2 - All breeds together - Cows in herdbook

Country	Year	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Netherlands (CRV) ⁵	2023	810.680	357	10.456		4,40	3,58	
Netherlands (CRV) ⁶	2022	824.182	355	10.377		4,40	3,59	
Poland	2023	556.899	305	9.151	9.151	3,98	3,36	
Poland	2022	555.182	305	9.004	9.004	4,00	3,35	
Portugal (ANABLE)	2023	86.962	357	11.386	10.068	3,80	3,30	297
Portugal (ANABLE)	2022	85.611	349	11.197	10.029	3,80	3,29	290
Romania (Asociatia Generala a Crescatorilor de Taurine)	2023	72.577	344	7.149	6.890	3,83	3,45	
Romania (Asociatia Generala a Crescatorilor de Taurine)	2022	69.803	344	7.028	6.784	3,93	3,42	
Serbia ⁷	2023	36.798	372	8.761	7.567	3,81	3,28	
Serbia ⁷	2022	37.944	360	8.412	7.411	3,83	3,27	
South Africa (ARC)	2022	29.880	212	5.875	8.583	4,14	3,42	
Spain	2022	345.400	366	12.692	10.900	3,80	3,28	
Switzerland (ASR)	2023	316.160	301	7.836	7.921	4,08	3,36	93
Switzerland (ASR)	2022	318.549	301	7.833	7.914	4,10	3,30	93
Taiwan	2023	64.283						
Taiwan	2022	64.516						
Tunisia (OEP)	2022	4.891	400	5.602	4.693	3,58	3,19	620
UK - England (by CIS)	2023	177.097	327	10.358	9.101	4,20	3,29	202
UK - England (by CIS)	2022	183.292	321	10.082	8.991	4,17	3,25	248
UK - Jersey Island	2023	2.342	324	7.283	6.439	5,61	3,79	281

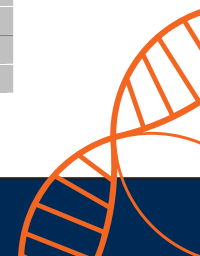
⁵ 834 kgs fat+protein⁶ 830 kgs fat+prot⁷ Data relating to the region AP Vojvodina in Serbia

Table 4.2 - All breeds together - Cows in herdbook

Country	Year	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
UK - Jersey Island	2022	2.295	339	7.504	6.660	5,54	3,81	279
UK - N. Ireland (by CIS)	2023	47.773	325	9.698	8.586	4,18	3,31	363
UK - N. Ireland (by CIS)	2022	47.061	321	9.777	8.724	4,17	3,30	201
UK - Scotland (by CIS)	2023	64.386	321	10.235	9.060	4,09	3,27	198
UK - Scotland (by CIS)	2022	64.939	321	10.186	9.080	4,09	3,26	218
UK - Wales (by CIS)	2023	36.184	325	9.580	8.492	4,20	3,25	289
UK - Wales (by CIS)	2022	36.710	324	9.419	8.420	4,18	3,23	203

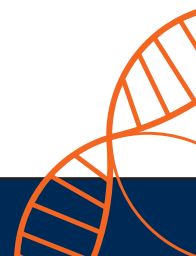


Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Australia (DataGene)	2022	Holstein	186.044	325	7.640	7.640	3,95	3,27	
Australia (DataGene)	2022	Jersey	39.551	316	5.561	5.561	4,85	3,72	
Austria	2023	Brown Swiss	30.924			7.580	4,16	3,50	
Austria	2022	Brown Swiss	32.188			7.627	4,18	3,52	
Austria	2023	Fleckvieh	283.004			7.848	4,17	3,41	
Austria	2022	Fleckvieh	279.959			7.784	4,18	3,42	
Austria	2023	Grauvieh	2.683			5.107	3,91	3,33	
Austria	2022	Grauvieh	2.645			5.162	3,93	3,35	
Austria	2023	Holstein	41.630			9.261	4,08	3,32	
Austria	2022	Holstein	42.519			9.158	4,10	3,33	
Austria	2023	Orig. Pinzgauer	3.436			5.454	3,80	3,27	
Austria	2022	Pinzgauer	5.924			6.093	3,91	3,30	
Belgium (Wallonia)	2022	Blanc-Bleu Belge	1.980	304	4.415	4.220	3,78	3,26	
Belgium (Wallonia)	2022	Holstein	30.104	354	9.517	8.493	4,12	3,39	
Belgium (Wallonia)	2022	Jersey	493	341	5.753	5.176	5,24	3,94	
Belgium (Wallonia)	2022	Montbéliarde	944	351	7.537	6.729	4,02	3,47	
Belgium (Wallonia)	2022	Normande	289	333	6.930	6.320	4,08	3,54	
Belgium (Wallonia)	2022	Red Holstein	4.557	353	8.616	7.709	4,18	3,43	
Belgium (Wallonia)	2022	Rouge-Pie Est de la Belgique	575	318	5.376	5.038	4,14	3,43	
Croatia	2023	Alpine Brown	760	377	7.482	6.130	4,00	3,50	272.000
Croatia	2022	Alpine Brown	792	380	7.561	6.138	4,10	3,40	
Croatia	2023	Holstein	21.205	368	10.146	8.674	4,20	3,50	248.000
Croatia	2022	Holstein	21.720	371	10.139	8.672	4,10	3,50	
Croatia	2023	Simmental	28.609	375	6.948	5.744	4,10	3,40	297.000
Croatia	2022	Simmental	30.606	368	6.881	5.740	4,10	3,50	

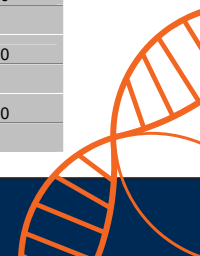


Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Czech Rep.	2023	Fleckvieh	100.496	294	8.165	8.593	3,97	3,51	
Czech Rep.	2022	Fleckvieh	101.786	294	7.959	8.181	4,01	3,52	
Czech Rep.	2023	Holstein	176.748	297	10.743	10.959	3,85	3,37	
Czech Rep.	2022	Holstein	177.219	297	10.544	10.756	3,87	3,38	
Czech Rep.	2023	Montbéliarde	3.815	297	8.356	8.524	4,04	3,58	
Czech Rep.	2022	Montbéliarde	3.554	297	8.322	8.490	4,07	3,56	
Denmark	2022	Cross	62.957	365	10.078		4,30	3,60	230
Denmark	2022	Holstein	343.761	365	11.271		4,10	3,52	207
Denmark	2022	Jersey	68.335	365	7.598		5,96	4,29	208
Denmark	2022	Red Nordic	23.591	365	9.735		4,39	3,70	264
Estonia	2023	Holstein	70.456	330	11.394	10.905	3,85	3,34	216
Estonia	2022	Holstein	69.962	331	10.896	10.633	3,85	3,36	220
Estonia	2023	Red	8.924	329	9.529	9.342	4,08	3,45	262
Estonia	2022	Red	9.541	333	9.235	9.261	4,07	3,47	258
Finland	2023	Ayrshire	51.069	305	9.291	9.430	4,52	3,64	191
Finland	2022	Ayrshire	63.208	305	9.266	9.407	4,54	3,67	184
Finland	2023	Brown	442	305	9.650	9.672	4,31	3,58	179
Finland	2022	Brown	465	305	9.532	9.613	4,35	3,62	187
Finland	2023	Finnish Cattle	1.033	305	6.469	6.730	4,33	3,43	205
Finland	2022	Finnish Cattle	1.236	305	6.304	6.515	4,42	3,44	199
Finland	2023	Guernsey	45	305	8.891	8.793	4,52	3,54	121
Finland	2022	Guernsey	37	305	8.508	8.284	4,56	3,55	112
Finland	2023	Holstein	84.854	305	10.767	10.805	4,24	3,51	180
Finland	2022	Holstein	93.691	305	10.622	10.683	4,27	3,54	178
Finland	2023	Jersey	1.025	305	8.017	8.088	5,17	3,89	196
Finland	2022	Jersey	1.065	305	7.924	7.902	5,29	3,96	201



Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Finland	2023	Montbéliarde	451	305	10.580	10.389	4,23	3,58	190
Finland	2022	Montbéliarde	378	305	10.232	10.034	4,26	3,63	167
France	2023	Tarentaise	8.709	291	4.519	4.776	3,71	3,40	
France	2022	Tarentaise	8.798	288	4.435	4.718	3,67	3,39	
France ¹	2023	Abondance	23.017	308	5.771	5.925	3,64	3,44	
France ¹	2022	Simmental	15.348	323	6.784	6.935	4,01	3,52	
France ¹	2022	Abondance	23.265	305	5.669	5.863	3,61	3,44	
France ¹	2023	Alpine Brown	15.798	358	7.960	7.611	4,19	3,58	
France ¹	2022	Alpine Brown	15.950	355	7.870	7.549	4,20	3,58	
France ¹	2023	Holstein	1.176.381	354	9.792	9.563	4,03	3,36	
France ¹	2022	Holstein	1.244.946	353	9.746	9.532	4,01	3,35	
France ¹	2023	Jersiaise	12.072	337	5.389	5.322	5,48	4,02	
France ¹	2022	Jersiaise	11.822	336	5.327	5.257	5,50	4,02	
France ¹	2023	Montbéliarde	373.004	328	7.807	7.847	4,03	3,36	
France ¹	2022	Montbéliarde	385.514	324	7.635	7.739	3,88	3,47	
France ¹	2023	Normande	136.858	343	7.138	7.087	4,18	3,61	
France ¹	2022	Normande	145.103	341	7.062	7.056	4,19	3,61	
France ¹	2023	Pie Rouge des Plaines	7.707	343	8.436	8.365	4,32	3,53	
France ¹	2022	Pie Rouge des Plaines	8.051	344	8.390	8.308	4,28	3,52	
France ¹	2023	Simmental	15.427	324	6.910	7.037	4,00	3,52	
Germany (BRS)	2023	Braunvieh	128.166	327	7.888	7.716	4,25	3,60	
Germany (BRS)	2022	Braunvieh	131.749	326	7.585	7.526	4,27	3,59	
Germany (BRS)	2023	Fleckvieh	832.201	320	8.177	7.902	4,17	3,51	
Germany (BRS)	2022	Fleckvieh	835.193	319	7.927	7.810	4,17	3,49	
Germany (BRS)	2023	Holstein - Rotbunt	196.815	324	9.246	9.100	4,15	3,47	



Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Germany (BRS)	2022	Holstein - Rotbunt	200.455	324	9.004	8.968	4,12	3,45	
Germany (BRS)	2023	Holstein - Schwarzbunt	1.877.148	325	10.164	9.931	4,04	3,45	
Germany (BRS)	2022	Holstein - Schwarzbunt	1.913.989	324	9.897	9.743	4,01	3,42	
Iceland	2023	Icelandic Cattle	25.309	365	6.411		4,26	3,40	286
Iceland	2022	Icelandic Cattle	25.032	365	6.313		4,20	3,41	250
Italy (AIA)	2023	Italian Simmental	39.018	305	7.434	7.434	3,90	3,42	
Italy (AIA) ²	2022	Grey of the Apls	6.213	305	5.330	5.330	3,80	3,36	
Italy (AIA) ²	2022	Italian Friesian	709.258	305	10.523	10.523	3,86	3,24	
Italy (AIA) ²	2023	Grigio Alpina	5.840	305	5.316	5.316	3,75	3,34	
Italy (AIA) ²	2023	Italian Brown	37.370	305	7.832	7.832	4,04	3,61	
Italy (AIA) ²	2022	Italian Brown	41.452	305	7.889	7.889	4,08	3,61	
Italy (AIA) ²	2023	Italian Friesian	697.117	305	10.552	10.552	3,85	3,35	
Italy (AIA) ²	2022	Italian Simmental	41.577	305	7.449	7.449	3,93	3,42	
Italy (AIA) ²	2023	Jersey	4.029	305	7.001	7.001	4,83	3,90	
Italy (AIA) ²	2022	Jersey	4.352	305	6.883	6.883	4,92	3,33	
Italy (AIA) ²	2023	Valdostana Red Spotted	8.803	305	3.810	3.810	3,51	3,27	
Italy (AIA) ²	2022	Valdostana Red Spotted	10.165	305	3.854	3.854	3,55	3,30	
Latvia	2023	Holstein	65.410	378		9.278	3,96	3,33	
Latvia	2022	Holstein	65.411	380		9.131	3,91	3,32	
Latvia	2023	Latvian Blue	248	346		5.250	4,32	3,42	
Latvia	2022	Latvian Blue	259	363		5.292	4,25	3,38	
Latvia	2023	Latvian brown	12.024	380		7.067	4,24	3,40	

Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Latvia	2022	Latvian brown	13.388	382		7.032	4,23	3,39	
Latvia	2023	Latvian Brown Old Type	105	356		5.233	4,76	3,55	
Luxembourg	2023	Holstein	37.874	322	9.347		4,21	3,45	
Luxembourg	2022	Holstein	37.637	321	9.004		4,10	3,39	
Luxembourg	2023	Red Holstein	6.015	320	8.623		4,31	3,48	
Luxembourg	2022	Red Holstein	5.996	318	8.225		4,21	3,42	
Norway	2023	Holstein	2.849	328	9.695	9.448	4,29	3,55	58
Norway	2022	Holstein	2.665	323	9.802	9.523	4,22	3,49	57
Norway	2023	Jersey	1.319	318	6.037	5.869	5,74	4,12	73
Norway	2022	Jersey	1.197	318	6.300	6.080	5,73	4,12	67
Norway	2023	Red	120.761	305	7.816	7.527	4,26	3,51	62
Norway	2022	Red	127.058	377	7.926	7.673	4,26	3,54	61
Poland	2023	Black and White	1.420	305	4.731	4.731	4,13	3,27	
Poland	2022	Black and White	1.490	305		4.750	4,16	3,29	
Poland	2023	Brown Swiss	253	305	7.086	7.086	4,26	3,48	
Poland	2022	Brown Swiss	274	305		7.163	4,38	3,49	
Poland	2023	Holstein	534.770	305	9.258	9.258	3,98	3,36	
Poland	2022	Holstein	528.008	305		9.122	3,99	3,35	
Poland	2023	Jersey	847	305	6.370	6.370	5,01	3,78	
Poland	2022	Jersey	988	305		6.446	5,02	3,75	
Poland	2023	Montbéliarde	2.672	305	8.185	8.185	4,00	3,47	
Poland	2022	Montbéliarde	2.786	305		8.034	4,05	3,47	
Poland	2023	Red	2.624	305	3.528	3.528	4,24	3,36	
Poland	2022	Red	2.473	305		3.728	4,28	3,38	
Poland	2023	Red and White	3.461	305	4.279	4.279	4,09	3,24	
Poland	2022	Red and White	3.574	305		4.456	4,13	3,27	
Poland	2023	Red Holstein	21.905	305	8.274	8.274	4,09	3,37	

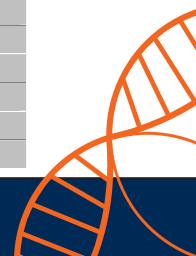


Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Poland	2022	Red Holstein	22.653	305		8.169	4,13	3,38	
Poland	2023	Simmental	7.932	305	6.547	6.547	4,12	3,42	
Poland	2022	Simmental	7.893	305		6.505	4,16	3,43	
Republic of Srpska	2023	Holstein	95	305	7.016	7.152	4,15	3,37	
Republic of Srpska	2022	Holstein	114	305	7.847	7.355	4,00	3,28	
Republic of Srpska	2023	Simmental	242	305	6.738	6.120	4,39	3,46	
Republic of Srpska	2022	Simmental	233	305	6.309	6.339	4,11	3,24	
Romania (Asociatia Generala a Crescatorilor de Taurine)	2023	Holstein	72.577	344	7.149	6.890	3,83	3,45	
Romania (Asociatia Generala a Crescatorilor de Taurine)	2022	Holstein	69.803	344	7.028	6.784	3,93	3,42	
Serbia ³	2023	Brown swiss	71	337	8.674	7.971	3,95	3,44	
Serbia ³	2022	Brown swiss	68	340	8.840	7.955	3,94	3,40	
Serbia ³	2023	Holstein							
Serbia ³	2023	Friesian	28.017	369	8.999	7.797	3,80	3,27	
Serbia ³	2022	Holstein							
Serbia ³	2022	Friesian	30.788	356	8.518	7.571	3,83	3,26	
Serbia ³	2023	Simmental	9.311	356	7.682	6.811	3,84	3,30	
Serbia ³	2022	Simmental	9.815	343	7.257	6.605	3,87	3,29	
Slovak Republic	2023	Holstein	40.321	299	10.493	10.650	3,96	3,37	
Slovak Republic	2022	Holstein	38.498	299	10.449	10.606	3,84	3,34	
Slovak Republic	2023	Pinzgauer	153	292	4.753	4.911	3,92	3,47	
Slovak Republic	2022	Pinzgauer	242	288	4.443	4.638	3,80	3,37	
Slovak Republic	2023	Simmental	16.233	295	7.214	7.397	3,97	3,52	
Slovak Republic	2022	Simmental	16.324	295	7.207	7.389	3,95	3,51	

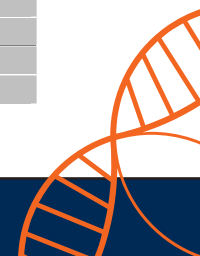
³ Data relating to the region AP Vojvodina in Serbia

Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
South Africa (ARC)	2022	Ayrshire	3.534	234	5.993	8.164	4,34	3,49	
South Africa (ARC)	2022	Guernsey	260	172	3.965	6.639	4,00	3,49	
South Africa (ARC)	2022	Holstein	11.179	206	6.245	9.395	3,97	3,30	
South Africa (ARC)	2022	Jersey	23.585	226	4.080	5.602	4,83	3,77	
Spain	2022	Alpine Brown	1.122	370	9.190	7.869	3,92	3,59	345
Spain	2022	Friesian	344.238	366	12.692	10.900	3,80	3,28	285
Spain	2022	Pasiega	40	345		6.687	3,44	3,21	
Sweden (Vaxa)	2023	Holstein	104.343	365	11.247		4,17	3,57	
Sweden (Vaxa)	2022	Holstein	106.894	365	11.037		4,16	3,54	
Sweden (Vaxa)	2023	Jersey	1.748	365	7.383		5,91	4,24	
Sweden (Vaxa)	2022	Jersey	1.785	365	7.317		5,83	4,19	
Sweden (Vaxa)	2023	Red and White	54.886	365	9.586		4,50	3,75	
Sweden (Vaxa)	2022	Red and White	58.307	365	9.528		4,45	3,71	
Sweden (Vaxa)	2023	Swedish Polled	464	365	5.117		4,38	3,58	
Sweden (Vaxa)	2022	Swedish Polled	487	365	5.220		4,34	3,59	
Switzerland (ASR)	2023	Alpine Brown	102.649	301	7.228	7.300	4,03	3,44	100
Switzerland (ASR)	2022	Alpine Brown	104.453	301	7.258	7.330	4,04	3,34	100
Switzerland (ASR)	2023	Eringer	376		3.292		3,68	3,38	
Switzerland (ASR)	2022	Eringer	391		3.428		3,75	3,36	
Switzerland (ASR)	2023	Evolener	19	292	3.561	3.679	3,80	3,34	58
Switzerland (ASR)	2022	Evolener	21	297	3.412	3.481	3,72	3,32	53
Switzerland (ASR)	2023	Fleckvieh	46.242	300	7.055	7.143	4,16	3,34	80
Switzerland (ASR)	2022	Fleckvieh	45.934	300	7.066	7.154	4,16	3,32	81
Switzerland (ASR)	2023	Grauvieh	459	296	4.391	4.491	3,88	3,25	78
Switzerland (ASR)	2022	Grauvieh	441	296	4.490	4.592	3,84	3,24	91
Switzerland (ASR)	2023	Hinterwälder	123	296	3.362	3.438	4,04	3,26	126
Switzerland (ASR)	2022	Hinterwälder	104	296	3.329	3.405	4,05	3,28	120

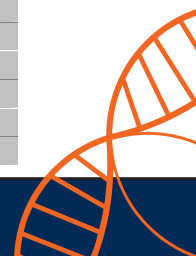


Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Switzerland (ASR)	2023	Holstein	88.902	302	9.074	9.150	4,06	3,29	95
Switzerland (ASR)	2022	Holstein	86.926	302	9.054	9.130	4,06	3,27	95
Switzerland (ASR)	2023	Jersey	3.509	300	5.946	6.020	5,13	3,86	106
Switzerland (ASR)	2022	Jersey	3.517	301	5.959	6.018	5,15	3,87	104
Switzerland (ASR)	2023	Montbéliarde	7.374	300	7.636	7.731	3,80	3,40	90
Switzerland (ASR)	2022	Montbéliarde	7.638	300	7.652	7.748	3,81	3,39	91
Switzerland (ASR)	2023	Normande	765	299	6.907	7.011	4,09	3,42	95
Switzerland (ASR)	2022	Normande	789	299	6.881	6.984	4,13	3,41	100
Switzerland (ASR)	2023	Pinzgauer	63	298	5.446	5.542	3,84	3,28	97
Switzerland (ASR)	2022	Pinzgauer	67	298	5.291	5.384	3,91	3,25	91
Switzerland (ASR)	2023	Red Holstein	51.171	301	8.418	8.502	4,11	3,31	94
Switzerland (ASR)	2022	Red Holstein	53.670	301	8.371	8.455	4,12	3,30	93
Switzerland (ASR)	2023	Simmental	14.375	298	5.913	6.017	4,00	3,39	73
Switzerland (ASR)	2022	Simmental	14.472	305	6.017	6.017	4,00	3,37	70
Switzerland (ASR)	2023	Water buffalo	133	270	2.652	2.903	7,60	4,41	80
Switzerland (ASR)	2022	Water buffalo	126	270	2.754	3.015	7,41	4,42	74
Taiwan	2023	Holstein	27.111			8.450	4,05	3,44	227
Taiwan	2022	Holstein	28.633			8.299	4,04	3,38	263
Taiwan	2023	Jersey	92	316	7.549	7.195	4,82	3,96	346
Taiwan	2022	Jersey	74	333	7.473	7.370	4,74	3,71	269
Tunisia (OEP)	2022	Alpine Brown	609	400	5.222	5.344	2,94	3,11	652
Tunisia (OEP)	2022	Holstein	8.349	400	5.655	4.669	2,37	2,54	927
Tunisia (OEP)	2022	Montbéliarde	365	362	5.978	5.089	2,43	2,99	419
Tunisia (OEP)	2022	Tarentaise	157	375	4.173	3.918	2,16	2,77	672
UK - England (by CIS)	2023	Alpine Brown	1.094	338	8.138	6.984	4,30	3,38	240
UK - England (by CIS)	2022	Alpine Brown	1.178	327	7.806	6.936	4,31	3,37	353

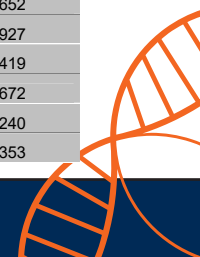


Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
UK - England (by CIS)	2023	Ayrshire	8.931	309	7.493	6.919	4,35	3,38	178
UK - England (by CIS)	2022	Ayrshire	5.819	309	7.356	6.776	4,35	3,31	219
UK - England (by CIS)	2023	Friesian	11.592	312	6.673	6.121	4,38	3,46	205
UK - England (by CIS)	2022	Friesian	10.507	312	6.777	6.247	4,40	3,41	224
UK - England (by CIS)	2023	Guernsey	341	321	6.155	5.518	4,93	3,52	250
UK - England (by CIS)	2022	Guernsey	380	310	5.661	5.121	4,90	3,51	245
UK - England (by CIS)	2023	Holstein	251.714	326	10.199	8.969	4,17	3,30	197
UK - England (by CIS)	2022	Holstein	251.315	320	9.952	8.892	4,14	3,26	207
UK - England (by CIS)	2023	Jersey	13.329	311	6.245	5.620	5,28	3,91	210
UK - England (by CIS)	2022	Jersey	13.367	305	6.220	5.655	5,23	3,89	209
UK - England (by CIS)	2023	Montbéliarde	3.388	318	8.116	7.343	4,22	3,39	185
UK - England (by CIS)	2022	Montbéliarde	6.039	310	7.918	7.194	4,24	3,35	228
UK - England (by CIS)	2023	Other Breeds	2.995	310	7.914	7.178	4,26	3,39	222
UK - England (by CIS)	2022	Other Breeds	526	326	6.386	5.608	4,37	3,42	304
UK - England (by CIS)	2023	Shorthorn	3.819	311	7.412	6.774	4,21	3,41	203
UK - England (by CIS)	2022	Shorthorn	6.476	312	7.460	6.876	4,17	3,40	207
UK - Jersey Island	2023	Jersey	2.342	324	7.283	6.439	5,61	3,79	281
UK - Jersey Island	2022	Jersey	2.295	339	7.504	6.660	5,54	3,81	279
UK - N. Ireland (by CIS)	2023	Alpine Brown	220	325	7.543	6.734	4,11	3,34	183
UK - N. Ireland (by CIS)	2022	Alpine Brown	171	353	8.767	7.486	4,17	3,39	121
UK - N. Ireland (by CIS)	2023	Ayrshire	1.885	317	7.168	6.560	4,10	3,32	165
UK - N. Ireland (by CIS)	2022	Ayrshire	1.834	307	7.288	6.732	4,11	3,34	183
UK - N. Ireland (by CIS)	2023	Friesian	3.486	304	7.510	6.921	4,32	3,38	186
UK - N. Ireland (by CIS)	2022	Friesian	2.448	317	8.012	7.359	4,27	3,37	187

