

Web advisory tools to support dairy production in Slovenian herds

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Cattle in Slovenia



455,000 cattle 162,000 cows



.Kra102,000 dairy cowstalle



81,000 dairy cows in recording scheme (81%) 21 cows/herd

CROATIA

800 cows in beef recording



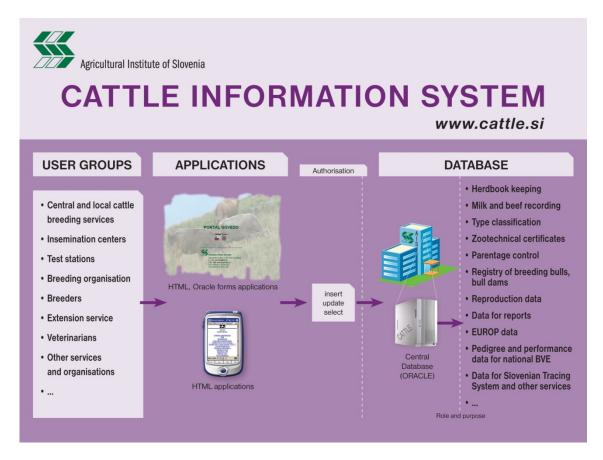


60,000 suckling cows

a LJUBLJANA



Cattle Information System





Aim

- to introduce advisory tools and services on Web Portal Cattle (WPC) for supporting management decisions in Slovenian dairy herds
- access for all herds in recording

			-
CPZ Govedo ► User DEI	<i>I</i> O		
🗄 USER DEMO	User DEMO		
😋 All animals 🕨	DEMO breeder Extend Last visit of	f Farm identity card: 03.06.15	
📩 Animal tree	Su	ummary of last TD, at:01.06.2015; 18 co	ws in MR
Animar acc	Milk yied on TD	Fat to protein ration	🔶 Urea
To avoid inbreeding •	Milk, kg 306	E 1.9 Low Comma Good	Low Commit High
Reproduction •	Fat, % 4,42 Protein, % 3,27	с £ 10	42 40 Als Assistant
☑ Dairy production ►	SCC (x1000) 275	9 1,5 1812 3 5 5 1.3	£3.8 = 3.6
Somatic cells	Tendency No. (%)	2 1.1	a 3,4 10 9
Z Longevity	Increasing 3 (16,7%) Stagnant 4 (22,2%)	14 14 14 14 14 14 14 14 14 14 14 14 14 1	3.0
Cattle breeding & environment >	Decreasing 11 (61,1%)	0.7 2,6 2,9 3,2 3,5 3,8 4,1 4,4 Protein in mik (%)	2,8 2,6 3 6 0 12 15 18 21 24 27 30 33 36 39 42 45 Urea in mik ima?000 mi)
∐ Lab ⊧	Months after calving	Bulk SSC per month	Inseminations/ Expected calvings
📅 Farm data 🕨	10]	8	1. Inseminated cows: 17 (50.0%)
Beef production >	9- 8- >7-	× 350 -	2. Open cows: 5 (14,7%)
	0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	250 - 200	3. Heifers, older than 1 year: 12 (35,3%)
	4 - 4 45 3 -		Insemination service in last 365 days
	2		All AlWith young buils All cows 48 8
			Primiparous cows 14 8
	1 2 3 4 6 7 8 10 Mesec po telitvi	JUL JUL JUL JAN NOV JANG APR MAR	Bulls out of BP 0

Recording Data Management

 SMS and/or an e-mail after processing of the recording data
 The recording results for 28.05.2015 are available.

