

# The application of reproduction reports in INTERGIS, based on official milk performance recording

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## INTRODUCTION

- Reproductive ability is the single most important component of dairy herd management.
- Reproduction traits are being incorporated in performance recording.
- Reproductive performance variables include health and production traits, nutritional needs and reproduction information.
- Ongoing information being captured in INTERGIS (see Figure 1).

### Objective:

**The development and improvement of interactive reports towards ensuring sound reproduction performance for dairy herds**

**Figure 2. Dashboard for cows in milk filtered on Lifetime Production Efficiency**



**Figure 3. Cows in milk filtered on Somatic Cell Count (SCC) > 400 000 cells/ml**

FarmID	Name	Age	Parity	DIM	Milk Yld	SCC	Lact%	n SCC > 400	SCC-1	SCC-2	SCC-3	SCC-4	SCC-5	SCC-6	SCC-7	SCC-8
1 0910	ORONGO NOKIA	6/9	5	159	31	6.64	4.54	5	337 [5]	306 [5]	302 [5]	1278 [5]	501 [4]	158 [4]	145 [4]	125 [4]
2 1113	HILL BVM NOKIA 1113	4/11	2	259	29.6	4.20	4.94	4	1331 [2]	205 [2]	1745 [2]	197 [2]	175 [2]	126 [2]	82 [1]	1121 [1]
3 1111	MC BRIDE PETRONELLA	5/1	3	143	31.6	3.41	4.63	11	6302 [3]	5514 [3]	4190 [3]	3547 [3]	1294 [2]	1301 [2]	741 [2]	1051 [2]
4 1312	TAURIE SABIE 1312	2/11	1	249	25.2	3.95	5.04	1	190 [1]	390 [1]	170 [1]	143 [1]	82 [1]	59 [1]		
5 0820	ROYAL NOKIA 0820	7/10	5	145	35	2.95	4.61	10	8624 [5]	1181 [5]	109 [5]	93 [5]	4209 [4]	1125 [4]	219 [4]	1484 [4]
6 1201	TAURIE MARK SKY 1201	4/4	2	296	25.6	1.76	4.47	11	1173 [2]	601 [2]	1188 [2]	1346 [2]	386 [2]	316 [2]	443 [1]	613 [1]
7 1216	MILLION PIETJE MARK	4/0	2	287	21.8	1.69	4.82	8	1073 [2]	688 [2]	512 [2]	1902 [2]	1221 [2]	1951 [2]		3677 [4]
8 1110	TAURIE FAWN 1110	5/1	3	274	28	8.14	4.84	4	187 [3]	172 [3]	185 [3]	191 [3]	92 [3]	1244 [3]	163 [3]	186 [2]
9 1018	PIETJE BURNSIDE 1018	6/0	3	219	25.8	6.27	4.41	5	838 [3]	340 [3]	477 [3]	222 [3]	255 [3]	307 [2]	310 [2]	306 [2]
10 1319	NOKIA BOSS	2/10	1	107	31.8	5.35	5.09	1	68 [1]	58 [1]						
11 1224	MILLION TITAN 1224	3/11	2	284	26.8	4.8	5.13	2	317 [2]	294 [2]	610 [2]	132 [2]	70 [2]	71 [2]	81 [2]	
12 0722	PETRONELLA MT 0722	8/9	7	122	43.4	4.45	4.75	15	165 [7]	87 [7]	246 [7]	891 [6]	733 [6]	122 [6]	549 [6]	596 [6]
13 1011	TAURIE DANTE 1011	6/1	5	69	38.8	4.3	4.96	6	1916 [5]	1995 [5]	555 [4]	211 [4]	799 [4]	594 [4]	116 [4]	269 [4]
14 0726	LHEROS JOCK 0726	8/8	6	103	45.8	4.1	4.77	18	244 [6]	316 [6]	845 [5]	2442 [5]	2743 [5]	1190 [5]	698 [5]	1909 [5]
15 1122	MARCUS VVN 1122	4/8	3	214	26.4	3.62	5.06	1	282 [3]	227 [3]	211 [3]	218 [3]	269 [2]	358 [2]	208 [2]	39 [2]
16 1223	BERRY HILL ROSY 1223	3/10	1	377	23.2	3.54	4.86	1	207 [1]	74 [1]	100 [1]	148 [1]	106 [1]	108 [1]	114 [1]	82 [1]

## DISCUSSION

- Reproduction and health status of the herd can easily be monitored.
- Early intervention on reproduction and health problems will exclude expenses on outside resources of replacement heifers.
- Performance of bulls can also be evaluated on production and reproduction values.

