

ANNUAL REPORT 2022/2023



CESTR
svaz chovatelů
českého strakatého skotu



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Czech Fleckvieh Breeders Association

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INTRODUCTION

Esteemed breeders,

we are pleased to present the fourth edition of the Annual Report. This Yearbook offers a comprehensive overview of the latest developments and trends in the population of Czech Fleckvieh cows. Your diligent efforts have enabled us to maintain last year's standard of 8,000 kg of milk per lactation for cows registered in the herd book for Czech Fleckvieh. This milestone has also been achieved by the animals in the milk yield recording that belong to Czech Fleckvieh. This year's survey contains various fascinating updates, such as information on milk yield recording, insemination, and beef production. The tables showcase the most exceptional stables and cows for the current control year 2022/2023. Additionally, a new section is dedicated to the CATTLE GENOM project.

2022 / 2023



9 741 kg

AVERAGE MILK YIELD
OF ALL BREEDS



341 035

DAIRY COWS



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100 496

FINISHED LACTATIONS OF
CZECH FLECKVIEH BREED

FLECKVIEH



MILK

8 165 kg

 **+ 206 kg**
compared to
2022



FAT

324 kg
3,97%

 **+ 5 kg**
compared to
2022



PROTEIN

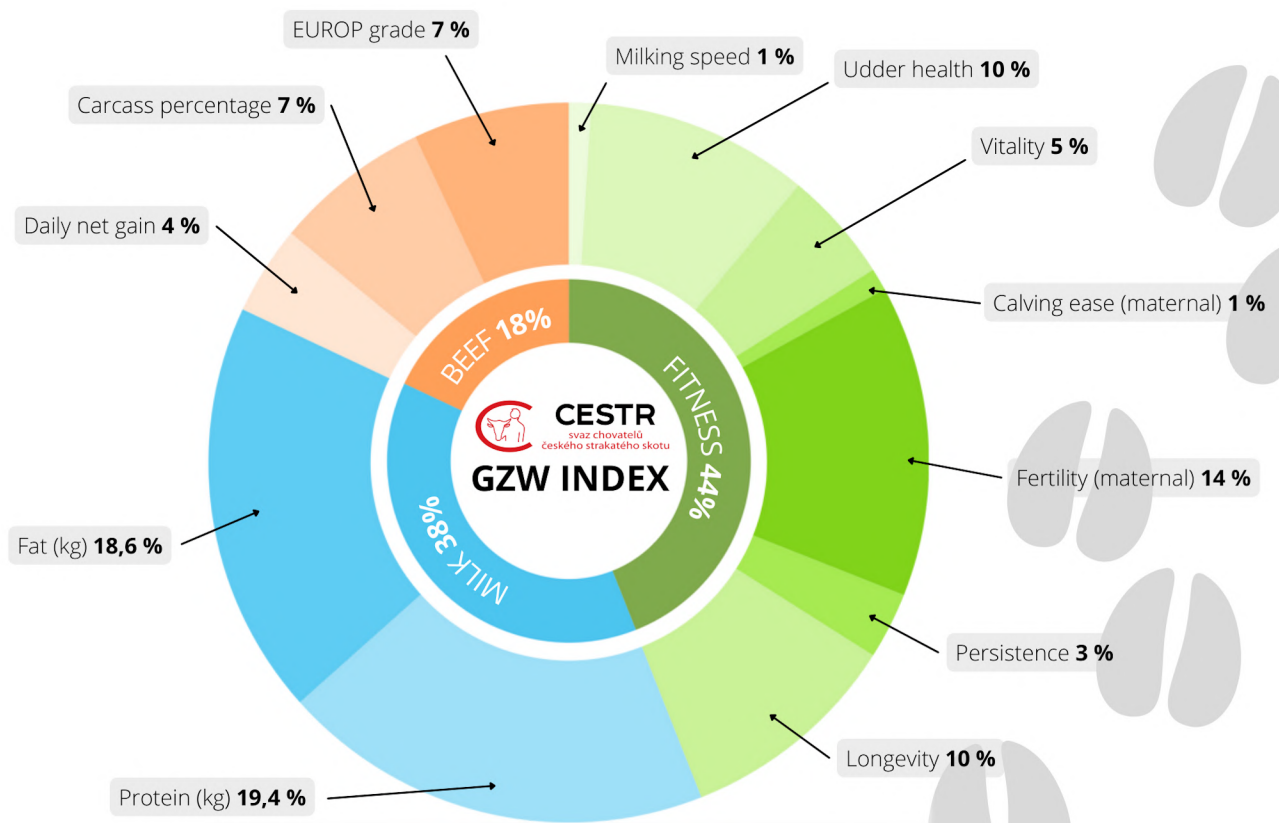
287 kg
3,51 %

PROTEIN
+ FAT

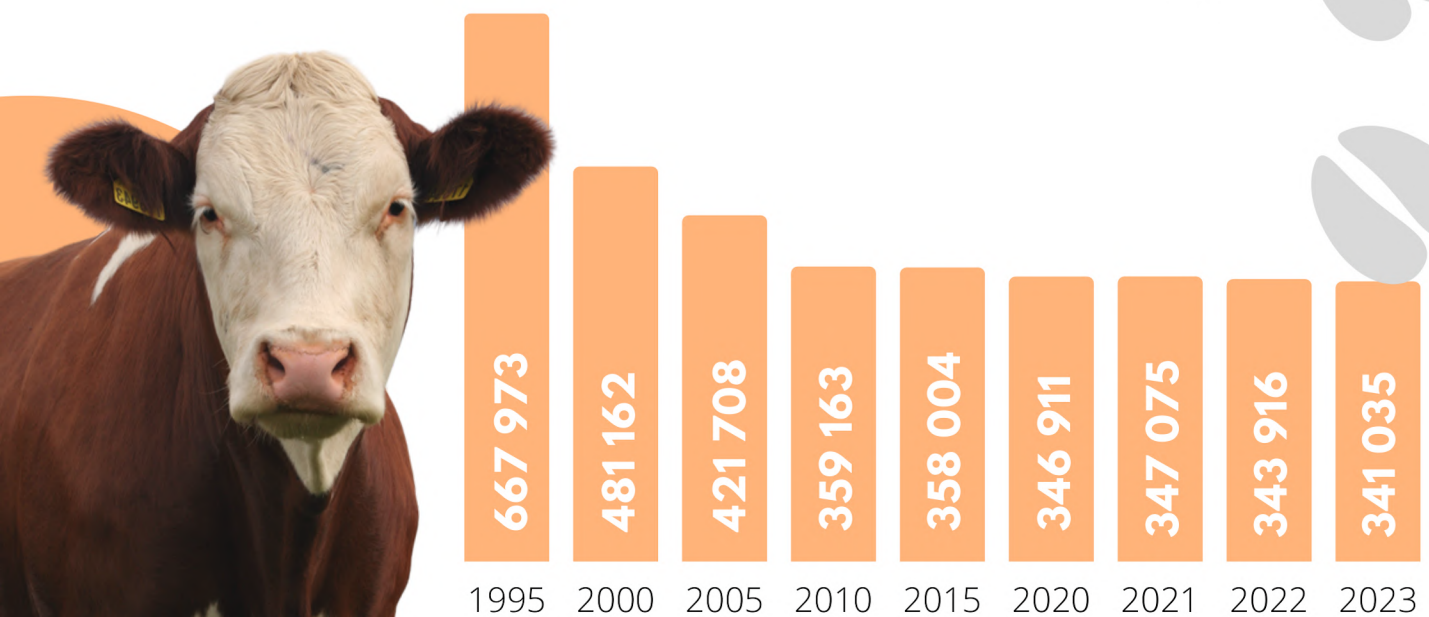
 **611 kg**
+ 12 kg
compared to
2022

 **+7 kg**
compared to
2022

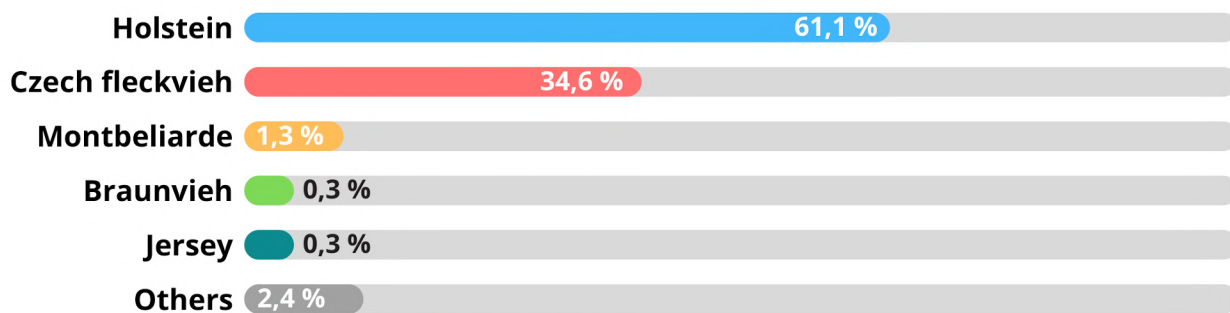
2. TOTAL MERIT INDEX (GZW) OF FLECKVIEH



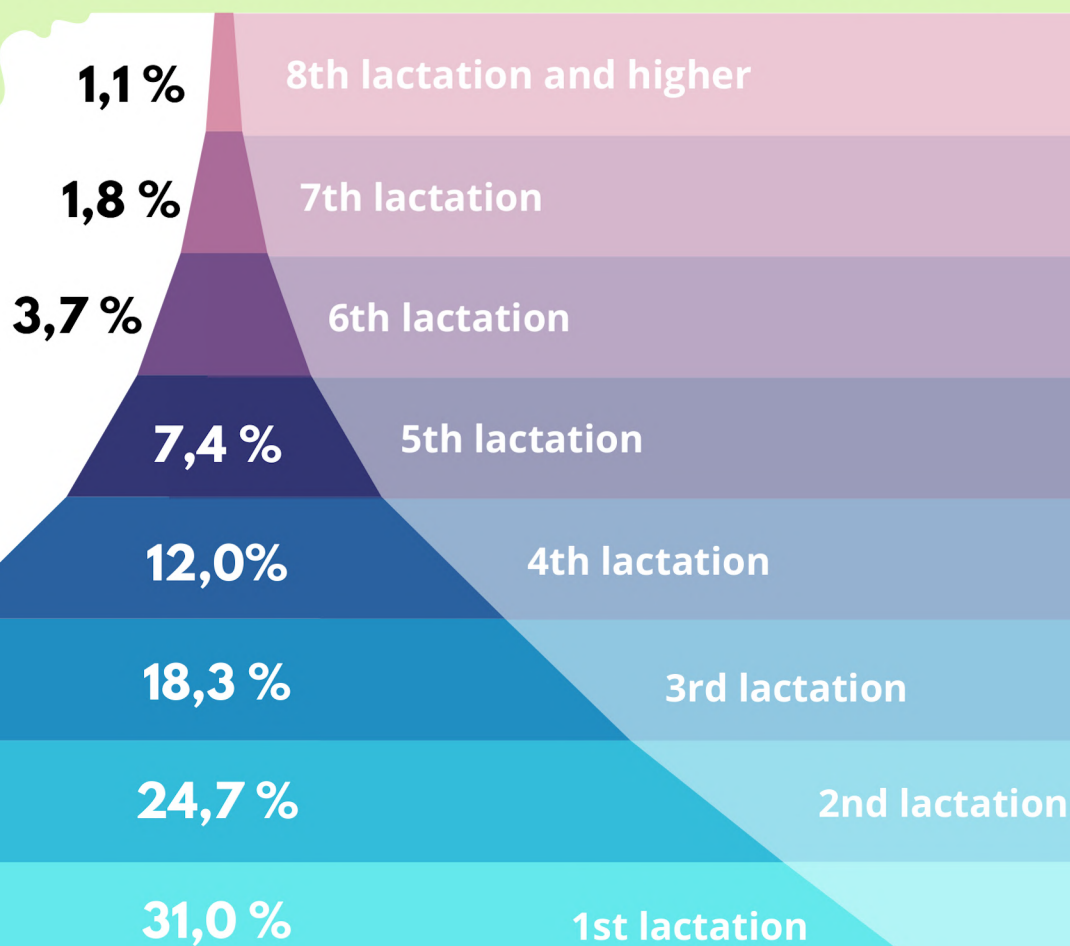
3. DEVELOPMENT OF THE COWS IN MILK RECORDING