Average sampel (calc.):

fatt: 3,85 %; protein: 3,50 %; SCC: 75.000 SC/ml

Critical cows (in 1000 SCC): SI62327752 KLARISA: 491; Bulk sumple: fatt: 3,87 %; protein : 3,46 %; SCC: 66.000 SC/ml Urea: 21.

more data on <u>www.cattle.si</u> (WPC)

Farm Identity Card

www.cattle.si

Kmetijski inštitut Sl	ovenije	CENTRAL CATTLE BREEDING DATABASE	Kilknite ti DEMO pri portala za				
CPZ Govedo > User DEMO							
USER DEMO	User DEMO						
ᡀ All animals 🕨	DEMO breeder Extend Last visit of	Farm identity card: 03.06.15					
	Su	mmary of last TD, at:01.06.2015; 18 cow	/s in MR				
Animal tree	Milk yied on TD	Fat to protein ration	Urea				
To avoid inbreeding	Milk, kg 306	≝ Metaboisable protein supply of cows E 1,9 Low Optimal Good	Uegradable proten supply of cow 4.4 Low Cobirnal High				
Reproduction	Fat, % 4,42 Protein, % 3,27	£ 14 Aihme A2mer A∂mer -					
Z Dairy production ►	SCC (x1000) 275	9 1,5 1812 1 10 7 1812 1 5 8 1,3	₹3,8 ₹3,6 ₹3,6 ₹3,6 ₹3,6 ₹3,6 ₹3,6 ₹3,6 ₹3,6 ₹5 ₹5 ₹5 ₹5 ₹5 ₹5 ₹5 ₹5 ₹5 ₹5				
Somatic cells	Tendency No. (%)						
Kongevity	Increasing 3 (16,7%) Stagnant 4 (22,2%)	14 7 Fatter 0,9 C ¹ MB C ³ MB C ³ MB -					
Cattle breeding & environment ►	Decreasing 11 (61,1%)	0,7 2,6 2,9 3,2 3,5 3,8 4,1 4,4 Protein in mik (%)	2,6 3 6 9 12 15 18 21 24 27 30 33 36 39 42 45				
∐ Lab ▶	Months after calving	Bulk SSC per month	Ureainmik (mg/100 ml) Inseminations/ <u>Expected calvings</u>				
╈ Farm data ►	10 - 9 -	Conn	1. Inseminated cows: 17 (50,0%)				
	8 -	× 350 T	2. Open cows: 5 (14,7%)				
Beef production	0 XEIX 0 X 10	≣ 300 - ≝ 250 -	3. Heifers, older than 1 year: 12 (35,3%)				
	2 te vi						
	00 3 - N N		All Al With young bulls				
		acunano 145 145 145 145 145 145 145 145 145 145	All cows 48 8				
	1 2 3 4 6 7 8 10	IZT JUL JUL JUL AAG SEP OKT AAG MAAR AAR MAA	Primiparous cows 14 8 Bulls out of BP 0				



Somatic cells

- index of somatic cell count (ISC), 1 5
 - SCC, lactation, lactation stage, quantity of milk

contribution of the SCC to the bulk tank in SCC and %

• contribution of the SCC

				Milk	scc▼	взсс	ISC	PSCT	Moriths after	Days after insem.
No.	Cow ID	Name	Lact.	kg	(x 100	0)/ml		%	calving	insem.
1	SI 63632107	ANTA	4	29	1642	275	5	56,5	3	
3	SI 63267424	JASNA	6	14,5	927	132	4	16	8	82
7	SI 63825332	HANA	3	20,6	281	88	3	6,9	1	
4	SI 13541990	CULA	5	30,5	124	72	2	4,5	2	
2	SI 14034260	ANUK	1	19,4	150	64	3	3,5	10	66
11	SI 94034255	CENKA	1	14,3	178	56	2	3	13	214
							_			



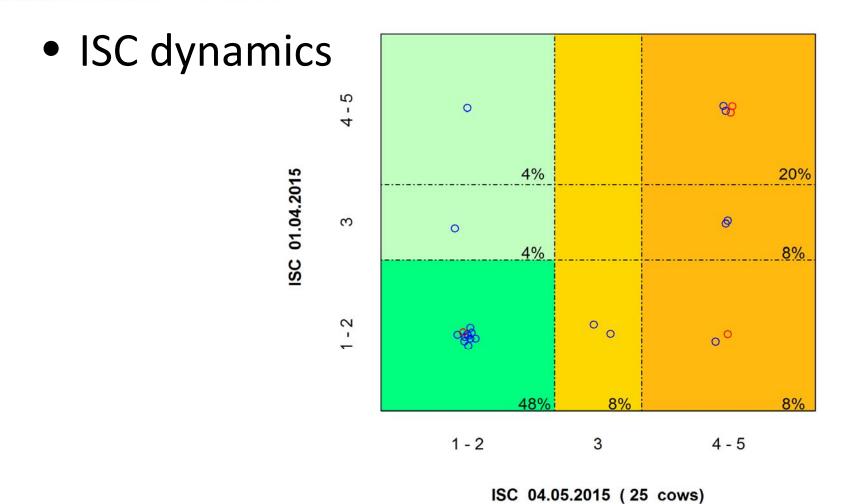
Somatic cells (2)