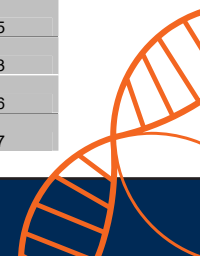


Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
UK - N. Ireland (by CIS)	2023	Guernsey	0						
UK - N. Ireland (by CIS)	2022	Guernsey	0						
UK - N. Ireland (by CIS)	2023	Holstein	85.472	324	9.237	8.160	4,19	3,31	472
UK - N. Ireland (by CIS)	2022	Holstein	83.691	322	9.281	8.233	4,18	3,30	208
UK - N. Ireland (by CIS)	2023	Jersey	1.007	334	6.840	5.946	5,48	3,90	238
UK - N. Ireland (by CIS)	2022	Jersey	1.109	313	6.304	5.628	5,45	3,91	199
UK - N. Ireland (by CIS)	2023	Montbéliarde	520	316	8.530	7.838	4,12	3,33	201
UK - N. Ireland (by CIS)	2022	Montbéliarde	1.122	305	7.727	7.135	4,25	3,35	243
UK - N. Ireland (by CIS)	2023	Other Breeds	1.103	319	7.752	6.879	4,35	3,37	259
UK - N. Ireland (by CIS)	2022	Other Breeds	462	334	7.871	6.842	4,46	3,42	234
UK - N. Ireland (by CIS)	2023	Shorthorn	530	313	7.297	6.684	4,10	3,31	277
UK - N. Ireland (by CIS)	2022	Shorthorn	364	327	8.218	7.349	4,20	3,32	337
UK - Scotland (by CIS)	2023	Alpine Brown	294	325	8.363	7.349	4,20	3,47	191
UK - Scotland (by CIS)	2022	Alpine Brown	365	311	7.876	7.110	4,11	3,46	242
UK - Scotland (by CIS)	2023	Ayrshire	8.160	307	7.810	7.191	4,21	3,30	193
UK - Scotland (by CIS)	2022	Ayrshire	7.382	313	8.106	7.421	4,18	3,29	230
UK - Scotland (by CIS)	2023	Friesian	4.325	321	7.143	6.546	4,31	3,32	214
UK - Scotland (by CIS)	2022	Friesian	4.502	322	7.389	6.770	4,28	3,32	228
UK - Scotland (by CIS)	2023	Guernsey	9	289	4.210	4.159	5,03	3,53	350
UK - Scotland (by CIS)	2022	Guernsey	4	281	8.420	8.385	3,92	3,18	112
UK - Scotland (by CIS)	2023	Holstein	103.364	324	10.097	8.957	4,04	3,23	190
UK - Scotland (by CIS)	2022	Holstein	103.932	323	10.046	8.957	4,01	3,20	209

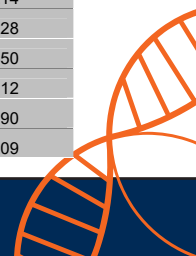


Table 4.3 - Main breeds - All recorded cows

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
UK - Scotland (by CIS)	2023	Jersey	4.171	310	6.762	6.040	5,36	4,02	190
UK - Scotland (by CIS)	2022	Jersey	4.837	310	6.585	5.954	5,54	4,03	210
UK - Scotland (by CIS)	2023	Montbéliarde	2.522	312	8.021	7.394	4,38	3,35	201
UK - Scotland (by CIS)	2022	Montbéliarde	3.807	302	7.910	7.319	4,36	3,35	221
UK - Scotland (by CIS)	2023	Other Breeds	1.347	305	7.794	7.085	4,09	3,37	173
UK - Scotland (by CIS)	2022	Other Breeds	172	300	6.860	6.368	4,16	3,36	240
UK - Scotland (by CIS)	2023	Shorthorn	628	308	7.202	6.740	4,21	3,38	206
UK - Scotland (by CIS)	2022	Shorthorn	1.134	306	7.703	7.240	4,31	3,41	195
UK - Wales (by CIS)	2023	Alpine Brown	293	334	6.972	6.227	4,43	3,34	231
UK - Wales (by CIS)	2022	Alpine Brown	353	328	6.944	6.133	4,34	3,34	205
UK - Wales (by CIS)	2023	Ayrshire	760	314	7.546	6.931	4,41	3,38	221
UK - Wales (by CIS)	2022	Ayrshire	466	294	6.060	5.508	4,54	3,29	198
UK - Wales (by CIS)	2023	Friesian	2.445	302	6.257	5.859	4,42	3,48	313
UK - Wales (by CIS)	2022	Friesian	2.133	329	6.896	5.971	4,35	3,45	201
UK - Wales (by CIS)	2023	Guernsey	76	342	5.123	4.527	4,15	3,36	269
UK - Wales (by CIS)	2022	Guernsey	88	321	5.233	4.803	4,46	3,44	224
UK - Wales (by CIS)	2023	Holstein	43.502	325	9.456	8.386	4,23	3,27	198
UK - Wales (by CIS)	2022	Holstein	44.008	323	9.278	8.280	4,19	3,25	212
UK - Wales (by CIS)	2023	Jersey	1.240	296	5.764	5.420	4,96	3,82	248
UK - Wales (by CIS)	2022	Jersey	1.476	278	5.519	5.241	5,00	3,80	211
UK - Wales (by CIS)	2023	Montbéliarde	211	330	6.578	5.752	4,43	3,34	150
UK - Wales (by CIS)	2022	Montbéliarde	345	375	7.832	6.470	4,51	3,34	114
UK - Wales (by CIS)	2023	Other Breeds	256	337	7.741	6.584	4,50	3,34	206
UK - Wales (by CIS)	2022	Other Breeds	102	332	7.118	5.806	4,43	3,38	187
UK - Wales (by CIS)	2023	Shorthorn	383	290	6.023	5.612	4,10	3,33	163
UK - Wales (by CIS)	2022	Shorthorn	680	307	7.381	6.880	4,17	3,36	140

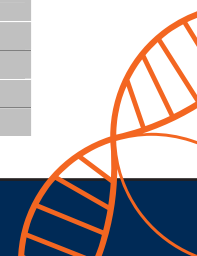


Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Australia (DataGene)	2022	Holstein	33.618	339	8.369	8.369	3,90	3,19	
Australia (DataGene)	2022	Jersey	10.951	329	5.920	5.920	4,93	3,74	
Austria	2023	Brown Swiss	30.164			7.607	4,16	3,50	
Austria	2022	Brown Swiss	31.432			7.657	4,18	3,52	
Austria	2023	Fleckvieh	268.760			7.910	4,17	3,41	
Austria	2022	Fleckvieh	265.788			7.842	4,18	3,43	
Austria	2023	Grauvieh	2.624			5.117	3,91	3,33	
Austria	2022	Grauvieh	2.582			5.172	3,94	3,35	
Austria	2023	Holstein	37.891			9.375	4,07	3,32	
Austria	2022	Holstein	38.616			9.271	4,10	3,33	
Austria	2023	Pinzgauer	3.310			5.456	3,80	3,27	
Austria	2022	Pinzgauer	5.539			6.099	3,91	3,30	
Belgium (Flemish Region by CRV) ¹	2023	Holstein B&W	60.114	346	10.995	10.050	4,18	3,47	
Belgium (Flemish Region by CRV) ²	2022	Holstein B&W	59.124	345	10.758	9.887	4,22	3,49	
Belgium (Flemish Region by CRV) ³	2023	Holstein R&W	10.757	350	9.809	8.915	4,39	3,57	
Belgium (Flemish Region by CRV) ⁴	2022	Holstein R&W	11.102	347	9.598	8.803	4,44	3,58	

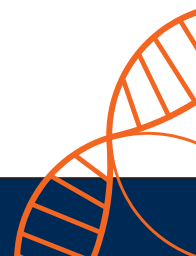
¹ 841 kgs fat+protein² 829 kgs fat+protein³ 781 kgs fat+protein⁴ 770 kgs fat+protein

Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Croatia	2023	Brown	364	386	7.796	6.317	4,10	3,50	
Croatia	2022	Brown	431	383	7.784	6.310	4,10	3,60	
Croatia	2023	Holstein	19.065	367	10.270	8.765	4,20	3,50	
Croatia	2022	Holstein	19.987	368	10.264	8.758	4,20	3,50	
Croatia	2023	Simmental	8.058	380	8.415	7.089	4,10	3,50	
Croatia	2022	Simmental	8.816	366	8.361	7.082	4,20	3,50	
Czech Rep.	2023	Fleckvieh	105.575	294	8.210	8.439	3,97	3,51	
Czech Rep.	2022	Fleckvieh	106.936	294	8.007	8.231	4,01	3,52	
Czech Rep.	2023	Holstein	178.270	297	10.768	10.985	3,85	3,37	
Czech Rep.	2022	Holstein	179.689	297	10.556	10.769	3,87	3,38	
Denmark	2022	Cross	62.957	365	10.078		4,30	3,60	230,00
Denmark	2022	Holstein	343.761	365	11.271		4,10	3,52	207,00
Denmark	2022	Jersey	68.335	365	7.598		5,96	4,29	208,00
Denmark	2022	Red Nordic	23.591	365	9.735		4,39	3,70	264,00
Estonia	2023	Holstein	67.177	330	11.484	10.966	3,85	3,34	
Estonia	2022	Holstein	66.325	332	10.987	10.697	3,84	3,36	
Estonia	2023	Red	8.212	329	9.675	9.449	4,08	3,46	
Estonia	2022	Red	8.837	333	9.368	9.366	4,07	3,47	
Finland	2023	Ayrshire	26.893	305		9.736	4,53	3,67	
Finland	2022	Ayrshire	28.691	305		9.700	4,48	3,64	
Finland	2023	Brown	111	305		10.553	4,32	3,57	
Finland	2022	Brown	99	305		10.839	4,29	3,58	
Finland	2023	Finnish Cattle	772	305		6.462	4,34	3,43	
Finland	2022	Finnish Cattle	838	305		6.248	4,40	3,40	



Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Finland	2023	Holstein	39.327	305		11.049	4,27	3,54	
Finland	2022	Holstein	39.531	305		10.964	4,24	3,53	
Finland	2023	Jersey	367	305		8.078	5,43	4,02	
Finland	2022	Jersey	355	305		7.948	5,44	4,05	
France ⁵	2023	Abondance	23.017	308	5.771	5.925	3,64	3,44	
France ⁵	2022	Abondance	23.265	305	5.669	5.863	3,61	3,44	
France ⁵	2023	Alpine Brown	15.798	358	7.960	5.924	4,19	3,58	
France ⁵	2022	Alpine Brown	15.950	355	7.870	7.549	4,20	3,58	
France ⁵	2023	Holstein	1.176.381	354	9.792	9.563	4,03	3,36	
France ⁵	2022	Holstein	1.244.946	353	9.746	9.532	4,01	3,35	
France ⁵	2023	Jersiaise	12.072	337	5.389	5.322	5,48	4,02	
France ⁵	2022	Jersiaise	11.822	336	5.327	5.257	5,50	4,02	
France ⁵	2023	Montbéliarde	373.004	328	7.807	7.847	4,03	3,36	
France ⁵	2022	Montbéliarde	385.514	324	7.635	7.739	3,88	3,47	
France ⁶	2023	Normande	136.858	343	7.138	7.087	4,18	3,61	
France ⁶	2022	Normande	145.103	341	7.062	7.056	4,19	3,61	
France ⁶	2023	Pie Rouge des Plaines	7.707	343	8.436	8.365	4,32	3,53	
France ⁶	2022	Pie Rouge des Plaines	8.051	344	8.390	8.308	4,28	3,52	
France ⁶	2023	Simmental	15.427	324	6.910	7.037	4,00	3,52	
France ⁶	2022	Simmental	15.348	323	6.784	6.935	4,01	3,52	
France ⁶	2023	Tarentaise	8.709	291	4.519	4.776	3,71	3,40	
France ⁶	2022	Tarentaise	8.798	288	4.435	4.718	3,67	3,39	
Germany (BRS)	2022	Braunvieh	113.463	319	7.736	7.647	4,27	3,59	

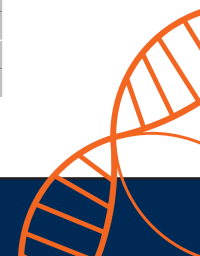
⁵ Milk in 305 days is adjusted to adult level⁶ Milk in 305 days is adjusted to adult level

Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Germany (BRS)	2023	Fleckvieh	698.015	320	8.354	8.049	4,17	3,52	
Germany (BRS)	2022	Fleckvieh	699.656	319	8.106	7.955	4,17	3,50	
Germany (BRS)	2023	Holstein - Rotbunt	140.263	325	9.612	9.414	4,13	3,47	
Germany (BRS)	2022	Holstein - Rotbunt	142.511	324	9.376	9.283	4,10	3,45	
Germany (BRS)	2023	Holstein - Schwarzbunt	1.482.624	325	10.370	10.123	4,03	3,45	
Germany (BRS)	2022	Holstein - Schwarzbunt	1.513.605	325	10.102	9.931	4,00	3,42	
Hungary (NEBIH) ⁷	2022	Holstein Friesian							
Hungary (NEBIH) ⁷	2022	Red Spotted (Fleckvieh)							
Iceland	2023	Icelandic Cattle	25.309	365	6.411		4,26	3,40	286,00
Iceland	2022	Icelandic Cattle	25.032	365	6.313		4,20	3,41	250,00
Italy (AIA) ⁸	2023	Grigio Alpina	5.840	305	5.316	5.316	3,75	3,34	
Italy (AIA) ⁸	2022	Grigio Alpina	6.213	305	5.330	5.330	3,80	3,36	
Italy (AIA) ⁸	2023	Italian Brown	37.370	305	7.832	7.832	4,04	3,61	
Italy (AIA) ⁸	2022	Italian Brown	41.452	305	7.889	7.889	4,08	3,61	
Italy (AIA) ⁸	2023	Italian Friesian	697.117	305	10.552	10.552	3,85	3,35	
Italy (AIA) ⁸	2022	Italian Friesian	709.258	305	10.523	10.523	3,86	3,34	
Italy (AIA) ⁸	2023	Italian Simmental	39.018	305	7.434	7.434	3,90	3,42	
Italy (AIA) ⁸	2022	Italian Simmental	41.577	305	7.449	7.449	3,93	3,42	
Italy (AIA) ⁸	2022	Jersey	4.352	305	6.883	6.883	4,92	3,93	
Italy (AIA) ⁸	2023	Valdostana Red Spotted	8.803	305	3.810	3.810	3,51	3,27	
Latvia	2022	Blue	211	364		5.190	4,24	3,37	

Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Latvia	2023	Holstein	53.776	377		9.497	3,94	3,33	
Latvia	2022	Holstein	52.514	379		9.373	3,88	3,31	
Latvia	2023	Latvian brown	10.583	380		7.078	4,25	3,40	
Latvia	2022	Latvian brown	11.538	382		7.056	4,23	3,38	
Latvia	2023	Latvian Brown Old Type	103	357		5.179	4,77	3,55	
Netherlands (CRV) ⁹	2023	Holstein B&W	583.056	359	10.749	9.645	4,35	3,56	
Netherlands (CRV) ¹⁰	2022	Holstein B&W	587.854	357	10.665	9.626	4,37	3,57	
Netherlands (CRV) ¹¹	2023	Holstein R&W	111.548	356	9.932	8.995	4,53	3,63	
Netherlands (CRV) ¹²	2022	Holstein R&W	114.963	355	9.866	8.975	4,55	3,66	
Netherlands (CRV) ¹³	2023	Meuse Rhine IJssel	4.964	345	7.325	6.797	4,55	3,70	
Netherlands (CRV) ¹⁴	2022	Meuse Rhine IJssel	5.341	342	7.323	6.843	4,56	3,73	
Poland	2023	Black and White	1.384	305	4.716	4.716	4,13	3,27	
Poland	2022	Black and White	1.375	305		4.662	4,17	3,29	
Poland	2023	Brown Swiss	244	305	7.053	7.053	4,25	3,48	
Poland	2022	Brown Swiss	260	305		7.155	4,39	3,49	
Poland	2023	Holstein	518.572	305	9.281	9.281	3,97	3,36	
Poland	2022	Holstein	513.164	305		9.140	3,99	3,35	
Poland	2023	Jersey	806	305	6.385	6.385	5,02	3,78	
Poland	2022	Jersey	711	305		6.474	5,03	3,76	

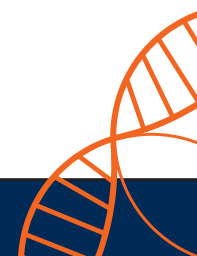
⁹ 850 kgs fat+protein¹⁰ 847 kgs fat+port¹¹ 810 kgs fat+protein¹² 810 kgs fat+prot¹³ 604 kgs fat+protein¹⁴ 607 kgs fat+prot

Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Poland	2023	Montbéliarde	2.504	305	8.153	8.153	4,00	3,47	
Poland	2022	Montbéliarde	2.613	305		7.987	4,05	3,48	
Poland	2023	Red	2.581	305	3.518	3.518	4,24	3,36	
Poland	2022	Red	2.262	305		3.713	4,28	3,38	
Poland	2023	Red and White	3.423	305	4.275	4.275	4,09	3,24	
Poland	2022	Red and White	3.382	305		4.454	4,13	3,27	
Poland	2023	Red Holstein	19.807	305	8.329	8.329	4,09	3,37	
Poland	2022	Red Holstein	20.714	305		8.213	4,14	3,39	
Poland	2023	Simmental	7.464	305	6.498	6.498	4,12	3,42	
Poland	2022	Simmental	7.303	305		6.448	4,16	3,43	
Portugal (ANABLE)	2022	Holstein	85.611	349	11.197	10.029	3,80	3,29	
Portugal (ANABLE)	2023	Holstein	86.962	357	11.386	10.068	3,80	3,30	
Romania (Asociatia Generala a Crescatorilor de Taurine)	2023	Holstein	72.577	344	7.149	6.890	3,83	3,45	
Romania (Asociatia Generala a Crescatorilor de Taurine)	2022	Holstein	69.803	344	7.028	6.784	3,93	3,42	
Serbia ¹⁵	2023	Brown swiss	70	340	8.753	8.006	3,94	3,43	
Serbia ¹⁵	2022	Brown swiss	42	330	7.587	7.222	3,97	3,30	
Serbia ¹⁵	2023	Holstein Friesian	27.524	375	9.104	7.817	3,80	3,27	
Serbia ¹⁵	2022	Holstein Friesian	29.014	363	8.720	7.640	3,83	3,26	
Serbia ¹⁵	2023	Simmental	9.204	362	7.735	6.817	3,84	3,31	
Serbia ¹⁵	2022	Simmental	8.888	349	7.409	6.663	3,89	3,30	

Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
South Africa (ARC)	2022	Ayrshire	3.486	221	6.259	9.174	4,01	3,29	
South Africa (ARC)	2022	Guernsey	128	187	4.336	6.892	4,02	3,48	
South Africa (ARC)	2022	Holstein	8.032	219	8.707	12.453	3,78	3,18	
South Africa (ARC)	2022	Jersey	18.234	221	4.198	5.814	4,77	3,73	
Spain	2022	Alpine Brown	1.122	370	9.190	7.869	3,92	3,59	345,00
Spain	2022	Friesian	344.238	366	12.692	10.900	3,80	3,28	285,00
Spain	2022	Pasiega	40	345		6.687	3,44	3,21	
Switzerland (ASR)	2023	Braunvieh	102.649	301	7.228	7.300	4,03	3,44	100,00
Switzerland (ASR)	2022	Braunvieh	104.453	301	7.258	7.330	4,04	3,34	100,00
Switzerland (ASR)	2023	Eringer	376		3.292		3,68	3,38	
Switzerland (ASR)	2022	Eringer	391		3.428		3,75	3,36	
Switzerland (ASR)	2023	Evolener	19	292	3.561	3.679	3,80	3,34	58,00
Switzerland (ASR)	2022	Evolener	21	297	3.412	3.481	3,72	3,32	53,00
Switzerland (ASR)	2023	Fleckvieh	46.242	300	7.055	7.143	4,16	3,34	80,00
Switzerland (ASR)	2022	Fleckvieh	45.934	300	7.066	7.154	4,16	3,32	81,00
Switzerland (ASR)	2023	Grauvieh	459	296	4.391	4.491	3,88	3,25	78,00
Switzerland (ASR)	2022	Grauvieh	441	296	4.490	4.592	3,84	3,24	91,00
Switzerland (ASR)	2023	Hinterwälder	123	296	3.362	3.438	4,04	3,26	126,00
Switzerland (ASR)	2022	Hinterwälder	104	296	3.329	3.405	4,05	3,28	120,00
Switzerland (ASR)	2023	Holstein	88.902	302	9.074	9.150	4,06	3,29	95,00
Switzerland (ASR)	2022	Holstein	86.926	302	9.054	9.130	4,06	3,27	95,00
Switzerland (ASR)	2023	Jersey	3.509	300	5.946	6.020	5,13	3,86	106,00
Switzerland (ASR)	2022	Jersey	3.517	301	5.959	6.018	5,15	3,87	104,00
Switzerland (ASR)	2023	Montbéliarde	7.374	300	7.636	7.731	3,80	3,40	90,00
Switzerland (ASR)	2022	Montbéliarde	7.638	300	7.652	7.748	3,81	3,39	91,00



Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
Switzerland (ASR)	2023	Normande	765	299	6.907	7.011	4,09	3,42	95,00
Switzerland (ASR)	2022	Normande	789	299	6.881	6.984	4,13	3,41	100,00
Switzerland (ASR)	2023	Pinzgauer	63	298	5.446	5.542	3,84	3,28	97,00
Switzerland (ASR)	2022	Pinzgauer	67	298	5.291	5.384	3,91	3,25	91,00
Switzerland (ASR)	2023	Red Holstein	51.171	301	8.418	8.502	4,11	3,31	94,00
Switzerland (ASR)	2022	Red Holstein	53.670	301	8.371	8.455	4,12	3,30	93,00
Switzerland (ASR)	2023	Simmental	14.375	298	5.913	6.017	4,00	3,39	73,00
Switzerland (ASR)	2022	Simmental	14.472	305	6.017	6.017	4,00	3,37	70,00
Switzerland (ASR)	2023	Water buffalo	133	270	2.652	2.903	7,60	4,41	80,00
Switzerland (ASR)	2022	Water buffalo	126	270	2.754	3.015	7,41	4,42	74,00
Tunisia (OEP)	2022	Alpine Brown	609	400	5.978	5.089	2,94	3,11	652,00
Tunisia (OEP)	2022	Holstein	8.349	400	5.655	4.669	2,37	2,54	927,00
Tunisia (OEP)	2022	Montbéliarde	365	362	5.222	5.344	2,42	2,99	419,00
Tunisia (OEP)	2022	Tarentaise	157	375	4.173	3.918	2,61	2,77	671,00
UK - England (by CIS)	2023	Ayrshire	4.860	306	7.403	6.830	4,33	3,32	187,00
UK - England (by CIS)	2022	Ayrshire	4.754	312	7.492	6.898	4,35	3,31	237,00
UK - England (by CIS)	2023	Brown	240	333	9.401	8.186	4,45	3,44	135,00
UK - England (by CIS)	2022	Brown	310	329	8.654	7.568	4,27	3,42	313,00
UK - England (by CIS)	2023	Friesian	3.297	321	7.263	6.651	4,18	3,37	218,00
UK - England (by CIS)	2022	Friesian	3.471	318	7.169	6.580	4,22	3,34	225,00
UK - England (by CIS)	2023	Guernsey	240	323	6.376	5.676	5,02	3,52	278,00
UK - England (by CIS)	2022	Guernsey	287	315	5.854	5.250	4,95	3,54	292,00



Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
UK - England (by CIS)	2023	Holstein	160.793	328	10.699	9.383	4,16	3,26	199,00
UK - England (by CIS)	2022	Holstein	166.686	321	10.393	9.257	4,13	3,23	205,00
UK - England (by CIS)	2023	Jersey	7.143	320	6.473	5.724	5,57	3,97	211,00
UK - England (by CIS)	2022	Jersey	7.202	310	6.417	5.765	5,52	3,90	218,00
UK - England (by CIS)	2023	Montbéliarde	524	325	7.817	6.879	4,00	3,29	186,00
UK - England (by CIS)	2022	Montbéliarde	582	315	7.728	6.974	4,01	3,31	249,00
UK - Jersey Island	2023	Jersey	2.342	324	7.283	6.439	5,61	3,79	281,00
UK - Jersey Island	2022	Jersey	2.295	339	7.504	6.660	5,54	3,81	279,00
UK - N. Ireland (by CIS)	2023	Ayrshire	1.465	319	7.119	6.501	4,14	3,31	156,00
UK - N. Ireland (by CIS)	2022	Ayrshire	1.463	308	7.239	6.686	4,13	3,34	184,00
UK - N. Ireland (by CIS)	2023	Brown	44	313	8.435	7.275	4,21	3,42	213,00
UK - N. Ireland (by CIS)	2022	Brown	44	320	8.389	7.436	4,24	3,46	107,00
UK - N. Ireland (by CIS)	2023	Friesian	529	315	7.252	6.773	4,46	3,43	170,00
UK - N. Ireland (by CIS)	2022	Friesian	512	319	7.488	7.014	4,46	3,46	185,00
UK - N. Ireland (by CIS)	2023	Guernsey	0						
UK - N. Ireland (by CIS)	2023	Holstein	45.441	325	9.826	8.692	4,18	3,30	775,00
UK - N. Ireland (by CIS)	2022	Holstein	44.705	321	9.908	8.832	4,16	3,29	200,00
UK - N. Ireland (by CIS)	2023	Jersey	289	344	7.197	6.025	5,44	3,93	253,00
UK - N. Ireland (by CIS)	2022	Jersey	329	340	7.028	5.941	5,57	3,94	241,00



Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
UK - N. Ireland (by CIS)	2023	Montbéliarde	5	395	10.799	8.672	3,90	3,22	202,00
UK - N. Ireland (by CIS)	2022	Montbéliarde	8	324	9.491	8.911	4,28	3,29	373,00
UK - Scotland (by CIS)	2023	Ayrshire	5.988	307	7.938	7.292	4,17	3,28	215,00
UK - Scotland (by CIS)	2022	Ayrshire	5.961	312	8.324	7.636	4,16	3,29	228,00
UK - Scotland (by CIS)	2023	Brown	149	337	8.734	7.425	4,00	3,53	164,00
UK - Scotland (by CIS)	2022	Brown	258	307	7.575	6.831	4,04	3,51	230,00
UK - Scotland (by CIS)	2023	Friesian	737	311	7.081	6.660	4,26	3,35	212,00
UK - Scotland (by CIS)	2022	Friesian	757	320	7.248	6.766	4,21	3,37	229,00
UK - Scotland (by CIS)	2023	Guernsey	5	279	3.600	3.578	5,62	3,63	293,00
UK - Scotland (by CIS)	2023	Holstein	55.043	323	10.669	9.416	4,05	3,24	194,00
UK - Scotland (by CIS)	2022	Holstein	55.110	322	10.606	9.430	4,02	3,22	213,00
UK - Scotland (by CIS)	2023	Jersey	2.401	317	7.166	6.236	5,61	4,09	162,00
UK - Scotland (by CIS)	2022	Jersey	2.793	317	6.980	6.151	5,79	4,08	197,00
UK - Scotland (by CIS)	2023	Montbéliarde	63	282	6.795	6.350	4,02	3,40	191,00
UK - Scotland (by CIS)	2022	Montbéliarde	60	293	7.120	6.750	4,01	3,32	208,00
UK - Wales (by CIS)	2023	Ayrshire	344	316	6.619	5.807	4,68	3,32	276,00
UK - Wales (by CIS)	2022	Ayrshire	350	323	6.781	6.125	4,59	3,30	209,00
UK - Wales (by CIS)	2023	Brown	208	340	7.088	6.300	4,40	3,32	211,00
UK - Wales (by CIS)	2022	Brown	267	323	6.878	6.131	4,26	3,31	243,00
UK - Wales (by CIS)	2023	Friesian	715	298	5.822	5.591	4,33	3,40	428,00
UK - Wales (by CIS)	2022	Friesian	749	304	6.146	5.805	4,36	3,41	238,00

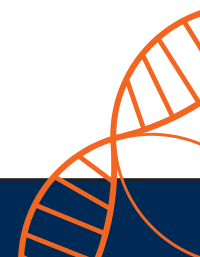
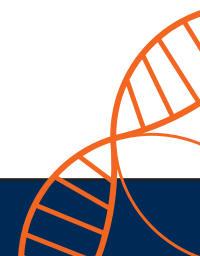


Table 4.4 - Main breeds - Cows in herdbook

Country	Year	Breed	Number of lactations	Length of the lactations (days)	Milk yield per recorded cow (kg)	Milk per cow in 305 days (kg)	Percent fat content (%)	Percent protein content (%)	Average cell count
UK - Wales (by CIS)	2023	Guernsey	72	348	5.229	4.601	4,15	3,37	436,00
UK - Wales (by CIS)	2022	Guernsey	72	331	5.148	4.700	4,43	3,47	152,00
UK - Wales (by CIS)	2023	Holstein	34.550	326	9.745	8.629	4,20	3,24	194,00
UK - Wales (by CIS)	2022	Holstein	34.891	325	9.583	8.557	4,16	3,23	218,00
UK - Wales (by CIS)	2023	Jersey	294	310	5.659	5.053	5,46	3,74	301,00
UK - Wales (by CIS)	2022	Jersey	380	296	5.848	5.341	5,58	3,73	240,00
UK - Wales (by CIS)	2023	Montbéliarde	1	318	7.398	7.216	3,59	3,15	74,00
UK - Wales (by CIS)	2022	Montbéliarde	1	370	9.188	8.223	3,48	3,04	46,00







Sheep Survey (Years 2022 and 2023)

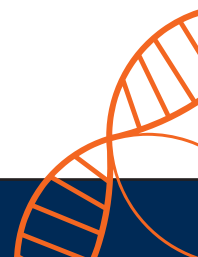




Table 1A - Milk recording and management of the lactation

SHEEP SURVEY

Country	Year	Breed	Flocks	Ewes/ Does	Recorded flocks	Recorded ewes	Milking scheme	Suckling period, D	Milking machine, % of recorded flocks	Flocks in D recording	Ewes in D recording/ Does in D recording
Croatia	2023	East Friesian	50	300	3	42	2	59	80		
Croatia	2022	East Friesian	50	300	3	64	2	56	80		
Croatia	2023	Istrian Sheep	80	2.900	12	805	2	76	15		
Croatia	2022	Istrian Sheep	80	2.900	16	930	2	55	14		
Croatia	2023	Lacaune	18	2.500	16	1.718	2	57	100		
Croatia	2022	Lacaune	18	2.500	14	1.890	2	43	100		
Croatia	2023	Paska Sheep	543	30.000	32	3.351	2	65	30		
Croatia	2022	Paska Sheep	543	30.000	34	3.892	2	75	30		
France	2023	Basco-Béarnaise		84.000	86	29.769	2	35	100	37	9.597
France	2022	Basco-Béarnaise	310	84.000	86	29.317	2	35	100	34	8.912
France	2023	Corse		85.000	51	17.992	2	35	98	32	7.775
France	2022	Corse	350	85.000	51	18.403	2	35	100	43	9.948
France	2023	Lacaune		948.000	379	200.700	2	25	100	973	481.143
France	2022	Lacaune	2.500	1.032.000	379	197.813	2	25	100	983	480.327
France	2023	Manech tête noire		77.000	29	9.571	2	35	100	8	2.640
France	2022	Manech tête noire	270	77.000	32	10.561	2	35	100	6	2.033
France	2023	Manech tête rousse		291.000	194	81.580	2	35	100	60	20.493
France	2022	Manech tête rousse	950	291.000	204	84.298	2	35	100	72	24.892
Italy (AIA)	2023	Assaf			9	999	2	30			
Italy (AIA)	2022	Assaf			12	1.325	2	30			
Italy (AIA)	2023	Comisana			23	2.619	2	30			
Italy (AIA)	2022	Comisana			41	3.846	2	30			
Italy (AIA)	2023	Delle Langhe			27	2.024	2	30			
Italy (AIA)	2022	Delle Langhe			29	2.369	2	30			
Italy (AIA)	2023	Lacaune			43	6.771	2	30			
Italy (AIA)	2022	Lacaune			55	7.487	2	30			

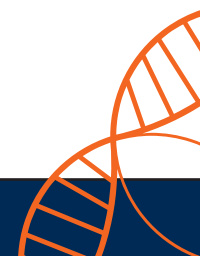


Table 1A - Milk recording and management of the lactation

Country	Year	Breed	Flocks	Ewes/ Does	Recorded flocks	Recorded ewes	Milking scheme	Suckling period, D	Milking machine, % of recorded flocks	Flocks in D recording	Ewes in D recording/ Does in D recording
Italy (AIA)	2023	Massese			70	5.816	2	30			
Italy (AIA)	2022	Massese			83	6.700	2	30			
Italy (AIA)	2024	Nera di Arbus			31	695	2	30			
Italy (AIA)	2023	Nera di Arbus			31	695	2	30			
Italy (AIA)	2022	Nera di Arbus			36	1.226	2	30			
Italy (AIA)	2023	Sarda			532	96.551	2	30			
Italy (AIA)	2022	Sarda			589	107.694	2	30			
Italy (AIA)	2023	Valle del Belice			146	6.198	2	30			
Italy (AIA)	2022	Valle del Belice			184	11.649	2	30			
Slovak Republic	2023	Assaf			1	226	2	30			
Slovak Republic	2022	Assaf			1	87	2	30			
Slovak Republic	2023	East Friesian			3	35	2	30			
Slovak Republic	2022	East Friesian			3	22	2	30			
Slovak Republic	2023	Improved Valachian			21	3.289	2	40			
Slovak Republic	2022	Improved Valachian			23	1.611	2	40			
Slovak Republic	2023	Lacaune			17	1.072	2	30			
Slovak Republic	2022	Lacaune			16	993	2	30			
Slovak Republic	2023	Slovak Dairy Sheep			15	1.046	2	30			
Slovak Republic	2022	Slovak Dairy Sheep			18	870	2	30			
Slovak Republic	2023	Tsigai			21	2.574	2	40			
Slovak Republic	2022	Tsigai			20	1.783	2	40			

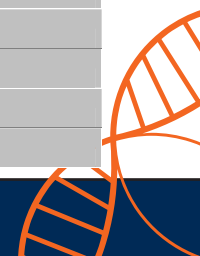


Table 1A - Milk recording and management of the lactation

Country	Year	Breed	Flocks	Ewes/ Does	Recorded flocks	Recorded ewes	Milking scheme	Suckling period, D	Milking machine, % of recorded flocks	Flocks in D recording	Ewes in D recording/ Does in D recording
Slovak Republic	2023	Valachian			2	33	2	40			
Slovak Republic	2022	Valachian			3	40	2	40			
Ukraine	2023	All Breeds	268.359								
Ukraine	2022	All Breeds	327.260								

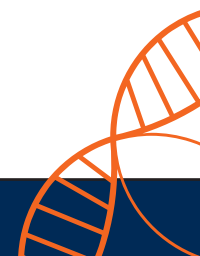


Table 1B - Methods of milk recording

Country	Year	Breed	Share of A4, A5, A6, B4, B5, B6, C4, C5, C6, %	Share of AT, BT, CT, %	Share of AC, BC, CC, %	Share of E4, E5, E6, ET, EC, %
Croatia	2023	East Friesian	B4=100			
Croatia	2022	East Friesian	B4=90	AT=10		
Croatia	2023	Istrian Sheep	B4=10	AT= 90		
Croatia	2022	Istrian Sheep	B4=10	AT=90		
Croatia	2023	Lacaune	B4- 60	AT- 40		
Croatia	2022	Lacaune	B4=70	AT=30		
Croatia	2023	Paska Sheep		AT- 100		
Croatia	2022	Paska Sheep		AT=100		
France ¹	2023	All Breeds	0	0	100	0
France	2022	All Breeds	0	0	100	0
Italy (AIA)	2023	All breeds		AT	AC	
Italy (AIA) ²	2022	All breeds		AT 5%	AC 95%	
Slovak Republic	2023	All Breeds			AC = 100	
Slovak Republic	2022	All Breeds			AC = 100	

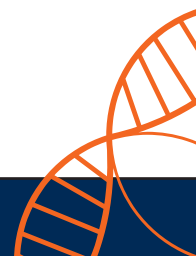


Table 2A - Type of lactation calculation for milk yield

Country	Year	Breed	TSMM1 (Yes/No)	TMM3 (Yes/No)	TMYes4 (Yes/No)	TSMM1 (Yes/No)	TMM2 (Yes/No)	TMYes3 (Yes/No)
Croatia	2023	East Friesian	Yes	Yes	No	No	No	No
Croatia	2022	East Friesian	Yes	Yes	No	No	No	No
Croatia	2023	Istrian Sheep	Yes	Yes	No	No	No	No
Croatia	2022	Istrian Sheep	Yes	Yes	No	No	No	No
Croatia	2023	Lacaune	Yes	Yes	No	No	No	No
Croatia	2022	Lacaune	Yes	Yes	No	No	No	No
Croatia	2023	Paska Sheep	Yes	Yes	No	No	No	No
Croatia	2022	Paska Sheep	Yes	Yes	No	No	No	No
France	2023	All Breeds	No	Yes	No	No	No	No
France	2022	All Breeds	No	Yes	No	No	No	No
Italy (AIA)	2023	All Breeds	Yes	Yes	No	No	From day 30 from lambing	No
Italy (AIA)	2022	All breeds	Yes	Yes	No	No	From Day 30 from lambing	No
Slovak Republic	2023	All Breeds	No	Yes	No	No	Yes. 150	No
Slovak Republic	2022	All Breeds	No	Yes	No	No	Yes. 150	No