3.1. BREED STRUCTURE DEVELOPMENT IN MILK RECORDED COWS IN 2023

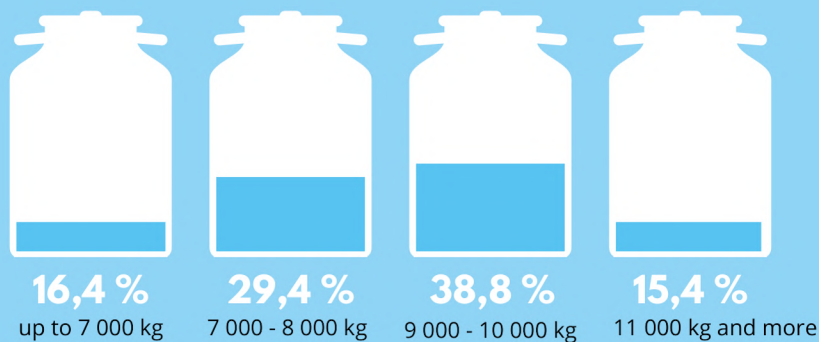
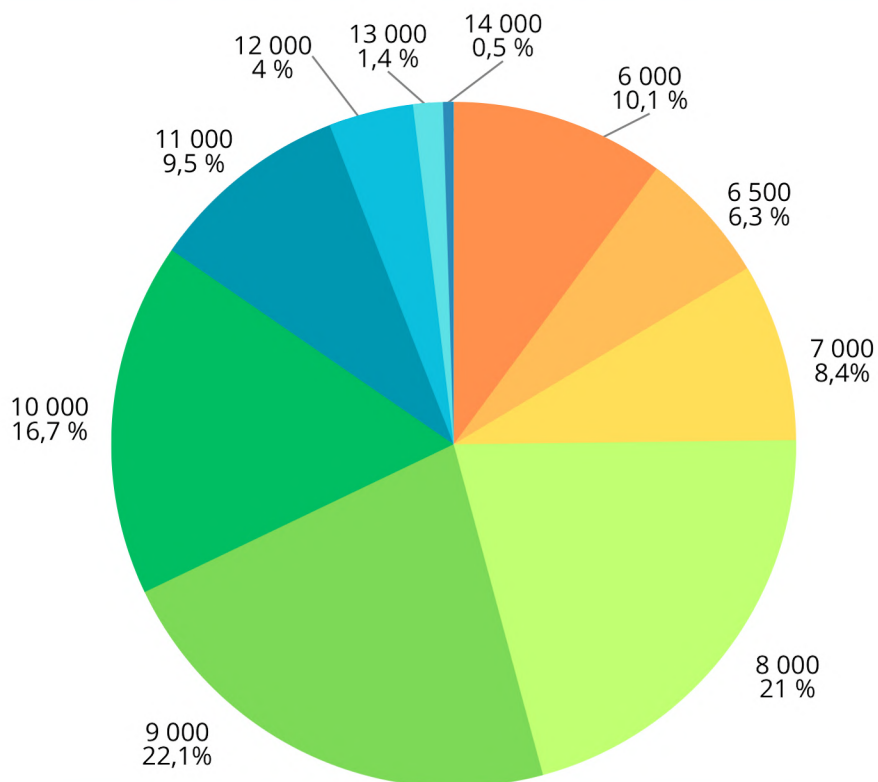


3.2. DISTRIBUTION OF CZECH FLECKVIEH COWS IN MILK RECORDING BY LACTATION (2022/2023)

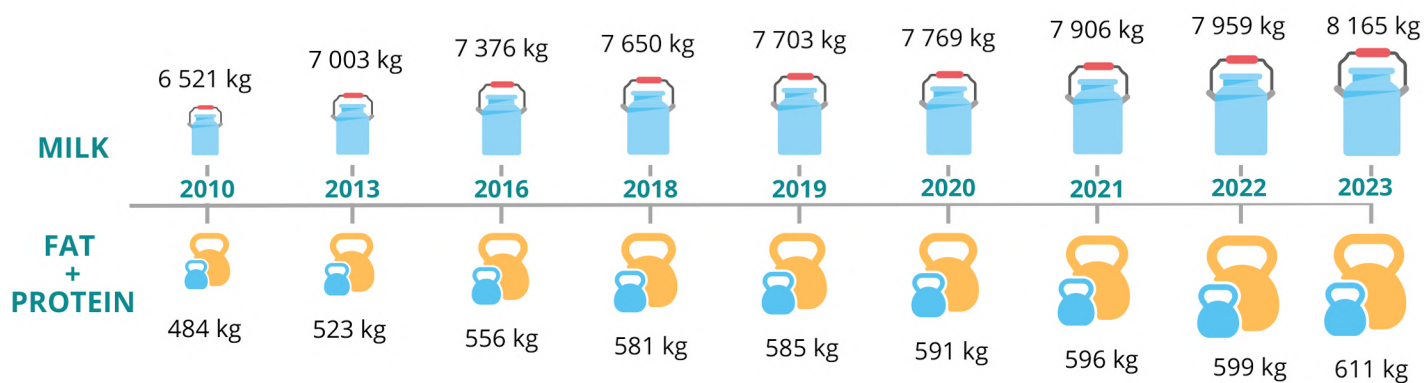


4. MILK PRODUCTION DEVELOPMENT OF RECORDED CZECH FLECKVIEH COWS IN 2022/2023

4.1. COMPOSITION OF CZECH FLECKVIEH COWS BY MILK YIELD (KG MILK)

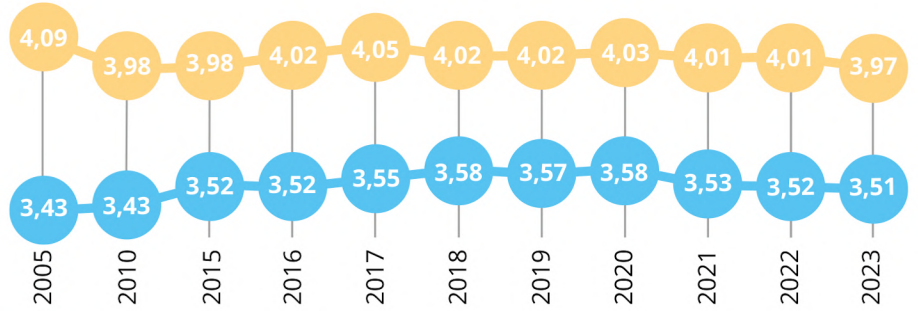


4.2. DEVELOPMENT OF MILK PRODUCTION AND MILK COMPONENTS OF CZECH FLECKVIEH COWS



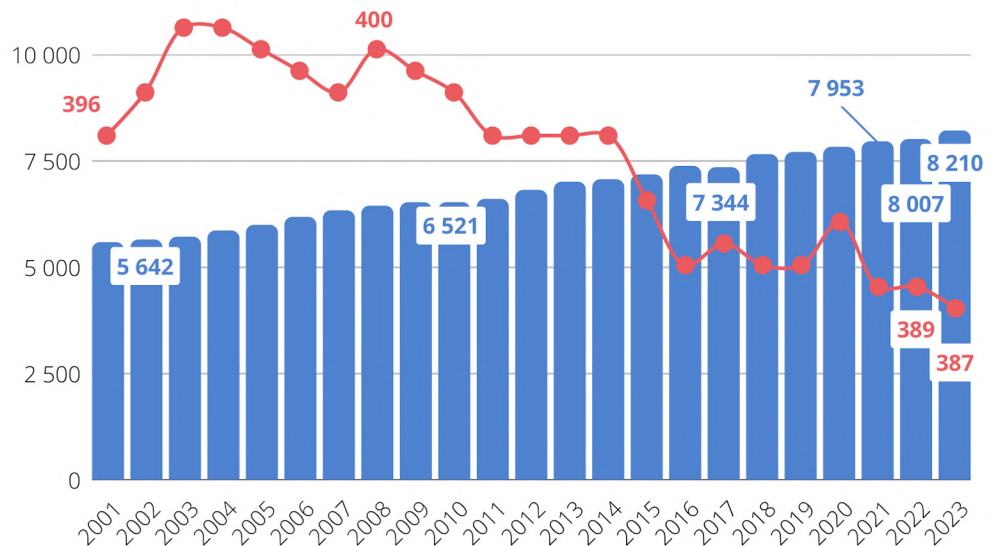
4.3. FAT AND PROTEIN PRODUCTION DEVELOPMENT