• ISC for the period of the last 12 TD

		Date			SCI i	in las	at 12 i	mont	hs (n	nonth	.yea	r)					Cure	ent T	D	Insemi	natio	ns
No.	Cow ID	Dry-off [l MD	L_P*	06.14	07.14	08.14	09.14	10.14	11.14	12.14	01.15	02.15	03.15	04.15	05.15	SCC	Milk	BSCC%	last	days	a11
1.	SI 63632107	01.02.15	4 78	1 - 2x M1	1	1	1	2	1	1	1	1			3	5	1461	30,5	41,9	14.05.15	20	
2.	SI 14034260		1 292					1	2	1	2	1	2	2	2	2	70	20,7	1,4	27.03.15	68	9
3.🔺	SI 63267424	31.08.14	6 238	1 - 7x M12	3	2	2			5	4	4	5	5	5	5	717	20,1	13,5	11.03.15	84	3
4.🔺	SI 13541990	27.02.15	5 46	3 - 5x M12	2	2	2	2	3	3	2	1	3			3	193	30,1	5,5			
5.	SI 23632118	30.05.14	3 342	1 - 5x M2		2	1	1	1	1	1	2	1	1	1	1	104	16,5	1,6	11.11.14	204	2
б.	SI 53632115	01.07.13	2 661	2 - 5x M2	2	2	2	2	2	2	3	5	2	1	1	1	185	10,5	1,8	07.10.14	239	8
7.	SI 63825332	29.03.15	3 31	1 - 3x M2	2	3	2	3	4	2	4	3	3	3			876	28,1	23,1			

1st > 200,000 SCC ~ lactation-f, lact. stage

Somatic cells (3)



Agricultural Institute of Slovenia

Reproduction

- Reproduction Calendar
 - monitoring and planning of the main reproduction events
 - for desired time period
 - future activities and plans calculated on previously entered events from various data sources
 - simplified entering of data

F	Period of (7 (days):25.(05.15 - 01	.06.2015		Heat	nd pregnancy	cy check plans				
No.	Animal ID	Name	Calving date	Days after calving	No. of services	Last insem. 🐴		Pregnancy check	Remark	Heat check		
1	<u>SI62958484</u>	STELA	17.05.15	8	0		27.05 - 01.06					
2	SI03199044	GINA	07.09.14	260	3	02.03.15	25.05 - 28.05	25.05				
3	SI53199049	RIŽA	13.09.14	254	2	03.03.15	25.05 - 29.05	25.05 - 26.05				
4	<u>SI53390051</u>	SAVA	03.10.14	234	1	08.12.14	25.05 - 28.05					
5	<u>SI93390057</u>	SONJA	09.11.14	197	0		27.05 - 01.06					
22	SI54043336	СІКА	25.04.15	30	0		26.05 - 01.06					
23	SI54230101				1	18.04.15	27.05 - 01.06					
24	SI44230102				1	17.04.15	26.05 - 01.06		-			