Table 2B - Milk yield results

Country	Year	Breed	Yearlings	Adults	All ewes
Croatia	2023	East Friesian	367	435	446
Croatia	2022	East Friesian	373	402	390
Croatia	2023	Istrian Sheep	142	190	181
Croatia	2022	Istrian Sheep	147	143	143
Croatia	2023	Lacaune	369	590	546
Croatia	2022	Lacaune	344	481	458
Croatia	2023	Paska Sheep	99	153	142
Croatia	2022	Paska Sheep	103	159	148
France	2023	Basco-Béarnaise	149 (105 days)	224 (155 days)	211 (147 days)
France	2022	Basco-Béarnaise	158 (105 days)	236 (158 days)	222 (150 days)
France	2023	Corse	98 (137 days)	155 (198 days)	144 (187 days)
France	2022	Corse	103 (135 days)	163 (200 days)	153 (189 days)
France	2023	Lacaune	303 (163 days)	376 (182 days)	357 (177 days)
France	2022	Lacaune	296 (162 days)	364 (181 days)	346 (176 days)
France	2023	Manech tête noire	126 (128 days)	180 (152 days)	176 (152 days)
France	2022	Manech tête noire	127 (119 days)	188 (153 days)	183 (151 days)
France	2023	Manech tête rousse	208 (152 days)	248 (165 days)	244 (164 days)
France	2022	Manech tête rousse	209 (154 days)	249 (166 days)	245 (165 days)
Italy (AIA) ¹	2023	Assaf	224	331	318
Italy (AIA)	2022	Assaf	187	292	271
Italy (AIA)	2023	Carsolina	80	149	136
Italy (AIA)	2022	Carsolina	23	115	114
Italy (AIA)	2023	Comisana	77	137	131
Italy (AIA)	2022	Comisana	76	162	156
Italy (AIA)	2023	Delle Langhe	79	142	136
Italy (AIA)	2022	Delle Langhe	87	148	142

¹ From day 30 from lambing to reference lactation length

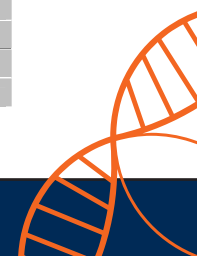


Table 2B - Milk yield results

Country	Year	Breed	Yearlings	Adults	All ewes
Italy (AIA) ²	2023	Lacaune	220	325	306
Italy (AIA)	2022	Lacaune	215	326	304
Italy (AIA)	2023	Massese	130	119	118
Italy (AIA)	2022	Massese	117	130	129
Italy (AIA)	2023	Nera di Arbus	84	164	156
Italy (AIA)	2022	Nera di Arbus	101	187	177
Italy (AIA)	2023	Noticiana	61	94	91
Italy (AIA)	2022	Noticiana	53	104	97
Italy (AIA)	2022	Pinzirita	73	125	117
Italy (AIA)	2023	Sarda	153	241	230
Italy (AIA)	2022	Sarda	153	236	225
Italy (AIA)	2023	Valle del Belice	241	227	227
Italy (AIA)	2022	Valle del Belice	152	230	225
Slovak Republic	2023	Assaf			175
Slovak Republic	2022	Assaf			211
Slovak Republic	2023	East Friesian			230
Slovak Republic	2022	East Friesian			269
Slovak Republic	2023	Improved Valachian			111
Slovak Republic	2022	Improved Valachian			111
Slovak Republic	2023	Lacaune			292
Slovak Republic	2022	Lacaune			304
Slovak Republic	2023	Slovak Dairy Sheep			163
Slovak Republic	2022	Slovak Dairy Sheep			171
Slovak Republic	2023	Tsigai			126
Slovak Republic	2022	Tsigai			115

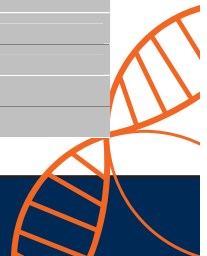




Table 2B - Milk yield results

Country	Year	Breed	Yearlings	Adults	All ewes
Slovak Republic	2023	Valachian			80
Slovak Republic	2022	Valachian			102

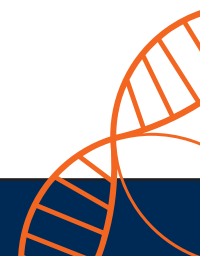


Table 3 - Optional tests for milk composition

Country	Year	Breed	Parity, number of ewes	Recording method for milk composition	Fat %	Protein %	SCC (Y/N)	Other analyses
Croatia	2023	East Friesian	42	B4	5,4	4,4	Yes	Lactose, Urea
Croatia	2022	East Friesian	64	AT,B4	4,9	4,1		
Croatia	2023	Istrian Sheep	805	AT,B4	7,3	5,7	Yes	Lactose, Urea
Croatia	2022	Istrian Sheep	930	AT, B4	6,3	5,8		
Croatia	2023	Lacaune	1.718	AT,B4	6,3	5,6	Yes	Lactose, Urea
Croatia	2022	Lacaune	1.890	AT, B4	5,7	5,8		
Croatia	2023	Paska Sheep	3.351	AT	7,1	5,9	Yes	Lactose, Urea
Croatia	2022	Paska Sheep	3.892	AT	7,3	5,8		
France ¹	2023	Corse	Parity 1 (3.147 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea on request
France	2022	Corse	Parity 1 (3.189 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea on request
France	2023	Lacaune	Parity 1 (46.251 ewes) and parity 2 (34.178 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea on request
France	2022	Lacaune	Parity 1 (45.873 ewes) and parity 2 (34.088 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea on request
France	2023	Pyrenean breeds	Parity 1 (22.383 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea
France	2022	Pyrenean breeds	Parity 1 (23.452 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea
Italy (AIA)	2023	Sarda	Primiparous, 10.424 lactations	AC,AT	5.40	5.16		
Italy (AIA)	2022	Sarda	Primiparous, 11.953 lactations	AC,AT	5.08	5.01		
Slovak Republic	2023	Assaf	Parity 1 to 3 (226 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Assaf	Parity 1 to 3 (38 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	East Friesian	Parity 1 to 3 (35 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	East Friesian	Parity 1 to 3 (22 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	Improved Valachian	Parity 1 to 3 (3.289 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Improved Valachian	Parity 1 to 3 (1.611 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	Lacaune	Parity 1 to 3 (1.072 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Lacaune	Parity 1 to 3 (993 ewes)	AC	Yes	Yes		Lactose

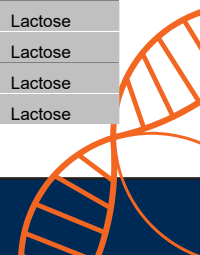


Table 3 - Optional tests for milk composition

Country	Year	Breed	Parity, number of ewes	Recording method for milk composition	Fat %	Protein %	SCC (Y/N)	Other analyses
Slovak Republic	2023	Slovak Dairy Sheep	Parity 1 to 3 (1.046 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Slovak Dairy Sheep	Parity 1 to 3 (870 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	Tsigai	Parity 1 to 3 (2.574 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Tsigai	Parity 1 to 3 (1.529 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	Valachian	Parity 1 to 3 (33 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Valachian	Parity 1 to 3 (40 ewes)	AC	Yes	Yes		Lactose

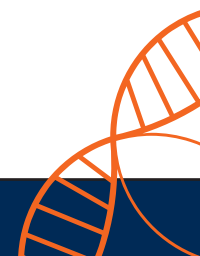


Table 4 - Recording of non-milking traits

Country	Year	Breed	Traits	On-farm recording (Y/N)	Breeding evaluation (Y/N)
Croatia	2023	East Friesian	Reproductive traits and birth weight	Yes	No
Croatia	2022	East Friesian	Reproductive traits and birth weight	Yes	No
Croatia	2023	Istrian Sheep	Reproductive traits and birth weight	Yes	No
Croatia	2022	Istrian Sheep	Reproductive traits and birth weight	Yes	No
Croatia	2023	Lacaune	Reproductive traits and birth weight	Yes	No
Croatia	2022	Lacaune	Reproductive traits and birth weight	Yes	No
Croatia	2023	Paska Sheep	Reproductive traits and birth weight	Yes	No
Croatia	2022	Paska Sheep	Reproductive traits and birth weight	Yes	No
France	2023	All Breeds	Reproductive traits	Yes	No
France	2022	All Breeds	Reproductive traits	Yes	No
France	2023	Basco-Béarnaise et Manech tête rousse	Udder scoring (20224 parity 1)	Yes	Yes
France	2022	Basco-Béarnaise et Manech tête rousse	Udder scoring (21285 parity 1)	Yes	Yes
France	2023	Corse	Udder scoring (2905 parity 1 & 2361 parity 2)	Yes	Yes
France	2022	Corse	Udder scoring (5562 parities 1 & 2)	Yes	Yes
France	2023	Lacaune	Udder scoring (46434 parity 1)	Yes	Yes
France	2022	Lacaune	Udder scoring (45693 parity 1)	Yes	Yes
Italy (AIA) ¹	2023	All Breeds	Udder Score, morphological evaluations	Yes	No
Italy (AIA) ¹	2022	All breeds	Udder Score, morphological evaluations	Yes	No
Slovak Republic	2023	All Breeds	Reproductive traits, weight	Yes	No
Slovak Republic	2022	All Breeds	Reproductive traits, weight	Yes	No

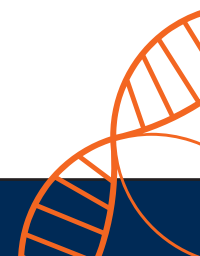


Table 5 - Milk recording equipment used in case of machine milking

Country	Year	Breed	Jar/meter	Manufacturer	Measurements (weight, volume, sample)	Approximate number in use
Croatia	2023	East Friesian	Jars	Cartel Germany	Volume -Sempler	3
Croatia	2022	East Friesian	Jars	Cartel Germany	Volume / Sampler	3
Croatia	2023	Istrian Sheep	Jars/mete	Cartel Germany, Waikato	Volume / Sampler	12/4
Croatia	2022	Istrian Sheep	Jars/meter	Cartel Germany	Volume / Sampler	16/4
Croatia	2023	Lacaune	Jars/meter	Cartel Germany / Waikato	Volume / Sampler	20/25
Croatia	2022	Lacaune	Jars/meter	Cartel Germany	Volume / Sampler	20/25
Croatia	2023	Paska Sheep	Jars/meter	Cartel Germany / Waikato	Volume / Sampler	20 / 27
Croatia	2022	Paska Sheep	Jars/meter	Cartel Germany	Volume / Sampler	20/27
France ¹	2023	All breeds	Jars	Sarl GELY Serge	Volume / Sampler	3.000
France ²	2022	All Breeds	Jars	Sarl GELY Serge	Volume / Sampler	3.000
Italy (AIA)	2023	All Breeds	Jar/meter	Waikato, Mibo, Royal, Lactocorder, Afifree, DeLaval		
Italy (AIA)	2022	All Breeds	Jar, Meters	Waikato, Mibo, Royal, Lactocorder, Afifree, DeLaval		
Slovak Republic	2023	All Breeds	Fisher Slovakia - Volume	Berango / Milkovis	Volume / Sampler. No	Berango 156, Milkovis 196
Slovak Republic	2022	All Breeds	Fisher Slovakia - Volume	Berango / Milkovis	Volume / Sampler. No	Berango 133, Milkovis 196

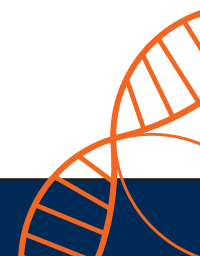


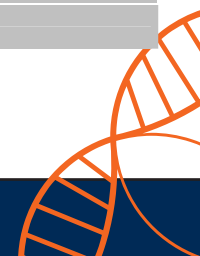
Table 6 - Breeding programme using artificial insemination

Country	Year	Breed	Fresh semen	Frozen semen	Progeny tested rams per year (bucks)	Inseminations per tested ram (buck)	Notes
Croatia	2023	All breeds					No artificial insemination
Croatia	2022	all breeds					No artificial insemination
France	2023	Basco-Béarnaise	17.341		63	120-140	63 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Basco-Béarnaise	17.486	76	76	120-140	76 rams genomically pre-selected. No more progeny test (no lay off).
France	2023	Corse	8.054		21	120-140	21 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Corse	8.053		20	120-140	20 rams genomically pre-selected. No more progeny test (no lay off).
France	2023	Lacaune	424.263		326	120-140	326 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Lacaune	420.501		309	120-140	309 rams genomically pre-selected. No more progeny test (no lay off).
France	2023	Manech tête noire	4.541		24	120-140	24 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Manech tête noire	5.015		34	120-140	34 rams genomically pre-selected. No more progeny test (no lay off).
France	2023	Manech tête rousse	53.238		167	120-140	167 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Manech tête rousse	60.578		221	120-140	221 rams genomically pre-selected. No more progeny test (no lay off).
Slovak Republic	2023	All breeds					No artificial insemination
Slovak Republic	2022	All breeds					No artificial insemination