FAT %

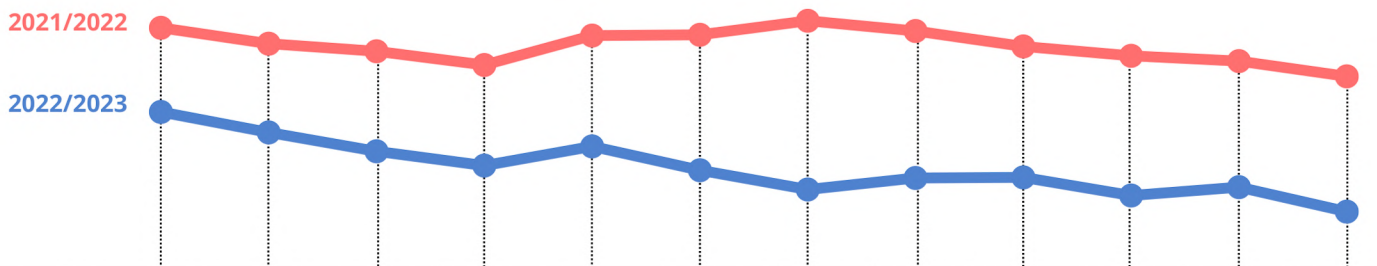


PROTEIN %

4.4. CALVING INTERVAL AND MILK PRODUCTION DEVELOPMENT OF RECORDED FLECKVIEH COWS

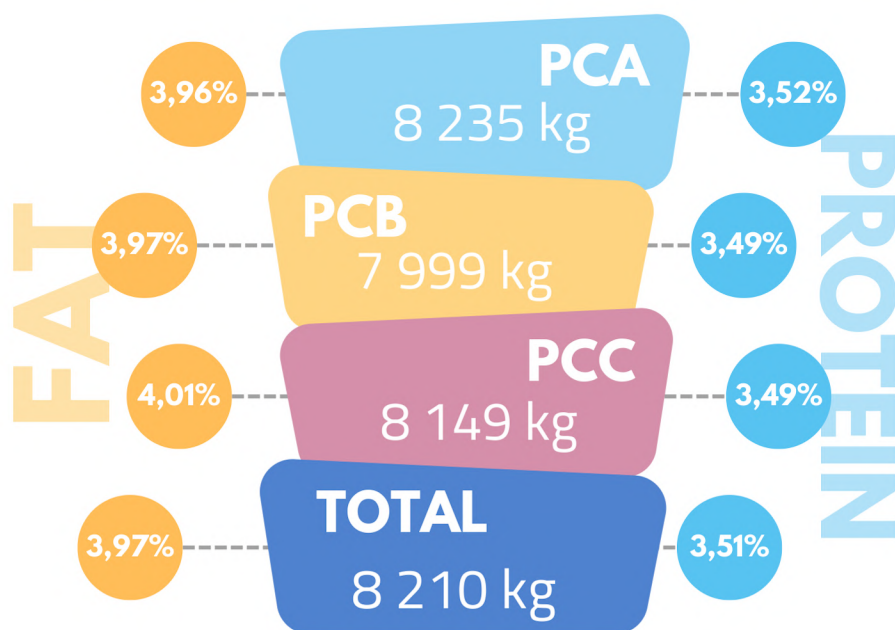


4.5. YEAR-ON-YEAR COMPARISON OF THE NUMBER OF COWS REGISTERED IN THE HERD BOOK



| | September | October | November | December | January | February | March | April | May | June | July | August |
|------------------|-----------|---------|----------|----------|---------|----------|---------|---------|---------|---------|---------|---------|
| 2021/2022 | 122 712 | 122 463 | 122 344 | 122 129 | 122 590 | 122 602 | 122 822 | 122 662 | 122 420 | 122 273 | 122 190 | 121 951 |
| 2022/2023 | 121 393 | 121 072 | 120 776 | 120 552 | 120 853 | 120 479 | 120 177 | 120 358 | 120 367 | 120 083 | 120 214 | 119 830 |

4.6. OVERVIEW OF THE MILK PRODUCTION OF THE CZECH FLECKVIEH COWS REGISTERED IN THE HERD BOOK



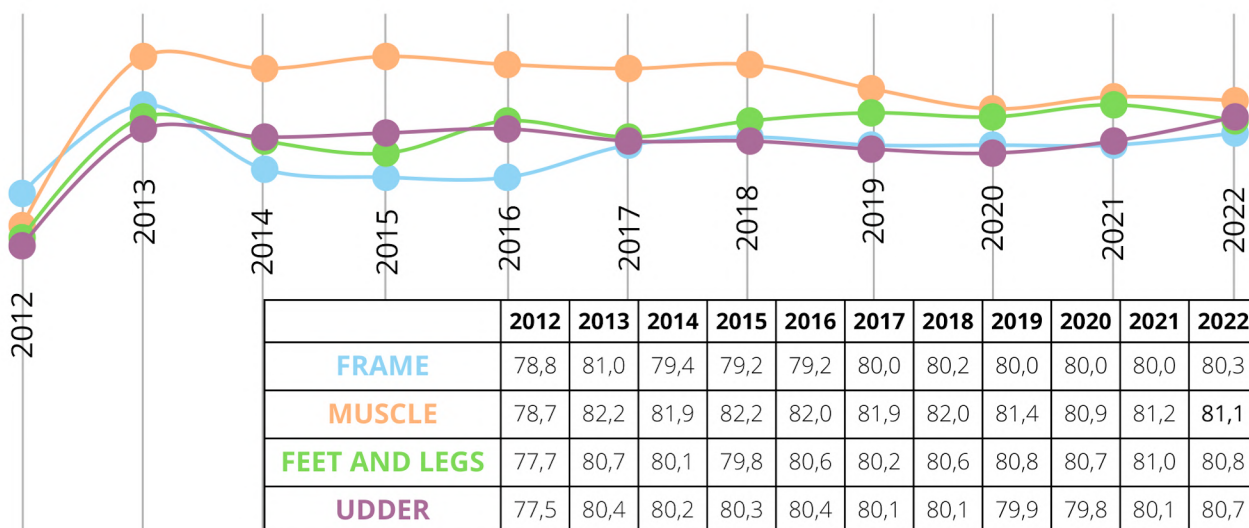
4.7. THE RESULTS OF MILK RECORDING OF CZECH FLECKVIEH COWS REGISTERED IN HERD BOOK

| | | Lactations | ∅ lactation ranking | Milk kg | Fat % | Protein % | Age of first calving / Calving interval |
|---------------------|---------------------|------------|---------------------|--------------|-------|-----------|---|
| PCA | 1st lactation | 32 316 | | 7 347 | 4,02 | 3,54 | 27/04 |
| | 2nd and higher lac. | 69 308 | 3,3 | 8 672 | 3,94 | 3,51 | 385 |
| | Total | 101 624 | 2,5 | 8 235 | 3,96 | 3,52 | |
| PCB | 1st lactation | 2 187 | | 7 078 | 4,05 | 3,52 | 27/12 |
| | 2nd and higher lac. | 8 394 | 3,9 | 8 264 | 3,95 | 3,48 | 394 |
| | Total | 10 581 | 3,2 | 7 999 | 3,97 | 3,49 | |
| PCC | 1st lactation | 2 722 | | 7 262 | 4,03 | 3,52 | 27/06 |
| | 2nd and higher lac. | 6 375 | 3,5 | 8 561 | 4,00 | 3,48 | 394 |
| | Total | 9 097 | 2,7 | 8 149 | 4,01 | 3,49 | |
| TOTAL FOR HERD BOOK | 1st lactation | 38 520 | | 7 326 | 4,03 | 3,54 | 27/06 |
| | 2nd and higher lac. | 88 450 | 3,3 | 8 626 | 3,94 | 3,50 | 387 |
| | Total | 12 6970 | 2,6 | 8 210 | 3,97 | 3,51 | |

4.8. DESCRIPTION AND EVALUATION OF THE EXTERIOR OF THE CZECH FLECKVIEH COWS BY LINEAR TRAITS COMPARING 2021 AND 2022



4.5. SUMMARY EVALUATION OF EXTERIOR OF PRIMIPAROUS COWS



5. THE BEST FARMS AND COWS IN CONTROL YEAR 2022/2023

5.1. THE BEST FARMS IN CONTROL YEAR 2022/2023 F + P

| Rank | Breeder | Farm | N lact. | Milk kg | F % | F kg | P % | P kg | F + P kg | CI |
|------|-------------------------------|------------------------|---------|---------|------|------|------|------|------------|-----|
| 1 | PODORLICKO a.s. MISTROVICE | Verměřovice MF | 402 | 10 571 | 3,86 | 408 | 3,61 | 382 | 790 | 375 |
| 2 | AGRO Posázaví, a.s. | Vadín | 57 | 11 237 | 3,64 | 410 | 3,34 | 375 | 785 | 398 |
| 3 | ZS Nalžovice, a.s. | Nová Ves VKK | 441 | 10 427 | 4,03 | 421 | 3,41 | 356 | 777 | 363 |
| 4 | ŽIHLSKÝ STATEK, a.s. | Žihle | 161 | 9 939 | 4,13 | 411 | 3,61 | 359 | 770 | 387 |
| 5 | LUKRENA a.s. | Řenče VKK CESTR | 122 | 10 507 | 3,80 | 399 | 3,51 | 368 | 767 | 363 |
| 6 | Zemědělská a.s. Horní Bradlo | Javorné | 376 | 10 468 | 3,82 | 400 | 3,44 | 360 | 760 | 365 |
| 7 | AGRA Březnice a.s. | Březnice | 481 | 9 651 | 4,27 | 412 | 3,57 | 345 | 757 | 391 |
| 8 | Zbirožská a.s. | Cheznovice | 254 | 9 726 | 4,28 | 417 | 3,47 | 338 | 755 | 395 |
| 9 | Volanická zemědělská, a.s. | Veselská Lhota VKK | 491 | 10 342 | 3,81 | 394 | 3,48 | 360 | 754 | 370 |
| 10 | ZEOS Kamenice s.r.o. | Kamenička | 199 | 10 515 | 3,70 | 389 | 3,46 | 364 | 753 | 383 |
| 11 | ZD Pluhův Ždár | K532 - C | 221 | 9 898 | 3,89 | 385 | 3,67 | 363 | 748 | 361 |
| 12 | VOD Zdislavice | Zdislavice C | 378 | 10 101 | 3,91 | 395 | 3,49 | 352 | 747 | 368 |
| 13 | DVPM Slavíkov | Slavíkov, UE, KU, INS. | 64 | 10 680 | 3,59 | 384 | 3,38 | 361 | 745 | 364 |
| 14 | ZD Libín | Libín 6R | 136 | 9 960 | 3,84 | 382 | 3,58 | 356 | 738 | 364 |
| 15 | DV Police nad Metují | Suchý Důl VKK | 358 | 9 815 | 3,87 | 380 | 3,57 | 351 | 731 | 396 |
| 16 | ZD Okrouhlička | Okrouhlička | 197 | 9 737 | 4,04 | 394 | 3,46 | 337 | 731 | 399 |
| 17 | ZOD Němětice | Úlehle | 211 | 9 756 | 3,97 | 387 | 3,51 | 343 | 730 | 388 |
| 18 | ZD Merklín u Přeštic | Zemětice | 767 | 9 590 | 3,92 | 376 | 3,67 | 352 | 728 | 371 |
| 19 | ZOD DEJAS | Dzbel | 155 | 9 820 | 3,94 | 387 | 3,47 | 341 | 728 | 376 |
| 20 | ZD Velká Chyška | Samšín | 363 | 9 204 | 4,32 | 398 | 3,57 | 328 | 726 | 367 |
| 21 | Lenka Klíčová | Mléčná farma Božice | 78 | 9 933 | 3,92 | 389 | 3,37 | 335 | 724 | 376 |
| 22 | AGRODRUŽSTVO Lhota p. Libčany | Osičky | 421 | 9 398 | 4,08 | 384 | 3,61 | 339 | 723 | 380 |
| 23 | AZOS s.r.o. | Zakřany | 114 | 9 828 | 3,83 | 376 | 3,50 | 344 | 720 | 403 |
| 24 | PROAGRO Radešínská Svratka | Rad. Svratka ŠCH | 365 | 9 479 | 4,02 | 381 | 3,57 | 338 | 719 | 359 |
| 25 | Rodinná farma Suchý | Slavětín | 74 | 9 388 | 4,00 | 376 | 3,63 | 341 | 717 | 415 |