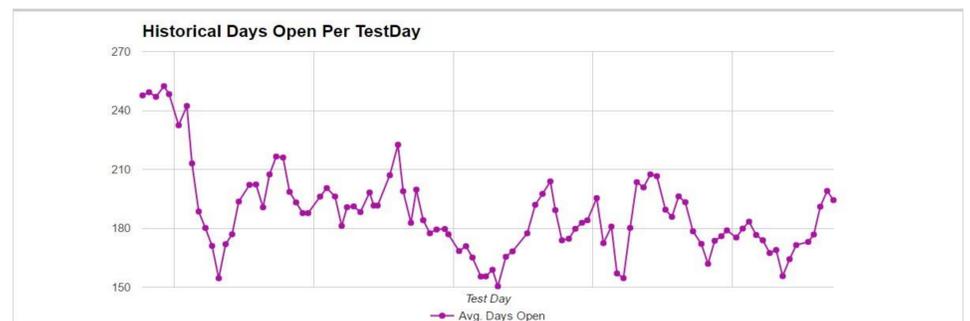
**Figure 1. Milk Dashboard on reproduction traits available in INTERGIS**



## METHOD

- An existing scientifically based program was upgraded to extend more management options.
- State of the art technology was used to develop these reproduction performance functionalities.
- Evaluation of individual cow performance was extended to cows within groups.

**Figure 4. Trend on average days open (calving to conception) for cows in the herd**



**Figure 5. Performance of bulls used in herd based on Lifetime Production Index**

Sire	Daughters	Milk Yld 305D	Solids 305D	L IDX	Pers	SCC	LPE Milk	LPE Solids	ICP	AFC	DO
1 GLENDA PLANET	4	8,902	305	107.94	86	173.03	5.83	0.199	360	33	80
2 ROUMARE TL TV	2	9,840	334	105.81	84	608.47	11.1	0.382	440.75	31	138.5
3 VAUCLOSE	3	8,965	310	105.35	85	252.31	9.57	0.333	383	33	142
4 ROYAUME TL TV	4	9,978	330	105.01	83	730.31	18.08	0.596	448.75	29	224.5
5 BERRYHILL	3	8,735	290	103.85	86	314.55	7.66	0.256	470	32	190
6 MILLIONAIRE	5	8,713	296	102.87	82	654.08	5.91	0.203	0	33	0
7 1048 JAGGER-ET	1	7,935	264	102.17	94	207	5.91	0.197	0	29	0
8 PIETJE ROUMARE 12102	1	7,518	260	99.71	96	567	5.72	0.197	0	27	0
9 REGANCREST-HHF MARCUS-ET	1	9,877	320	99.47	73	806.71	18.99	0.619	517	23	281
10 GOLDEN LOCKS BURN818	1	8,561	285	98.4	81	298.15	13.55	0.459	567	27	42
11 TAURIE TOYSTORY 0714	5	8,720	288	96.77	85	525.83	12.81	0.426	464.25	25	224.38
12 PIETJE 3 0303	1	9,600	319	95.43	79	382.67	15.39	0.524	344	33	86
13 McBRIDE 2	2	8,329	276	94.81	85	981.18	11.21	0.376	485.5	26	196.5
14 ENCINO ORONGOSA 0710	1	8,751	306	93.63	75	567.44	12.17	0.427	363	0	44
15 PIETJE MARK 2 0908	3	7,876	269	93.22	80	191.54	9.85	0.333	453	29	175.33
16 NAOMI NOKIA	1	10,130	326	90.15	86	220.1	3.3	0.109	0	30	0
17 PRETZEL ROUMARE 0721	1	7,781	254	89.11	76	651	4.63	0.148	0	34	0
18 LOTTA-HILL SHOTTLE 41-ET	3	7,759	262	86.82	90	310.08	9.27	0.31	479.33	26	201

## CONCLUSION

- Information on reproduction traits addresses the demands in health aspects and milk quality, as well as production and reproduction efficiency.
- The variety of reports offer the opportunity for animal scientists, feed consultants, veterinarians and extension officers to assist dairy farmers on aspects influencing reproduction performance.