Table 7 - Molecular information

Country	Year	Breed	Genotyping method	Animals, flocks analysed	Use in routine selection	Notes
Croatia	2023	Istrian Sheep	PrP	1.002	Yes	Samples collected
Croatia	2022	Istrian Sheep				Samples collected
Croatia	2023	Paska Sheep	PrP	3.627	Yes	Samples collected
Croatia	2022	Paska Sheep				Samples collected
France	2023	Basco-Béarnaise	PrP and OvineBeadChip 60k	244 rams genotyped	Yes (genomic selection)	
France	2022	Basco-Béarnaise	PrP and OvineBeadChip 19k	1.293 rams and ewes (PrP); 247 rams on Chip	Yes	
France	2023	Corse	PrP and OvineBeadChip 60k	346 rams genotyped	Yes (genomic selection)	
France	2022	Corse	PrP and OvineBeadChip 19k	1.683 rams and ewes (PrP); 375 rams on Chip	Yes	
France	2023	Lacaune	PrP and OvineBeadChip 60k	3.819 rams genotyped	Yes (genomic selection)	
France	2022	Lacaune	PrP and OvineBeadChip 19k	8.466 rams and ewes (PrP); 3.542 rams on Chip	Yes	
France	2023	Manech tête noire	PrP and OvineBeadChip 60k	80 rams genotyped	Yes (Genomic Selection)	
France	2022	Manech tête noire	PrP and OvineBeadChip 19k	731 rams and ewes (PrP); 109 rams on Chip	Yes	
France	2023	Manech tête rousse	PrP and OvineBeadChip 60k	663 rams genotyped	Yes (Genomic Selection)	
France	2022	Manech tête rousse	PrP and OvineBeadChip 19k	2.922 rams and ewes (PrP); 780 rams on Chip	Yes	
Italy (AIA)	2023	All Breeds	Filiation test, PnP	Filiation test 3.905 animales	Yes	Performed by Herdbook
Italy (AIA)	2022	All breeds	Filiation test, PnP	Filiation test 4.028 animals	Yes	Performed by Herdbook
Slovak Republic	2023	All Breeds	PrP genotyping		Yes	
Slovak Republic	2022	All Breeds	PrP genotyping	1.229 analysis	Yes	





Goat Survey (Years 2022 and 2023)

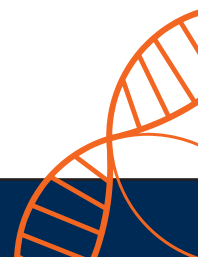




Table 1A - Milk recording and management of the lactation

GOAT SURVEY

Country	Year	Breed	Flocks	Ewes/ Does	Recorded flocks	Recorded ewes	Milking scheme	Suckling period, D	Milking machine, % of recorded flocks	Flocks in D recording	Ewes in D recording/ Does in D recording
Croatia	2023	East Friesian	50	300	3	42	2	59	80		
Croatia	2022	East Friesian	50	300	3	64	2	56	80		
Croatia	2023	Istrian Sheep	80	2.900	12	805	2	76	15		
Croatia	2022	Istrian Sheep	80	2.900	16	930	2	55	14		
Croatia	2023	Lacaune	18	2.500	16	1.718	2	57	100		
Croatia	2022	Lacaune	18	2.500	14	1.890	2	43	100		
Croatia	2023	Paska Sheep	543	30.000	32	3.351	2	65	30		
Croatia	2022	Paska Sheep	543	30.000	34	3.892	2	75	30		
France	2023	Basco-Béarnaise		84.000	86	29.769	2	35	100	37	9.597
France	2022	Basco-Béarnaise	310	84.000	86	29.317	2	35	100	34	8.912
France	2023	Corse		85.000	51	17.992	2	35	98	32	7.775
France	2022	Corse	350	85.000	51	18.403	2	35	100	43	9.948
France	2023	Lacaune		948.000	379	200.700	2	25	100	973	481.143
France	2022	Lacaune	2.500	1.032.000	379	197.813	2	25	100	983	480.327
France	2023	Manech tête noire		77.000	29	9.571	2	35	100	8	2.640
France	2022	Manech tête noire	270	77.000	32	10.561	2	35	100	6	2.033
France	2023	Manech tête rousse		291.000	194	81.580	2	35	100	60	20.493
France	2022	Manech tête rousse	950	291.000	204	84.298	2	35	100	72	24.892
Italy (AIA)	2023	Assaf			9	999	2	30			
Italy (AIA)	2022	Assaf			12	1.325	2	30			
Italy (AIA)	2023	Comisana			23	2.619	2	30			
Italy (AIA)	2022	Comisana			41	3.846	2	30			
Italy (AIA)	2023	Delle Langhe			27	2.024	2	30			
Italy (AIA)	2022	Delle Langhe			29	2.369	2	30			
Italy (AIA)	2023	Lacaune			43	6.771	2	30			
Italy (AIA)	2022	Lacaune			55	7.487	2	30			

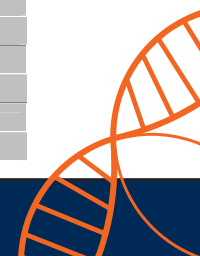


Table 1A - Milk recording and management of the lactation

Country	Year	Breed	Flocks	Ewes/ Does	Recorded flocks	Recorded ewes	Milking scheme	Suckling period, D	Milking machine, % of recorded flocks	Flocks in D recording	Ewes in D recording/ Does in D recording
Italy (AIA)	2023	Massese			70	5.816	2	30			
Italy (AIA)	2022	Massese			83	6.700	2	30			
Italy (AIA)	2024	Nera di Arbus			31	695	2	30			
Italy (AIA)	2023	Nera di Arbus			31	695	2	30			
Italy (AIA)	2022	Nera di Arbus			36	1.226	2	30			
Italy (AIA)	2023	Sarda			532	96.551	2	30			
Italy (AIA)	2022	Sarda			589	107.694	2	30			
Italy (AIA)	2023	Valle del Belice			146	6.198	2	30			
Italy (AIA)	2022	Valle del Belice			184	11.649	2	30			
Slovak Republic	2023	Assaf			1	226	2	30			
Slovak Republic	2022	Assaf			1	87	2	30			
Slovak Republic	2023	East Friesian			3	35	2	30			
Slovak Republic	2022	East Friesian			3	22	2	30			
Slovak Republic	2023	Improved Valachian			21	3.289	2	40			
Slovak Republic	2022	Improved Valachian			23	1.611	2	40			
Slovak Republic	2023	Lacaune			17	1.072	2	30			
Slovak Republic	2022	Lacaune			16	993	2	30			
Slovak Republic	2023	Slovak Dairy Sheep			15	1.046	2	30			
Slovak Republic	2022	Slovak Dairy Sheep			18	870	2	30			
Slovak Republic	2023	Tsigai			21	2.574	2	40			
Slovak Republic	2022	Tsigai			20	1.783	2	40			

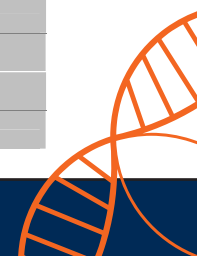


Table 1A - Milk recording and management of the lactation

Country	Year	Breed	Flocks	Ewes/ Does	Recorded flocks	Recorded ewes	Milking scheme	Suckling period, D	Milking machine, % of recorded flocks	Flocks in D recording	Ewes in D recording/ Does in D recording
Slovak Republic	2023	Valachian			2	33	2	40			
Slovak Republic	2022	Valachian			3	40	2	40			
Ukraine	2023	All Breeds	268.359								
Ukraine	2022	All Breeds	327.260								

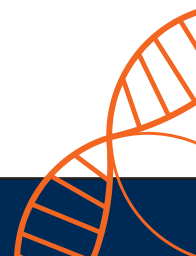


Table 1B - Methods of milk recording

Country	Year	Breed	Share of A4, A5, A6, B4, B5, B6, C4, C5, C6, %	Share of AT, BT, CT, %	Share of AC, BC, CC, %	Share of E4, E5, E6, ET, EC, %
Croatia	2023	East Friesian	B4=100			
Croatia	2022	East Friesian	B4=90	AT=10		
Croatia	2023	Istrian Sheep	B4=10	AT= 90		
Croatia	2022	Istrian Sheep	B4=10	AT=90		
Croatia	2023	Lacaune	B4= 60	AT= 40		
Croatia	2022	Lacaune	B4=70	AT=30		
Croatia	2023	Paska Sheep		AT= 100		
Croatia	2022	Paska Sheep		AT=100		
France ¹	2023	All Breeds	0	0	100	0
France	2022	All Breeds	0	0	100	0
Italy (AIA)	2023	All breeds		AT	AC	
Italy (AIA) ²	2022	All breeds		AT 5%	AC 95%	
Slovak Republic	2023	All Breeds			AC = 100	
Slovak Republic	2022	All Breeds			AC = 100	

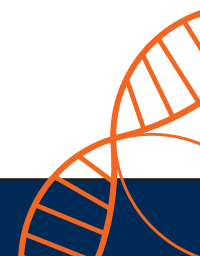


Table 2A - Type of lactation calculation for milk yield

Country	Year	Breed	TSMM1 (Yes/No)	TMM3 (Yes/No)	TMYes4 (Yes/No)	TSMM1 (Yes/No)	TMM2 (Yes/No)	TMYes3 (Yes/No)
Croatia	2023	East Friesian	Yes	Yes	No	No	No	No
Croatia	2022	East Friesian	Yes	Yes	No	No	No	No
Croatia	2023	Istrian Sheep	Yes	Yes	No	No	No	No
Croatia	2022	Istrian Sheep	Yes	Yes	No	No	No	No
Croatia	2023	Lacaune	Yes	Yes	No	No	No	No
Croatia	2022	Lacaune	Yes	Yes	No	No	No	No
Croatia	2023	Paska Sheep	Yes	Yes	No	No	No	No
Croatia	2022	Paska Sheep	Yes	Yes	No	No	No	No
France	2023	All Breeds	No	Yes	No	No	No	No
France	2022	All Breeds	No	Yes	No	No	No	No
Italy (AIA)	2023	All Breeds	Yes	Yes	No	No	From day 30 from lambing	No
Italy (AIA)	2022	All breeds	Yes	Yes	No	No	From Day 30 from lambing	No
Slovak Republic	2023	All Breeds	No	Yes	No	No	Yes. 150	No
Slovak Republic	2022	All Breeds	No	Yes	No	No	Yes. 150	No

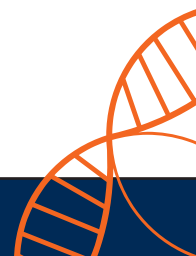


Table 2B - Milk yield results

Country	Year	Breed	Yearlings	Adults	All ewes
Croatia	2023	East Friesian	367	435	446
Croatia	2022	East Friesian	373	402	390
Croatia	2023	Istrian Sheep	142	190	181
Croatia	2022	Istrian Sheep	147	143	143
Croatia	2023	Lacaune	369	590	546
Croatia	2022	Lacaune	344	481	458
Croatia	2023	Paska Sheep	99	153	142
Croatia	2022	Paska Sheep	103	159	148
France	2023	Basco-Béarnaise	149 (105 days)	224 (155 days)	211 (147 days)
France	2022	Basco-Béarnaise	158 (105 days)	236 (158 days)	222 (150 days)
France	2023	Corse	98 (137 days)	155 (198 days)	144 (187 days)
France	2022	Corse	103 (135 days)	163 (200 days)	153 (189 days)
France	2023	Lacaune	303 (163 days)	376 (182 days)	357 (177 days)
France	2022	Lacaune	296 (162 days)	364 (181 days)	346 (176 days)
France	2023	Manech tête noire	126 (128 days)	180 (152 days)	176 (152 days)
France	2022	Manech tête noire	127 (119 days)	188 (153 days)	183 (151 days)
France	2023	Manech tête rousse	208 (152 days)	248 (165 days)	244 (164 days)
France	2022	Manech tête rousse	209 (154 days)	249 (166 days)	245 (165 days)
Italy (AIA) ¹	2023	Assaf	224	331	318
Italy (AIA)	2022	Assaf	187	292	271
Italy (AIA)	2023	Carsolina	80	149	136
Italy (AIA)	2022	Carsolina	23	115	114
Italy (AIA)	2023	Comisana	77	137	131
Italy (AIA)	2022	Comisana	76	162	156
Italy (AIA)	2023	Delle Langhe	79	142	136
Italy (AIA)	2022	Delle Langhe	87	148	142

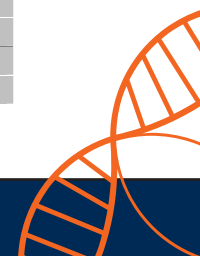
¹ From day 30 from lambing to reference lactation length

Table 2B - Milk yield results

Country	Year	Breed	Yearlings	Adults	All ewes
Italy (AIA) ²	2023	Lacaune	220	325	306
Italy (AIA)	2022	Lacaune	215	326	304
Italy (AIA)	2023	Massese	130	119	118
Italy (AIA)	2022	Massese	117	130	129
Italy (AIA)	2023	Nera di Arbus	84	164	156
Italy (AIA)	2022	Nera di Arbus	101	187	177
Italy (AIA)	2023	Noticiana	61	94	91
Italy (AIA)	2022	Noticiana	53	104	97
Italy (AIA)	2022	Pinzirita	73	125	117
Italy (AIA)	2023	Sarda	153	241	230
Italy (AIA)	2022	Sarda	153	236	225
Italy (AIA)	2023	Valle del Belice	241	227	227
Italy (AIA)	2022	Valle del Belice	152	230	225
Slovak Republic	2023	Assaf			175
Slovak Republic	2022	Assaf			211
Slovak Republic	2023	East Friesian			230
Slovak Republic	2022	East Friesian			269
Slovak Republic	2023	Improved Valachian			111
Slovak Republic	2022	Improved Valachian			111
Slovak Republic	2023	Lacaune			292
Slovak Republic	2022	Lacaune			304
Slovak Republic	2023	Slovak Dairy Sheep			163
Slovak Republic	2022	Slovak Dairy Sheep			171
Slovak Republic	2023	Tsigai			126
Slovak Republic	2022	Tsigai			115