5.2. FLECKVIEH COWS WITH THE HIGHEST PRODUCTION OF F + P IN CONTROL YEAR 2022/2023

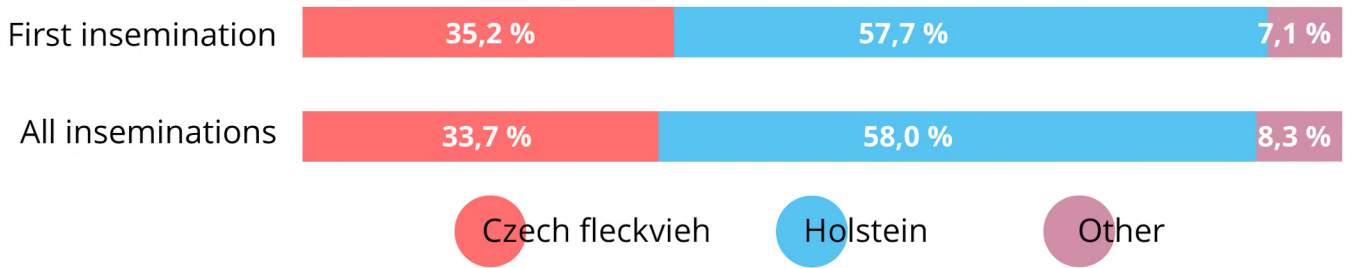
| Rank | Cow | Breeder | Sire | Sire-name | SM | Lac. | Milk kg | F % | F kg | P % | P kg | F + P kg | Calving interval |
|------|----------------|------------------------------|---------|------------|---------|------|---------|------|------|------|------|--------------|------------------|
| 1 | CZ000467430921 | VOD Zdislavice | HCH-014 | HARIBO | HEL-097 | 3 | 15 407 | 4,28 | 660 | 3,57 | 550 | 1 210 | 339 |
| 2 | CZ000467086921 | VOD Zdislavice | HG-419 | ORFEUS | AMT-070 | 4 | 15 827 | 4,03 | 638 | 3,59 | 568 | 1 206 | 370 |
| 3 | CZ000467500921 | VOD Zdislavice | HEL-115 | JUMPER | RAD-483 | 3 | 15 619 | 4,10 | 640 | 3,61 | 564 | 1 204 | 339 |
| 4 | CZ000467052921 | VOD Zdislavice | RAD-507 | NINO | NIC-015 | 4 | 15 544 | 4,13 | 642 | 3,40 | 528 | 1 170 | 377 |
| 5 | CZ000467535921 | VOD Zdislavice | HEL-115 | JUMPER | RAD-483 | 3 | 15 373 | 4,07 | 625 | 3,50 | 538 | 1 163 | 383 |
| 6 | CZ000446260953 | ZOD Žichlínek | EG-039 | EPINAL | RAD-337 | 3 | 14 431 | 4,29 | 619 | 3,64 | 525 | 1 144 | 359 |
| 7 | CZ000370144952 | ZAS Mžany, a.s. | HCH-018 | HERZSCHLAG | HG-335 | 3 | 15 861 | 3,90 | 619 | 3,25 | 516 | 1 135 | 651 |
| 8 | CZ000667771931 | AGRA Březnice a.s. | EG-039 | EPINAL | HG-329 | 4 | 12 488 | 4,96 | 619 | 4,05 | 506 | 1 125 | 339 |
| 9 | CZ000405628953 | ZOD Opatovec | EG-039 | EPINAL | RAD-318 | 3 | 16 580 | 3,44 | 570 | 3,34 | 553 | 1 123 | 562 |
| 10 | CZ000608683961 | Agrodružstvo Počátky | RAD-318 | GLORIE | AMT-050 | 6 | 14 688 | 4,17 | 613 | 3,47 | 510 | 1 123 | 372 |
| 11 | CZ000467626921 | VOD Zdislavice | HG-426 | WOBBLER | AMT-065 | 3 | 15 488 | 3,68 | 570 | 3,51 | 544 | 1 114 | 329 |
| 12 | CZ000445027921 | VOD Zdislavice | HEL-097 | CRUMBLE | UF-131 | 5 | 15 268 | 4,00 | 610 | 3,26 | 497 | 1 107 | 346 |
| 13 | CZ000478546932 | Zbizožská a.s. | RAD-487 | MOYA | RAD-451 | 5 | 14 133 | 4,54 | 642 | 3,28 | 464 | 1 106 | 400 |
| 14 | CZ000615801932 | Zbizožská a.s. | HG-387 | LECH | RAD-451 | 2 | 14 119 | 4,55 | 643 | 3,27 | 462 | 1 105 | 376 |
| 15 | CZ000327099971 | HD Určice, družstvo | BD-097 | SALDANA | HG-361 | 3 | 14 815 | 3,94 | 584 | 3,46 | 512 | 1 096 | 645 |
| 16 | CZ000421625953 | Zemědělská a.s. Horní Bradlo | HCH-024 | HUERDE | HG-329 | 3 | 14 293 | 4,16 | 594 | 3,51 | 501 | 1 095 | 330 |
| 17 | CZ000421529953 | Zemědělská a.s. Horní Bradlo | HCH-018 | HERZSCHLAG | MOR-229 | 4 | 14 817 | 3,98 | 590 | 3,36 | 498 | 1 088 | 323 |
| 18 | CZ000560539932 | ŽIHLESKÝ STATEK, a.s. | MOR-250 | MUNGO | HG-396 | 3 | 13 998 | 3,94 | 551 | 3,77 | 528 | 1 079 | 371 |
| 19 | CZ000708264961 | AGRO Posázaví, a.s. | UF-205 | HARPON | HEL-094 | 4 | 15 533 | 3,64 | 565 | 3,30 | 512 | 1 077 | 345 |
| 20 | CZ000467277921 | VOD Zdislavice | HG-416 | WALK | RAD-442 | 3 | 14 843 | 3,88 | 576 | 3,38 | 501 | 1 077 | 329 |
| 21 | CZ000467691921 | VOD Zdislavice | HCH-026 | GS HENDORF | SOB-008 | 2 | 14 646 | 3,78 | 554 | 3,54 | 519 | 1 073 | 379 |
| 22 | CZ000467731921 | VOD Zdislavice | BCH-139 | REMMEL | HG-365 | 2 | 13 806 | 4,16 | 574 | 3,59 | 496 | 1 070 | 333 |
| 23 | CZ000787072931 | AGRA Březnice a.s. | HG-442 | WAVE | AMT-050 | 2 | 12 149 | 4,95 | 601 | 3,86 | 469 | 1 070 | 509 |
| 24 | CZ000786958931 | AGRA Březnice a.s. | RAD-531 | GS VEST | HG-329 | 2 | 12 979 | 4,62 | 600 | 3,61 | 469 | 1 069 | 355 |
| 25 | CZ000375258952 | AD Lhota pod Libčany | HEL-112 | IOUPY | HEL-066 | 4 | 13 409 | 4,29 | 575 | 3,68 | 493 | 1 068 | 377 |
| 26 | CZ000377794953 | PODORLICKO MISTROVICE | HG-397 | WOHLTAT | RAD-406 | 4 | 13 681 | 4,19 | 573 | 3,61 | 494 | 1 067 | 333 |
| 27 | CZ000400726953 | Zemědělská a.s. Horní Bradlo | MOR-229 | MANTON | HG-335 | 4 | 14 136 | 4,10 | 580 | 3,45 | 487 | 1 067 | 318 |
| 28 | CZ000419695953 | ZOD Žichlínek | RAD-497 | VERMEER | HEL-068 | 3 | 13 193 | 4,49 | 593 | 3,59 | 474 | 1 067 | 362 |
| 29 | CZ000373009952 | ZEA Rychnovsko a.s. | HG-419 | ORFEUS | NIC-024 | 4 | 14 626 | 3,75 | 548 | 3,53 | 517 | 1 065 | 399 |
| 30 | CZ000467862921 | VOD Zdislavice | HG-426 | WOBBLER | HG-419 | 2 | 14 279 | 4,01 | 572 | 3,45 | 493 | 1 065 | 370 |
| 31 | CZ000467458921 | VOD Zdislavice | POL-018 | OMAGUA | RAD-442 | 3 | 14 159 | 3,82 | 541 | 3,69 | 523 | 1 064 | 434 |
| 32 | CZ000478548932 | Zbizožská a.s. | RAD-487 | MOYA | AMT-050 | 5 | 13 111 | 4,52 | 592 | 3,60 | 472 | 1 064 | 361 |
| 33 | CZ000667723931 | AGRA Březnice a.s. | HCH-018 | HERZSCHLAG | RAD-442 | 4 | 12 597 | 4,72 | 594 | 3,73 | 470 | 1 064 | 409 |
| 34 | CZ000624733961 | AGROCHEMA, družstvo | HG-391 | HELDERBERG | BA-120 | 5 | 14 867 | 3,78 | 562 | 3,37 | 501 | 1 063 | 419 |
| 35 | CZ000834504931 | ZD Chyšky | UF-205 | HARPON | AMT-048 | 2 | 12 597 | 4,48 | 564 | 3,96 | 499 | 1 063 | 331 |
| 36 | CZ000617493931 | AGRA Březnice a.s. | AMT-050 | GITAR | HG-315 | 5 | 14 028 | 4,13 | 579 | 3,44 | 482 | 1 061 | 347 |
| 37 | CZ000373089952 | ZEA Rychnovsko a.s. | HG-426 | WOBBLER | UF-183 | 3 | 14 789 | 3,52 | 520 | 3,64 | 538 | 1 058 | 475 |
| 38 | CZ000383445953 | PODORLICKO MISTROVICE | RAD-318 | GLORIE | AMT-048 | 4 | 14 734 | 3,69 | 544 | 3,48 | 513 | 1 057 | 519 |
| 39 | CZ000373078952 | ZEA Rychnovsko a.s. | EG-039 | EPINAL | RAD-337 | 3 | 13 850 | 4,03 | 558 | 3,60 | 499 | 1 057 | 397 |
| 40 | CZ000577680961 | ZD Nové Město n.M. | HG-373 | LG | NIC-015 | 5 | 13 667 | 4,11 | 562 | 3,62 | 495 | 1 057 | 483 |
| 41 | CZ000723610931 | AGRA Březnice a.s. | HCH-014 | HARIBO | RAD-318 | 3 | 14 638 | 3,91 | 573 | 3,31 | 484 | 1 057 | 362 |
| 42 | CZ000356453952 | Kalenská zemědělská a.s. | HG-408 | MAT | HG-311 | 3 | 14 443 | 4,00 | 577 | 3,32 | 479 | 1 056 | 424 |
| 43 | CZ000629504931 | ZOD PODHRADÍ | HG-402 | MOGUL | AMT-014 | 5 | 14 515 | 3,73 | 541 | 3,54 | 514 | 1 055 | 503 |
| 44 | CZ000428601953 | PODORLICKO MISTROVICE | HCH-037 | GS HUT AB | EG-039 | 2 | 13 212 | 4,17 | 551 | 3,81 | 503 | 1 054 | 339 |
| 45 | CZ000419696953 | ZOD Žichlínek | EG-039 | EPINAL | RAD-442 | 4 | 14 308 | 3,78 | 541 | 3,58 | 512 | 1 053 | 348 |
| 46 | CZ000557062932 | LUKRENA a.s. | HCH-014 | HARIBO | HG-406 | 3 | 13 527 | 4,04 | 546 | 3,75 | 507 | 1 053 | 439 |
| 47 | CZ000400669953 | Zemědělská a.s. Horní Bradlo | RAD-475 | IMPRESSION | UF-121 | 4 | 13 492 | 4,15 | 560 | 3,65 | 492 | 1 052 | 363 |
| 48 | CZ000467981921 | VOD Zdislavice | HG-393 | MESIAS | MOR-233 | 2 | 13 175 | 4,35 | 573 | 3,64 | 479 | 1 052 | 361 |
| 49 | CZ000420006952 | AD Lhota pod Libčany | TON-023 | LANDOS | HEL-078 | 2 | 13 530 | 4,15 | 562 | 3,61 | 488 | 1 050 | 437 |
| 50 | CZ000446377953 | ZOD Žichlínek | HCH-025 | OPEL | RAD-337 | 2 | 12 880 | 4,67 | 602 | 3,48 | 448 | 1 050 | 459 |