Feed Ration Planning

- define the feed basis, production price
- choose groups of cows (by lact. stages)

 average data for selected group

als												100	antes -
	*		Cat	egory			Title				Descri	ption	Date
-	9	Cov	vs 1-3 months after ca	alving		FØ	RST GROUP	2					14.05.2015 12:
	11	st of	animáls								•		
	13	State	Number 1	Name	Birth	Breed	lactation	Days	Milk yield	Fat	Protein	8	
	13	SI	13541990	CULA	25.07.2008	LS	5	27	30,1	4,10	3,32		
	13		54034266	CARA	06,09,2012	LS	1	60	18,1	4,38	3,62		
		SI	63632107	ANTA	11.11.2008	Ĉ8	4	59	30.5	3.96	2.91		
				Group avarage :		4	1	49	25.2	3.93	3.37		
	+		0		1.1	10 .				View 1	-77		
	Int	orma	tion about the an	seals and feeding						0			
				Parameter			Value		Units				
	Firs	t yea	r milk yield				6490	k	g/(305) d	ays			
	Plan	ned	milk yield				7000	kg	/ (305)d	ays			
	Dail	y milk	yield 🝙				31.0		kg/day				
	Fat	conte	nt of milk				3.9		96.				
	Pro	tein b	alance in milk				3,4		%				
	Day	s afte	r calving				49		days				
	Bed	y weig	iht				650		Kg				
	The	numt	per of animals in a g	roup or herd			7						
	Fee	ding					180		days				
			y of feedstuff feeding			_	2 times		per day				



Feed Ration Planning (2)

- feedstuffs and forage with daily needs per animal
 - needs
 - costs
- nutritional value of feed ration
- chart distance to optimal value
- prof. advices
- feed rations can be saved

						Per a	nimal		Per Gr (n=7	oup /)	In peri (180 da	ode ays)
		Fodder			Quantity	Unit	Quantity	Unit	Quantity	Unit	Quantity	Uni
	*	First cut grass silage: 2. good o	quality		11,0	kg	77.0	kg	13,9	t	1040	EUR
E		Local/domestic Hay,first cut: 1.	excelent qu	ality	2,0	kg	14,0	kg	2,5	t	504	EUR
	5	Corn silage: 2. good quality			11,0	kg	77.0	kg	13,9	t	638	EUR
		Cereal grains, maize/corn for gr	ain/Silage		4,5	kg	31,5	kg	5,7	t	1644	EUR
0		Foder premix: Jata-Emona K-MIX			2,0	kg	14.0	kg	2,5	t	A	
		Sum value			3,04	EUR	21	EUR			3825	EUR
		Parameter 💠 🕨	Units	in meal	Desire	d valu	e Alert	s	Graph		0	
т	Ű	© CALCULATE										
		med dry matter (DM)	kg DM/day	16,5	08	7,7	1	1				
		ergy needed for lactation (NEL)	MJ/kg DM	6,85	8	.24	1	-				
Trar	nsfe	er proteins (TP)	g/kg DM	99	1	10,6		-			•	
Fan	sfe	r proteins balance in meal	g/kg DM	-6,9		0	1	-				
Dry	ma	tter %	%	17,5	1	8.0	1	-				
Stru	uctu	urale value of meal	SV/kg DM	1,78	1	.08		-		-		
Sta	rch		g/kg DM	286	2	65	~	-			-	
1000	-	nydrates	g/kg DM	23		60		-			•	
Calo	iun	n (Ca)	g/kg DM	4,5	(5,8	+					
Pho	spi	orous (P)	g/kg DM	3,4		4.2	1	-				
Mag	gne	sium (Mg)	g/kg DM	2,3	-	1,8	~	-				
	ritte	n (Na)	g/kg DM	0.86		1.7	+					

Conclusion



• WPC - advisory tool to support dairy management

CPZ Govedo > User DEM	10		
🗄 USER DEMO	User DEMO		
🖏 All animals 🕨	DEMO breeder Extend Last visit of	f Farm identity card: 03.06.15	
🚵 Animal tree	Su	mmary of last TD, at:01.06.2015; 18 co	ws in MR
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	4		Insemination service in last 365 days All AlWith young bulls All cows 48 8
	;],,,,,,,,,		All cows 48 8 Primiparous cows 14 8
	1 2 3 4 6 7 8 10	III JUL ANG SEP ANG SEP ANG ANG ANG ANA ANA ANA ANA ANA ANA ANA	Bulls out of BP 0



Thank You for your attention!