² From day 30 from lambing to reference lactation length

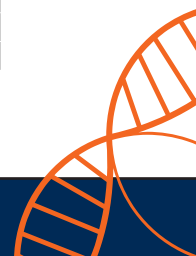


Table 2B - Milk yield results

Country	Year	Breed	Yearlings	Adults	All ewes
Slovak Republic	2023	Valachian			80
Slovak Republic	2022	Valachian			102

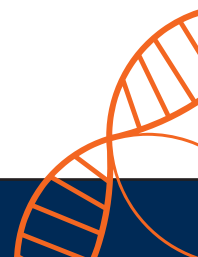


Table 3 - Optional tests for milk composition

Country	Year	Breed	Parity, number of ewes	Recording method for milk composition	Fat %	Protein %	SCC (Y/N)	Other analyses
Croatia	2023	East Friesian	42	B4	5,4	4,4	Yes	Lactose, Urea
Croatia	2022	East Friesian	64	AT,B4	4,9	4,1		
Croatia	2023	Istrian Sheep	805	AT,B4	7,3	5,7	Yes	Lactose, Urea
Croatia	2022	Istrian Sheep	930	AT, B4	6,3	5,8		
Croatia	2023	Lacaune	1.718	AT,B4	6,3	5,6	Yes	Lactose, Urea
Croatia	2022	Lacaune	1.890	AT, B4	5,7	5,8		
Croatia	2023	Paska Sheep	3.351	AT	7,1	5,9	Yes	Lactose, Urea
Croatia	2022	Paska Sheep	3.892	AT	7,3	5,8		
France ¹	2023	Corse	Parity 1 (3.147 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea on request
France	2022	Corse	Parity 1 (3.189 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea on request
France	2023	Lacaune	Parity 1 (46.251 ewes) and parity 2 (34.178 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea on request
France	2022	Lacaune	Parity 1 (45.873 ewes) and parity 2 (34.088 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea on request
France	2023	Pyrenean breeds	Parity 1 (22.383 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea
France	2022	Pyrenean breeds	Parity 1 (23.452 ewes)	Part-lactation sampling	Yes	Yes	Yes	Urea
Italy (AIA)	2023	Sarda	Primiparous, 10.424 lactations	AC,AT	5.40	5.16		
Italy (AIA)	2022	Sarda	Primiparous, 11.953 lactations	AC,AT	5.08	5.01		
Slovak Republic	2023	Assaf	Parity 1 to 3 (226 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Assaf	Parity 1 to 3 (38 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	East Friesian	Parity 1 to 3 (35 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	East Friesian	Parity 1 to 3 (22 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	Improved Valachian	Parity 1 to 3 (3.289 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Improved Valachian	Parity 1 to 3 (1.611 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	Lacaune	Parity 1 to 3 (1.072 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Lacaune	Parity 1 to 3 (993 ewes)	AC	Yes	Yes		Lactose

Table 3 - Optional tests for milk composition

Country	Year	Breed	Parity, number of ewes	Recording method for milk composition	Fat %	Protein %	SCC (Y/N)	Other analyses
Slovak Republic	2023	Slovak Dairy Sheep	Parity 1 to 3 (1.046 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Slovak Dairy Sheep	Parity 1 to 3 (870 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	Tsigai	Parity 1 to 3 (2.574 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Tsigai	Parity 1 to 3 (1.529 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2023	Valachian	Parity 1 to 3 (33 ewes)	AC	Yes	Yes		Lactose
Slovak Republic	2022	Valachian	Parity 1 to 3 (40 ewes)	AC	Yes	Yes		Lactose

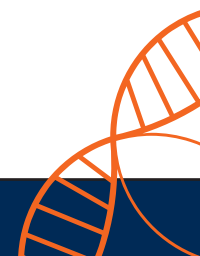


Table 4 - Recording of non-milking traits

Country	Year	Breed	Traits	On-farm recording (Y/N)	Breeding evaluation (Y/N)
Croatia	2023	East Friesian	Reproductive traits and birth weight Yes		No
Croatia	2022	East Friesian	Reproductive traits and birth weight Yes		No
Croatia	2023	Istrian Sheep	Reproductive traits and birth weight Yes		No
Croatia	2022	Istrian Sheep	Reproductive traits and birth weight Yes		No
Croatia	2023	Lacaune	Reproductive traits and birth weight Yes		No
Croatia	2022	Lacaune	Reproductive traits and birth weight Yes		No
Croatia	2023	Paska Sheep	Reproductive traits and birth weight Yes		No
Croatia	2022	Paska Sheep	Reproductive traits and birth weight Yes		No
France	2023	All Breeds	Reproductive traits	Yes	No
France	2022	All Breeds	Reproductive traits	Yes	No
France	2023	Basco-Béarnaise et Manech tête rousse	Udder scoring (20224 parity 1)	Yes	Yes
France	2022	Basco-Béarnaise et Manech tête rousse	Udder scoring (21285 parity 1)	Yes	Yes
France	2023	Corse	Udder scoring (2905 parity 1 & 2361 parity 2)	Yes	Yes
France	2022	Corse	Udder scoring (5562 parities 1 & 2)	Yes	Yes
France	2023	Lacaune	Udder scoring (46434 parity 1)	Yes	Yes
France	2022	Lacaune	Udder scoring (45693 parity 1)	Yes	Yes
Italy (AIA) ¹	2023	All Breeds	Udder Score, mophological evaluations	Yes	No
Italy (AIA) ¹	2022	All breeds	Udder Score, morphological evaluations	Yes	No
Slovak Republic	2023	All Breeds	Reproductive traits, weight	Yes	No
Slovak Republic	2022	All Breeds	Reproductive traits, weight	Yes	No

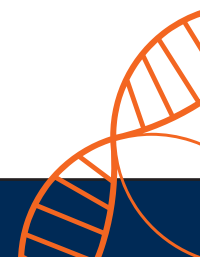


Table 5 - Milk recording equipment used in case of machine milking

Country	Year	Breed	Jar/meter	Manufacturer	Measurements (weight, volume, sample)	Approximate number in use
Croatia	2023	East Friesian	Jars	Cartel Germany	Volume -Sampler	3
Croatia	2022	East Friesian	Jars	Cartel Germany	Volume / Sampler	3
Croatia	2023	Istrian Sheep	Jars/mete	Cartel Germany, Waikato	Volume / Sampler	12/4
Croatia	2022	Istrian Sheep	Jars/meter	Cartel Germany	Volume / Sampler	16/4
Croatia	2023	Lacaune	Jars/meter	Cartel Germany / Waikato	Volume / Sampler	20/25
Croatia	2022	Lacaune	Jars/meter	Cartel Germany	Volume / Sampler	20/25
Croatia	2023	Paska Sheep	Jars/meter	Cartel Germany / Waikato	Volume / Sampler	20 / 27
Croatia	2022	Paska Sheep	Jars/meter	Cartel Germany	Volume / Sampler	20/27
France ¹	2023	All breeds	Jars	Sarl GELY Serge	Volume / Sampler	3.000
France ²	2022	All Breeds	Jars	Sarl GELY Serge	Volume / Sampler	3.000
Italy (AIA)	2023	All Breeds	Jar/meter	Waikato, Mibo, Royal, Lactocorder, Afifree, DeLaval		
				Waikato, Mibo, Royal, Lactocorder, Afifree, DeLaval		
Slovak Republic	2023	All Breeds	Fisher Slovakia - Volume	Berango / Milkovis	Volume / Sampler. No	Berango 156, Milkovis 196
	2022	All Breeds	Fisher Slovakia - Volume	Berango / Milkovis	Volume / Sampler. No	Berango 133, Milkovis 196

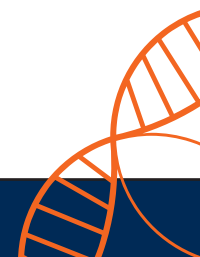


Table 6 - Breeding programme using artificial insemination

Country	Year	Breed	Fresh semen	Frozen semen	Progeny tested rams per year (bucks)	Inseminations per tested ram (buck)	Notes
Croatia	2023	All breeds					No artificial insemination
Croatia	2022	all breeds					No artificial insemination
France	2023	Basco-Béarnaise	17.341		63	120-140	63 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Basco-Béarnaise	17.486	76	76	120-140	76 rams genomically pre-selected. No more progeny test (no lay off).
France	2023	Corse	8.054		21	120-140	21 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Corse	8.053		20	120-140	20 rams genomically pre-selected. No more progeny test (no lay off).
France	2023	Lacaune	424.263		326	120-140	326 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Lacaune	420.501		309	120-140	309 rams genomically pre-selected. No more progeny test (no lay off).
France	2023	Manech tête noire	4.541		24	120-140	24 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Manech tête noire	5.015		34	120-140	34 rams genomically pre-selected. No more progeny test (no lay off).
France	2023	Manech tête rousse	53.238		167	120-140	167 rams genomically pre-selected. No more progeny test (no lay off).
France	2022	Manech tête rousse	60.578		221	120-140	221 rams genomically pre-selected. No more progeny test (no lay off).
Slovak Republic	2023	All breeds					No artificial insemination
Slovak Republic	2022	All breeds					No artificial insemination

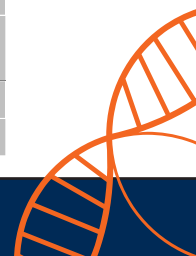
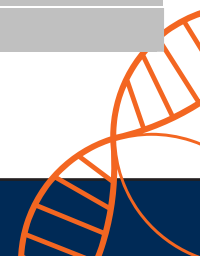


Table 7 - Molecular information

Country	Year	Breed	Genotyping method	Animals, flocks analysed	Use in routine selection	Notes
Croatia	2023	Istrian Sheep	PrP	1.002	Yes	Samples collected
Croatia	2022	Istrian Sheep				Samples collected
Croatia	2023	Paska Sheep	PrP	3.627	Yes	Samples collected
Croatia	2022	Paska Sheep				Samples collected
France	2023	Basco-Béarnaise	PrP and OvineBeadChip 60k	244 rams genotyped	Yes (genomic selection)	
France	2022	Basco-Béarnaise	PrP and OvineBeadChip 19k	1.293 rams and ewes (PrP); 247 rams on Chip	Yes	
France	2023	Corse	PrP and OvineBeadChip 60k	346 rams genotyped	Yes (genomic selection)	
France	2022	Corse	PrP and OvineBeadChip 19k	1.683 rams and ewes (PrP); 375 rams on Chip	Yes	
France	2023	Lacaune	PrP and OvineBeadChip 60k	3.819 rams genotyped	Yes (genomic selection)	
France	2022	Lacaune	PrP and OvineBeadChip 19k	8.466 rams and ewes (PrP); 3.542 rams on Chip	Yes	
France	2023	Manech tête noire	PrP and OvineBeadChip 60k	80 rams genotyped	Yes (Genomlic Selection)	
France	2022	Manech tête noire	PrP and OvineBeadChip 19k	731 rams and ewes (PrP); 109 rams on Chip	Yes	
France	2023	Manech tête rousse	PrP and OvineBeadChip 60k	663 rams genotyped	Yes (Genomic Selection)	
France	2022	Manech tête rousse	PrP and OvineBeadChip 19k	2.922 rams and ewes (PrP); 780 rams on Chip	Yes	
Italy (AIA)	2023	All Breeds	Filiation test, PnP	Filiation test 3.905 animales	Yes	Performed by Herdbook
Italy (AIA)	2022	All breeds	Filiation test, PnP	Filiation test 4.028 animals	Yes	Performed by Herdbook
Slovak Republic	2023	All Breeds	PrP genotyping		Yes	
Slovak Republic	2022	All Breeds	PrP genotyping	1.229 analysis	Yes	





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Their collaboration is acknowledged and much appreciated

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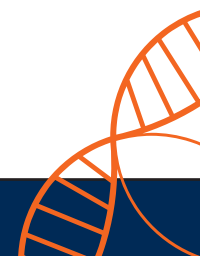
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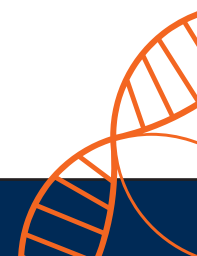
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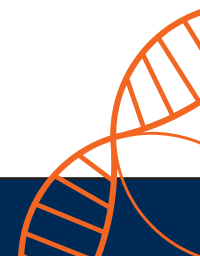
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