5.2. FLECKVIEH COWS WITH THE HIGHEST LIFETIME YIELD

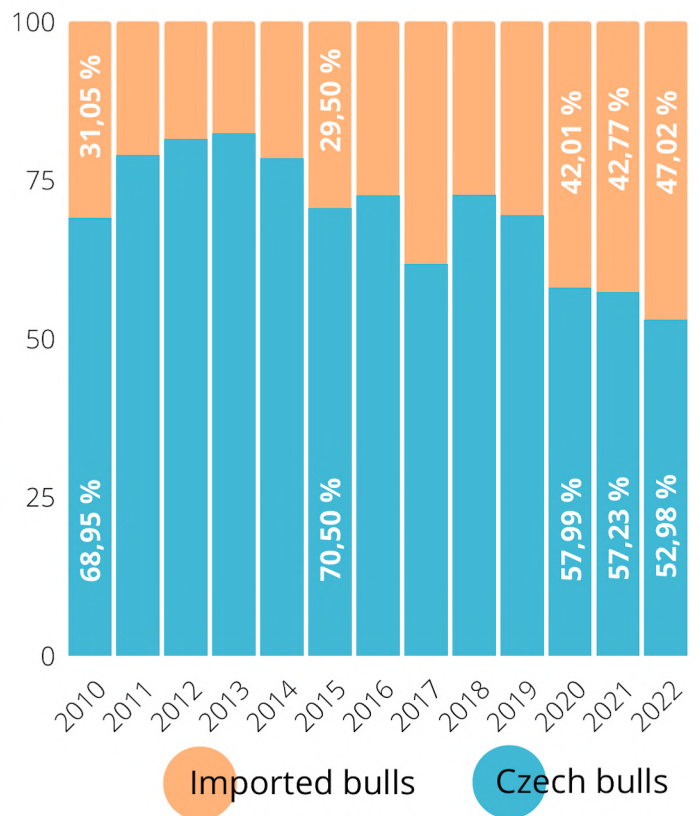
| Rank | Cow | Breeder | Sire | Lac. | Milk kg | F % | F kg | P % | P kg | F + P |
|------|----------------|--------------------------------|---------|------|----------------|------|-------|------|-------|--------|
| 1 | CZ000194781921 | VOD Zdislavice | RAD-214 | 12 | 162 116 | 3,85 | 5 924 | 3,40 | 5 225 | 11 149 |
| 2 | CZ000234061921 | AGROSPOL, Bubovice | HEL-58 | 11 | 140 936 | 3,53 | 4 286 | 3,23 | 3 919 | 8 205 |
| 3 | CZ000186697931 | ZD Bělčice | UF-068 | 11 | 137 091 | 4,27 | 4 966 | 3,56 | 4 143 | 9 109 |
| 4 | CZ000305327961 | VOD se sídlem v Kámeně | MOR-163 | 11 | 128 725 | 4,19 | 4 864 | 3,50 | 4 061 | 8 925 |
| 5 | CZ000175039931 | ZD Popelín | NIC-010 | 15 | 127 263 | 3,94 | 4 708 | 3,41 | 4 068 | 8 776 |
| 6 | CZ000403314961 | ZD Nová Ves - Víška | HG-315 | 11 | 125 629 | 3,21 | 3 759 | 3,23 | 3 774 | 7 533 |
| 7 | CZ000309883921 | ZAS Úžice, a.s. | NIC-015 | 9 | 120 268 | 3,40 | 3 656 | 3,36 | 3 612 | 7 268 |
| 8 | CZ000233210953 | ZD "Mezilesí" Telecí | RAD-321 | 8 | 118 817 | 3,97 | 3 535 | 3,52 | 3 135 | 6 670 |
| 9 | CZ000313790961 | ZD Klučov - Lhota, družstvo | HG-212 | 12 | 118 640 | 3,79 | 4 092 | 3,43 | 3 702 | 7 794 |
| 10 | CZ000143920951 | ZETKA Strážník a.s. | HG-311 | 11 | 117 407 | 3,61 | 3 769 | 3,43 | 3 577 | 7 346 |
| 11 | CZ000376855961 | ZD Okrouhlička | RAD-292 | 10 | 117 192 | 3,93 | 4 013 | 3,34 | 3 407 | 7 420 |
| 12 | CZ000207447952 | Agrodružstvo Lhota pod Libčany | HEL-060 | 10 | 116 379 | 3,41 | 3 325 | 3,47 | 3 380 | 6 705 |
| 13 | CZ000244020952 | Volanická zemědělská, a.s. | NIC-015 | 9 | 115 729 | 4,11 | 4 149 | 3,52 | 3 558 | 7 707 |
| 14 | CZ000132921971 | ZD MORAVAN | RAD-064 | 10 | 115 111 | 3,65 | 2 993 | 3,22 | 2 636 | 5 629 |
| 15 | CZ000406320961 | AGRO Posázaví, a.s. | NIC-015 | 11 | 114 534 | 3,73 | 3 985 | 3,46 | 3 701 | 7 686 |
| 16 | CZ000273312961 | DVPM Slavíkov | BCH-076 | 11 | 113 938 | 3,48 | 3 577 | 3,20 | 3 292 | 6 869 |
| 17 | CZ000456884961 | Školní statek, Humpolec | HG-215 | 8 | 113 932 | 4,31 | 3 987 | 3,44 | 3 182 | 7 169 |
| 18 | CZ000219184921 | ZS Nalžovice, a.s. | MOR-119 | 11 | 111 571 | 4,04 | 4 333 | 3,57 | 3 824 | 8 157 |
| 19 | CZ000238099952 | ZAS Mžany, a.s. | RAD-314 | 10 | 111 327 | 4,15 | 4 373 | 3,47 | 3 661 | 8 034 |
| 20 | CZ000198090932 | ZAS Koloveč | HEL-052 | 11 | 111 277 | 4,41 | 4 604 | 3,41 | 3 561 | 8 165 |
| 21 | CZ000198134932 | ZAS Koloveč | HEL-052 | 12 | 111 274 | 4,17 | 4 342 | 3,43 | 3 572 | 7 914 |
| 22 | CZ000308544921 | VOD Zdislavice | BCH-102 | 8 | 111 195 | 3,71 | 3 411 | 3,49 | 3 207 | 6 618 |
| 23 | CZ000371771931 | ZD Bělčice | UF-141 | 11 | 110 761 | 3,80 | 4 088 | 3,27 | 3 520 | 7 608 |
| 24 | CZ000208807952 | NAHOŘANSKÁ a.s. | RAD-276 | 10 | 110 705 | 3,89 | 4 113 | 3,43 | 3 627 | 7 740 |
| 25 | CZ000439589961 | VOD Jetřichovec, družstvo | HEL-070 | 10 | 110 612 | 4,10 | 4 224 | 3,48 | 3 583 | 7 807 |
| 26 | CZ000161440942 | Rodinná farma - Suchý, s.r.o. | UF-084 | 8 | 110 304 | 3,52 | 3 597 | 3,27 | 3 336 | 6 933 |
| 27 | CZ000400410961 | PROAGRO Radešinská Svratka | RAD-265 | 12 | 109 748 | 4,37 | 4 702 | 3,72 | 4 009 | 8 711 |
| 28 | CZ000259350932 | ZAS Koloveč | UF-036 | 10 | 109 701 | 4,08 | 3 789 | 3,37 | 3 132 | 6 921 |
| 29 | CZ000185390953 | ZOD "Bratranců Veverkových" | REZ-368 | 12 | 108 797 | 4,53 | 4 224 | 3,77 | 3 515 | 7 739 |
| 30 | CZ000338021961 | ZD Nová Ves - Víška | MOR-119 | 11 | 108 683 | 3,52 | 3 763 | 3,46 | 3 702 | 7 465 |
| 31 | CZ000427228961 | VOD se sídlem v Kámeně | RAD-320 | 9 | 107 416 | 4,31 | 3 789 | 3,57 | 3 133 | 6 922 |
| 32 | CZ000503547961 | ZD Nová Ves - Víška | HG-335 | 6 | 107 266 | 3,72 | 2 877 | 3,59 | 2 777 | 5 654 |
| 33 | CZ000436559961 | PROAGRO Radešinská Svratka | RAD-171 | 12 | 106 607 | 4,15 | 4 411 | 3,37 | 3 581 | 7 992 |
| 34 | CZ000282735953 | SOLVIT, s.r.o. | UF-119 | 10 | 106 163 | 4,10 | 4 189 | 3,29 | 3 360 | 7 549 |
| 35 | CZ000368834931 | ZEMPO-VOS a.s. | AMT-009 | 11 | 106 066 | 3,50 | 3 568 | 3,18 | 3 242 | 6 810 |
| 36 | CZ000264885921 | ZS Nalžovice, a.s. | MOR-163 | 10 | 105 790 | 3,82 | 3 766 | 3,46 | 3 418 | 7 184 |
| 37 | CZ000446616931 | ZD Pluhův Žďár | NIC-015 | 9 | 105 459 | 3,82 | 3 654 | 3,52 | 3 372 | 7 026 |
| 38 | CZ000222377952 | ZEА Rychnovsko a.s. | MKM-255 | 10 | 104 489 | 3,78 | 3 596 | 3,27 | 3 107 | 6 703 |
| 39 | CZ000261418952 | Agrodružstvo Lhota pod Libčany | NIC-015 | 10 | 104 174 | 3,59 | 3 655 | 3,47 | 3 531 | 7 186 |
| 40 | CZ000437454931 | ZD Ločenice | NIC-015 | 10 | 103 920 | 3,91 | 3 362 | 3,52 | 3 023 | 6 385 |
| 41 | CZ000417248931 | ZD Bělčice | NIC-015 | 10 | 103 792 | 4,29 | 4 113 | 3,40 | 3 260 | 7 373 |
| 42 | CZ000268731953 | ZD "Mezilesí" Telecí | BA-109 | 9 | 103 366 | 3,76 | 3 338 | 3,47 | 3 082 | 6 420 |
| 43 | CZ000412353931 | ZOD Kolný | UF-094 | 8 | 102 943 | 3,70 | 3 159 | 3,22 | 2 748 | 5 907 |
| 44 | CZ000247288953 | ZOD Zálší | TAR-061 | 9 | 102 914 | 3,73 | 3 438 | 3,32 | 3 060 | 6 498 |
| 45 | CZ000388321921 | AGRO DRUŽSTVO Načeradec | RAD-318 | 7 | 102 765 | 3,63 | 3 307 | 3,39 | 3 093 | 6 400 |
| 46 | CZ000227440952 | Agrodružstvo Lhota pod Libčany | AMT-019 | 9 | 102 566 | 3,94 | 3 360 | 3,46 | 2 950 | 6 310 |
| 47 | CZ000243956952 | ZD Podchlumí Dobrá Voda | RAD-277 | 9 | 102 237 | 3,77 | 3 429 | 3,74 | 3 398 | 6 827 |
| 48 | CZ000336084931 | Václav Aulík | HG-191 | 9 | 102 013 | 3,88 | 3 214 | 3,31 | 2 742 | 5 956 |
| 49 | CZ000409381961 | ZD Nižkov | BA-101 | 10 | 101 994 | 3,20 | 3 006 | 3,14 | 2 953 | 5 959 |
| 50 | CZ000219920952 | ZD Žernov | RAD-323 | 11 | 101 944 | 3,41 | 3 307 | 3,14 | 3 049 | 6 356 |

6. ARTIFICIAL INSEMINATION

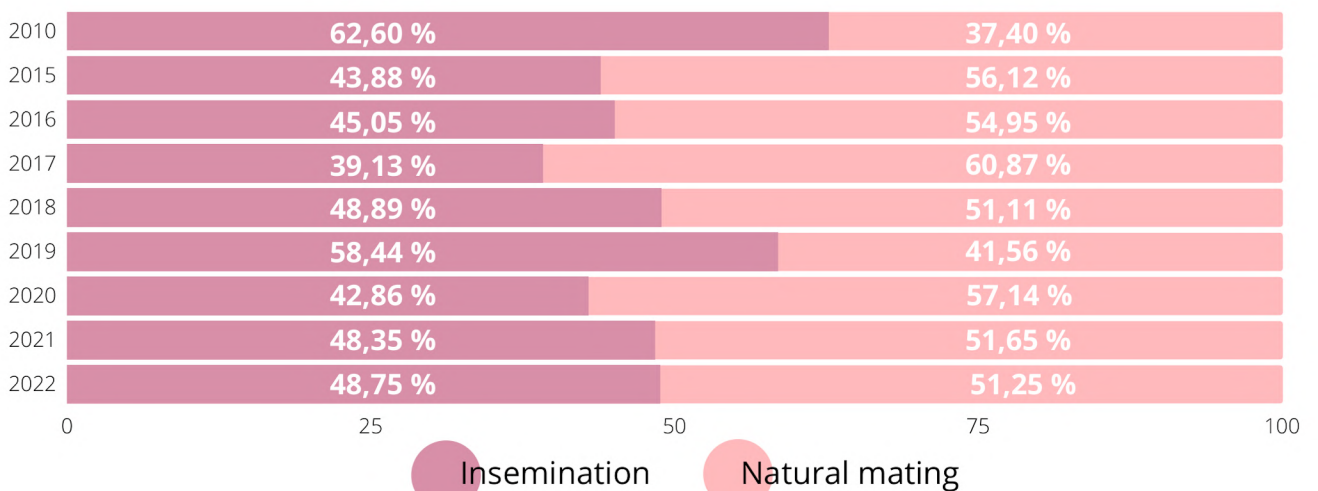
6.1. PROPORTION OF THE FIRST AND ALL INSEMINATIONS IN DIFFERENT BREEDS



6.2. THE PROPORTION OF INSEMINATIONS OF CZECH AND IMPORTED BULLS IN HERD BOOK



6.3. PROPORTION OF BULLS INCLUDED IN INSEMINATION AND NATURAL MATING



6.4. BREEDING BULLS WITH THE HIGHEST NUMBER OF INSEMINATIONS (1.1.2023 - 30.9.2023)

| Rank | Register | Name | Birth | Category | 1st ins. | All ins. | GZW | MW | FW | Country |
|------|----------|-------------|-------|----------|----------|----------|-----------|-----|-----|---------|
| 1 | BA-134 | DER BESTE | 2016 | Proven | 4 613 | 8 352 | 122 | 121 | 101 | AT |
| 2 | HCH-039 | PASCAL | 2016 | Proven | 4 055 | 8 179 | 133 | 129 | 115 | CZ |
| 3 | HG-509 | TIGER | 2019 | Genomic | 2 869 | 5 454 | 123 | 122 | 108 | CZ |
| 4 | HCH-132 | HERZTAKT | 2016 | Proven | 2 689 | 4 830 | 133 | 123 | 107 | AT |
| 5 | MOR-328 | MASKOT | 2021 | Genomic | 2 553 | 4 521 | 135 | 124 | 113 | CZ |
| 6 | BA-137 | DELUXE | 2020 | Genomic | 2 371 | 4 449 | 137 | 128 | 113 | AT |
| 7 | HG-532 | WULAN | 2020 | Genomic | 2 151 | 3 958 | 133 | 121 | 108 | DE |
| 8 | HCH-127 | HEMI | 2021 | Genomic | 2 150 | 3 739 | 133 | 128 | 107 | CZ |
| 9 | HCH-107 | HOKUSPOKUS | 2016 | Proven | 2 113 | 3 601 | 134 | 120 | 108 | DE |
| 10 | HCH-110 | GS HOERI | 2019 | Genomic | 1 718 | 3 320 | 134 | 127 | 102 | AT |
| 11 | HG-518 | WHITESTAR | 2019 | Genomic | 1 820 | 3 257 | 137 | 127 | 104 | AT |
| 12 | HG-533 | WORLD CUP | 2016 | Proven | 1 630 | 3 159 | 127 | 115 | 111 | DE |
| 13 | HG-507 | WINTERTRAUM | 2019 | Genomic | 1 652 | 3 088 | 138 | 117 | 105 | AT |
| 14 | HCH-128 | HAN SOLO | 2021 | Genomic | 1 668 | 3 036 | 141 | 131 | 114 | DE |
| 15 | HCH-055 | RICKON | 2017 | Proven | 1 597 | 2 894 | 122 | 120 | 108 | CZ |
| 16 | HG-503 | WARLOCK | 2019 | Genomic | 1 468 | 2 851 | 135 | 126 | 102 | DE |
| 17 | POL-026 | PICAR | 2018 | Proven | 1 490 | 2 685 | 122 | 113 | 96 | DE |
| 18 | MOR-324 | MONEY | 2020 | Genomic | 1 425 | 2 661 | 130 | 124 | 109 | AT |
| 19 | HCH-139 | HROM | 2021 | Genomic | 1 401 | 2 642 | 146 | 134 | 123 | CZ |
| 20 | RAD-526 | VESUVIO | 2015 | Proven | 1 289 | 2 529 | 125 | 112 | 112 | DE |
| 21 | HCH-135 | HOCHFRANKEN | 2021 | Genomic | 1 492 | 2 469 | 145 | 124 | 120 | DE |
| 22 | ZEL-145 | ZENEKA | 2020 | Genomic | 1 299 | 2 445 | 138 | 122 | 115 | DE |
| 23 | MOR-345 | MAVERIK | 2021 | Genomic | 1 306 | 2 427 | 133 | 121 | 112 | CZ |
| 24 | EG-057 | EISBAER | 2017 | Proven | 800 | 2 309 | 123 | 112 | 106 | DE |
| 25 | HCH-122 | HABANERO | 2020 | Genomic | 1 226 | 2 256 | 138 | 131 | 109 | DE |
| 26 | EG-051 | RAMON | 2017 | Proven | 1 111 | 1 942 | 126 | 123 | 122 | CZ |
| 27 | HG-403 | MAGNUM | 2013 | Proven | 946 | 1 919 | 123 | 122 | 88 | CZ |
| 28 | EG-072 | UMBRO | 2020 | Genomic | 874 | 1 793 | 126 | 114 | 112 | CZ |
| 29 | MOR-331 | MCMAZLIK | 2021 | Genomic | 883 | 1 793 | 133 | 121 | 107 | CZ |
| 30 | HG-483 | WEISSENSEE | 2017 | Proven | 999 | 1 698 | 133 | 121 | 102 | AT |
| 31 | ZEL-153 | ZELDA | 2021 | Genomic | 924 | 1 679 | 141 | 123 | 117 | AT |
| 32 | HCH-143 | HRDOBEC | 2021 | Genomic | 877 | 1 606 | 138 | 132 | 111 | CZ |
| 33 | HG-442 | WAVE | 2016 | Proven | 802 | 1 551 | 117 | 119 | 102 | DE |
| 34 | MOR-310 | MONK | 2019 | Genomic | 802 | 1 537 | 126 | 116 | 108 | DE |
| 35 | HEL-148 | RIVELIN JB | 2020 | Genomic | 857 | 1 513 | ISU = 162 | | | FR |

9 bulls out of 35 *
38 909 inseminations
∅ GZW 130,9
CZ

13 bulls out of 35 *
34 386 inseminations
∅ GZW 131,1
DE

9 bulls out of 35 *
33 334 inseminations
∅ GZW 133,9
AT

*out of 35 most used bulls (in the period 1.1.2023 - 30.9.2023)



AT

BA-134
DER BESTE



CZ

HCH-039
PASCAL



HG-509
TIGER

CZ



AT

HCH-132
HERZTAKT



CZ

MOR-328
MASKOT

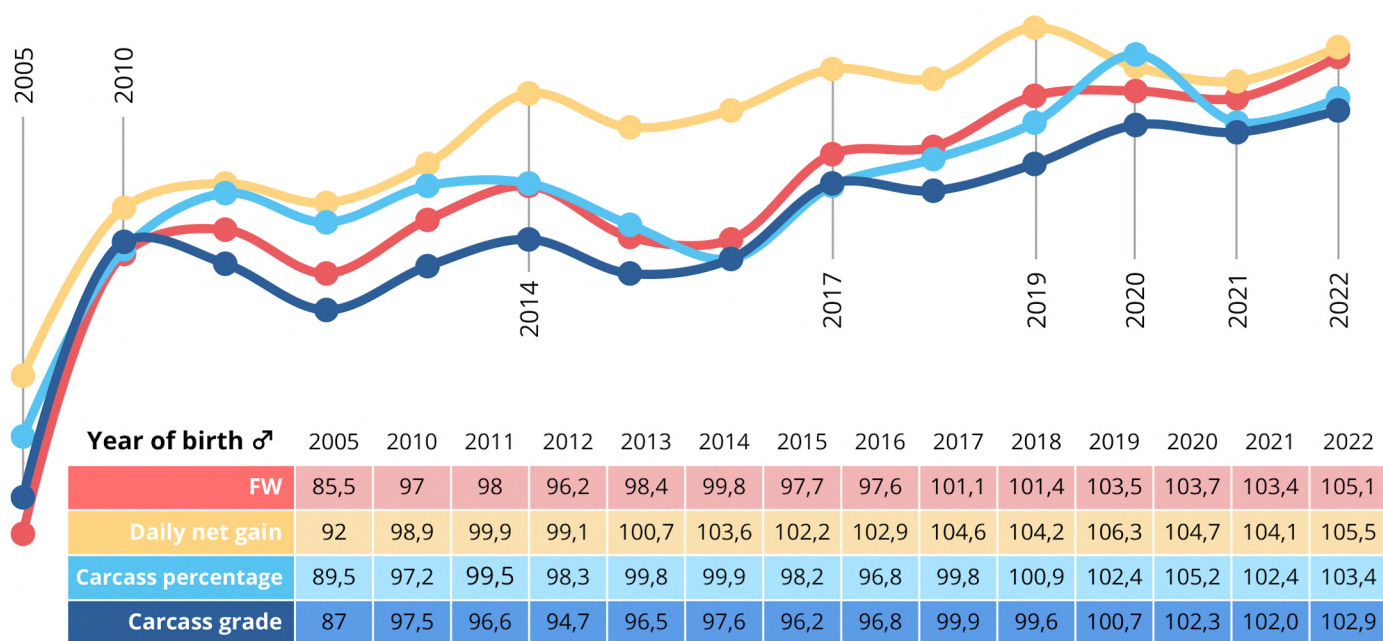


AT

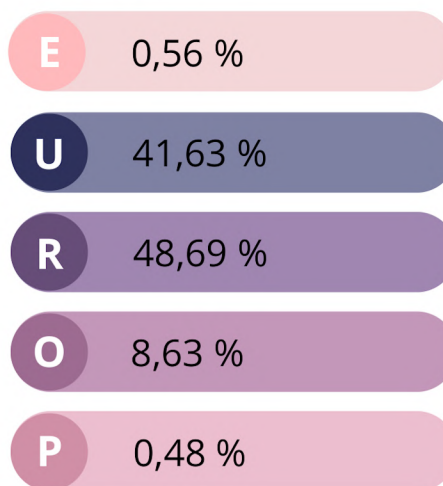
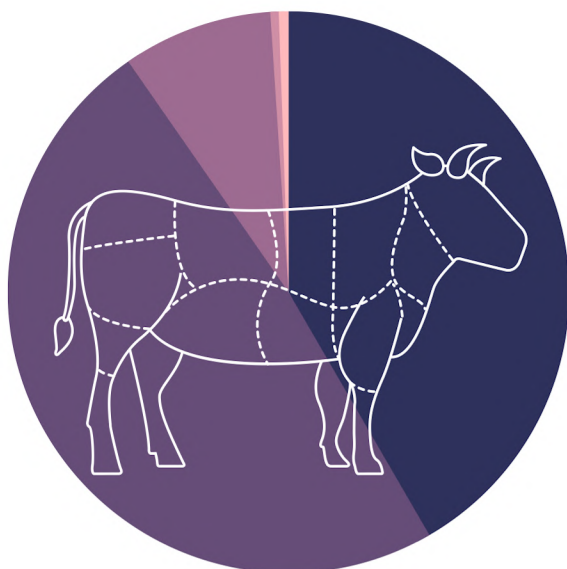
BA-137
DELUXE

7. BEEF PRODUCTION

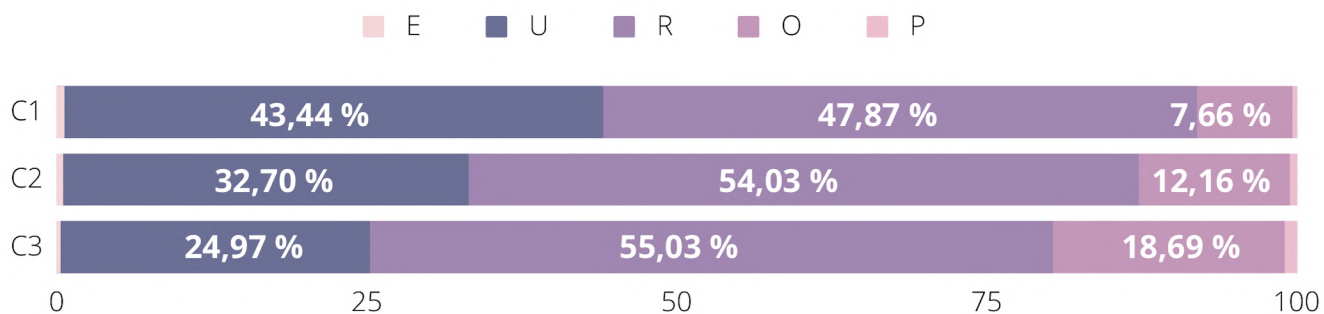
7.1. GENETIC TREND OF BEEF PRODUCTION OF YOUNG BULLS



7.2. EUROP CLASSIFICATION - CLASSIFICATION OF FLECKVIEH BULLS IN 2023



7.3. EUROP CLASSIFICATION - CLASSIFICATION OF FLECKVIEH BULLS ACCORDING TO HERD BOOK SECTION



| | E | P |
|-----------|------|------|
| C1 | 0,59 | 0,43 |
| C2 | 0,47 | 0,63 |
| C3 | 0,26 | 1,05 |



8. PROJECT CATTLE GENOM

8.1. STATISTICS FOR THE 3RD YEAR OF THE PROJECT

3.
YEAR



29 767 cows

WITH THE GENOTYPE WITHIN THE CATTLE GENOME PROJECT



53 breeders

INVOLVED IN THE CATTLE GENOME PROJECT AT THE 3RD YEAR OF THE PROJECT



41 008

CZECH FLECKVIEH WITH OWN GENOTYPE



35 721 cows

WITH GENOTYPE

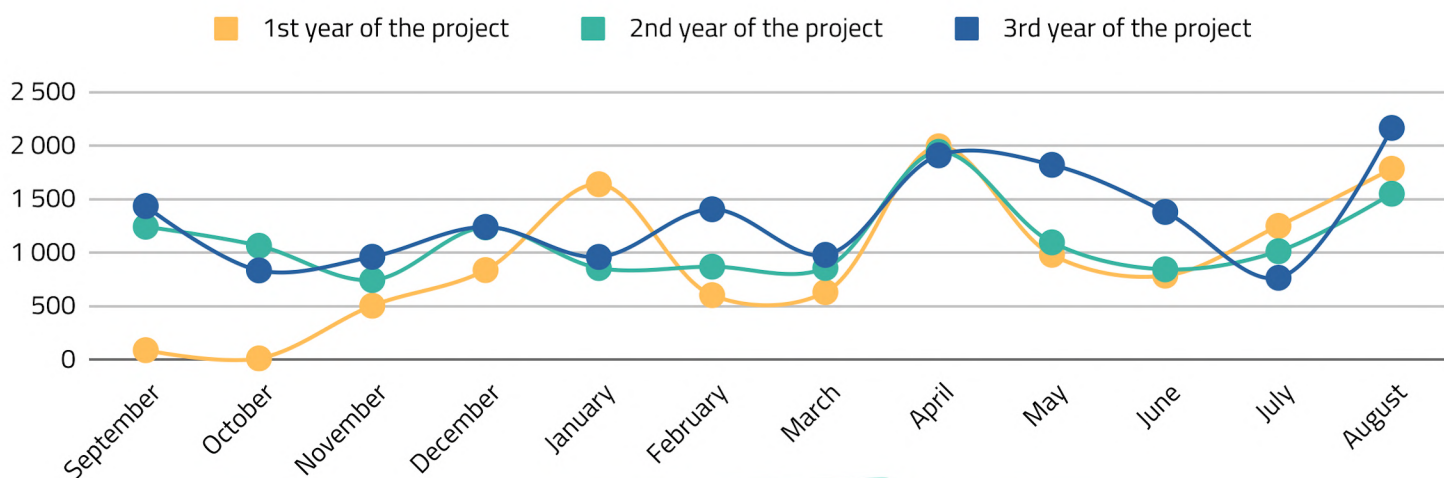
5 287 bulls

WITH GENOTYPE



CATTLE GENOM

8.2. YEAR-ON-YEAR COMPARISON OF THE NUMBER OF RECEIVED SAMPLES



∅ **925,5** received samples monthly

1st year

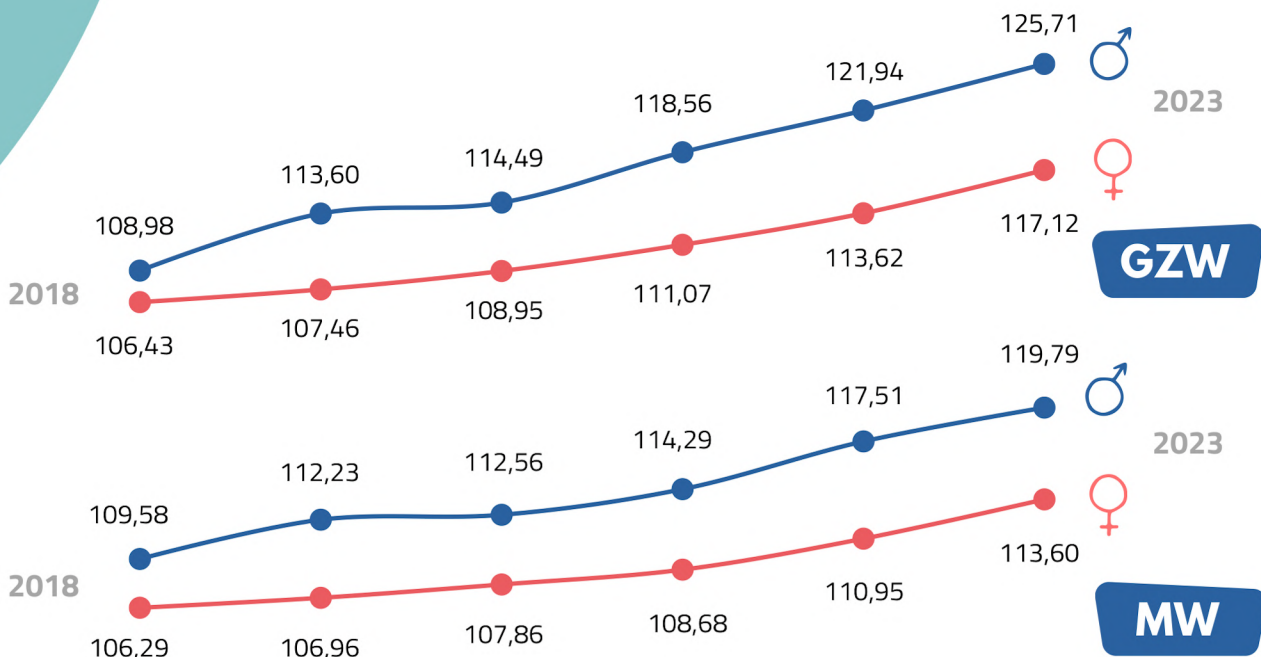
∅ **1109,3** received samples monthly

2nd year

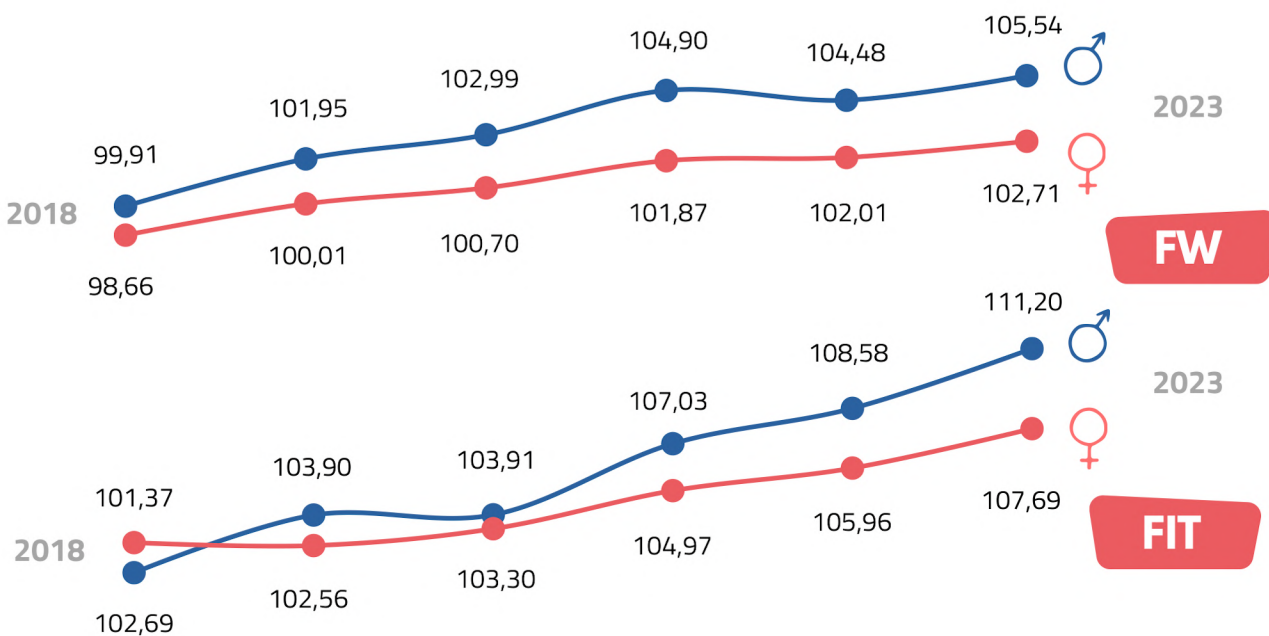
∅ **1321,1** received samples monthly

3rd year

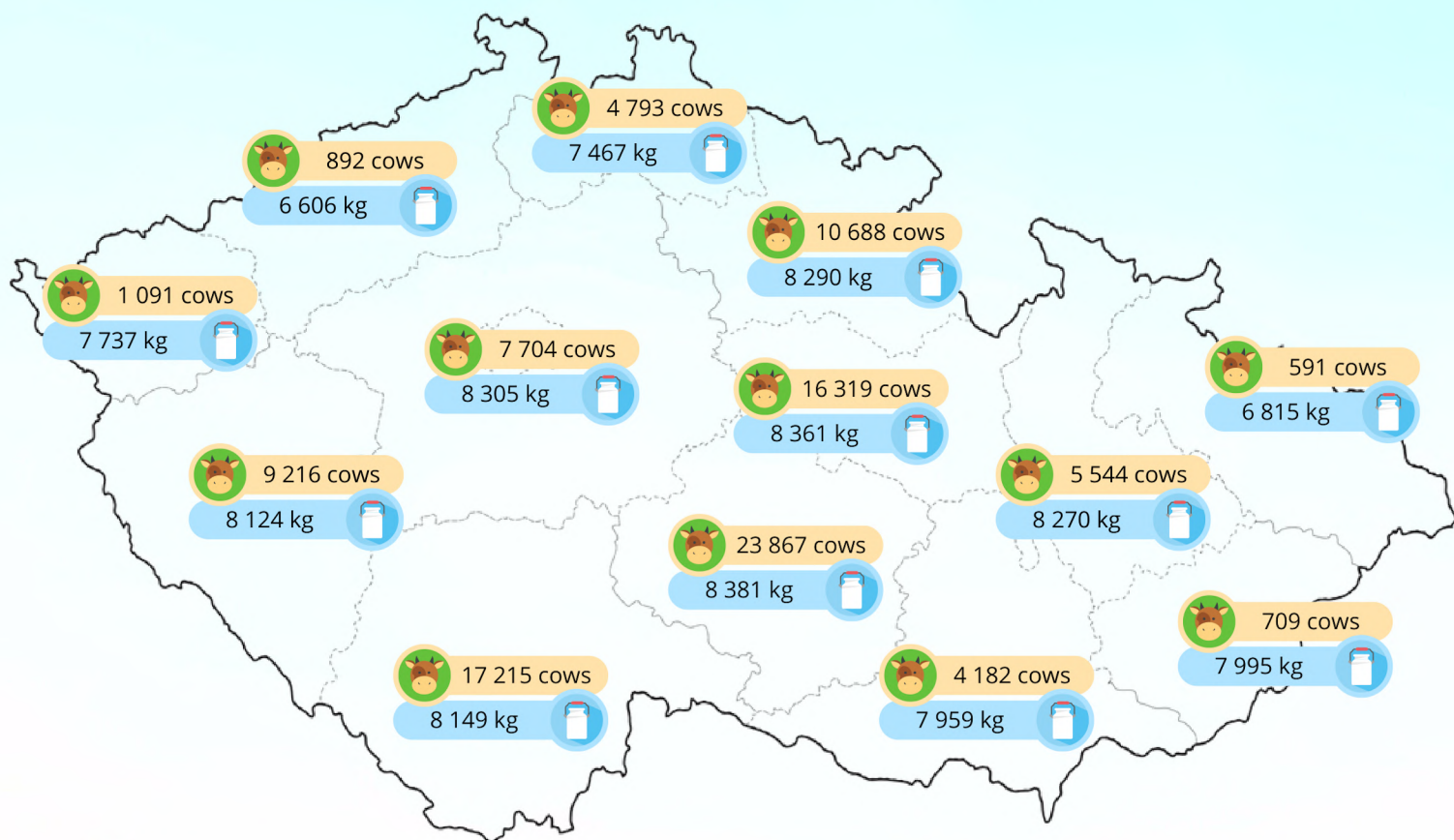
8.3. AVERAGES OF MAIN GENOMIC TRAITS OF GENOTYPED ANIMALS BY YEAR OF BIRTH



| Year of birth | ♂ Bulls | | | | | ♀ Cows | | | | |
|---------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | No. | GZW | MW | FW | FIT | No. | GZW | MW | FW | FIT |
| 2018 | 462 | 108,98 | 109,58 | 99,91 | 101,37 | 2 753 | 106,43 | 106,29 | 98,66 | 102,69 |
| 2019 | 493 | 113,60 | 112,23 | 101,95 | 103,90 | 4 228 | 107,46 | 106,96 | 100,01 | 102,56 |
| 2020 | 582 | 114,49 | 112,56 | 102,99 | 103,91 | 6 322 | 108,95 | 107,86 | 100,70 | 103,30 |
| 2021 | 786 | 118,56 | 114,29 | 104,90 | 107,03 | 8 401 | 111,07 | 108,68 | 101,87 | 104,97 |
| 2022 | 783 | 121,94 | 117,51 | 104,48 | 108,58 | 10 539 | 113,62 | 110,95 | 102,01 | 105,96 |
| 2023 | 438 | 125,71 | 119,79 | 105,54 | 111,20 | 6 232 | 117,12 | 113,60 | 102,71 | 107,69 |
| Total | 3 544 | 117,58 | 114,49 | 103,51 | 106,20 | 38 475 | 111,64 | 109,59 | 101,42 | 104,97 |



8. OVERVIEW OF THE AVERAGE MILK YIELD AND THE NUMBER OF COMPLETED LACTATIONS IN REGIONS OF THE CZECH REPUBLIC (2022/2023)



Number of completed lactations of fleckvieh cows registered in the herd book in milk recording

Average milk yield



| Region | Breeders | Stables | Cows | Lactations | Average milk yield |
|----------------------|----------|---------|--------|------------|--------------------|
| Jihočeský kraj | 96 | 115 | 20 754 | 17 215 | 8 149 |
| Jihomoravský kraj | 19 | 25 | 4 741 | 4 182 | 7 959 |
| Karlovarský kraj | 5 | 5 | 1 279 | 1 091 | 7 737 |
| Kraj Vysočina | 113 | 131 | 27 902 | 23 867 | 8 381 |
| Královéhradecký kraj | 51 | 59 | 12 139 | 10 688 | 8 290 |
| Liberecký kraj | 22 | 31 | 5 449 | 4 793 | 7 467 |
| Moravskoslezský kraj | 7 | 7 | 788 | 591 | 6 815 |
| Olomoucký kraj | 21 | 22 | 6 265 | 5 544 | 8 270 |
| Pardubický kraj | 61 | 69 | 18 231 | 16 319 | 8 361 |
| Plzeňský kraj | 42 | 49 | 10 539 | 9 216 | 8 124 |
| Středočeský kraj | 35 | 42 | 8 879 | 7 704 | 8 305 |
| Ústecký kraj | 8 | 9 | 1 041 | 892 | 6 606 |
| Zlínský kraj | 6 | 6 | 731 | 709 | 7 995 |