



# International Review of Best Recording Practices/Routines

37th ICAR Session 31<sup>st</sup> May - 4<sup>th</sup> June, 2010, Riga, Latvia

Presented by;
ICAR Sub-Committee on
Recording Devices



# Milk Recording in Germany





#### About DLQ

As the umbrella organisation of organised milk recording organisations in Germany, Deutscher Verband für Leistungs- und Qualitätsprüfungen e.V. (DLQ) comprises all milk recording organisations (16) and the data center in Verden.

Certification

**DIN EN ISO 9001:2008-12** 



Akkreditation
DIN EN ISO 17025



# **Agenda**



- General Rules for Milk Recording
- Preparation of Milk Recording
- Testing Procedures
- Data acquisition and data provision in Herd
- Sample Transport
- Sample accepting and analysis
- Processing Data and Inform the Farmer



# **General Rules for Milk Recording**



- Inform the farmer just before start MR
- All cows of a herd will be tested (also if sick or in heat)
- All cows are marked with official eartag



- Changes of the working procedure, the time of milking and feeding before milk recording are not accepted
- Any insets of hormones or active agents to promote the milk performance are prohibited
- The MR is realized evenhanded, conscientious, sanitarily and punctual
- Farms with two times milking start MR in the evening
- ☐ Farms with three times milking start MR at noontime



# **Preparation of Milk Recording**



- Check if the farmer information of the last MR is completed
- Boxes with vials and if necessary RD (ICARapproved) have to be ordered in necessary number
- Check for new and left cows as well as calving dates for the time period after the last MR, the data have to be listed
- Status Dry and Colostrums of the respective cows have to be listed
- conservation of needed vials
- Open "MR" in the Herd-PC/Palm (enter date and group order and box number, milking frequency and so on, vial number of the respective cow will automatically given)
- If use Herd-PC: print worksheed (number cow, box, number vial)
- if necessary the mobile RD have to be build in (only annually approved RD)

(ICAR-approved)









# **Testing Procedures**



- Identification of the cows ID (automatic Systems or visual)
- note the milk weight on worksheet or type into Palm (read proper off on display or scale, when mobile RD)
- Mix the entire milk thoroughly and transfuse it into a measuring beaker
- samplings have to be done immediately after the mixing with scaled pipette
- fill the milk sample into the correct vial, close and shake the bottle, to have a good conservation
- each cow has one bottle in which the samples of all the milkings (two or three) are collected
- empty measuring beaker after each milking
- After milking clean equipment















- ☐ If use Palm: Milk weight will be stored in the Palm-Program for every cow during the milking (data record per animal: farm number, date, box number, vial number, milk weight, milking frequency)
- ☐ If Use Farm-PC: Milk yield has to be typed in PC from the worksheet for every cow (data record per animal: farm number, date, box number, vial number, milk weight, milking frequency)



	m Drahlen	140	Fritte	à+	10	T	1	Same.	Annual Print	in single	ř
10.5		2.54	180	0.30	4-17		18	162	1.60		
of tr	(Cop 10, do 50)	_	The second	THE A	EI.	Colora	130	Gab:	-	1377	T
	Table 1			1000		-	e a				I.
1	12 20024		7	-003	н,	2.1	4			-	ť
2		359		275				_			t
5		200	2	4.00						_	t
5	78.20252	200	1 2	14.							t
	38.787	2.48	- 6	44.7					111111		t
	FOL 7700 65	0.950	100	200					1.1.1.1		Ι
1	1 2 2001 44	1.9.56	0	20.5		1111			111111	1/4	Ι
	SQ 7,000,00	26.87.8	- 6	2000		11.6		1	Life hall I		1
	12.200.00	100.00	- 17	3.02		1111		- 1			1
20.	A12 - 2704 VOS	0.705.5	77	-		111.		1.1	COLUM		1
11	1220013	10.36		-		-	-		1.613	- 5	1
34	227024		- 5	200	-	-	-	-	L. L. L.	-	+
43		10,65	77	760	-		-	-	1.1.1.1	- 1	ł
15			- 0	12	-		-	-			ŧ.
	433	تدجو	40	100			-			- 11	П
-04	58 783 55	2.00	14	236						-11	ı
9	28 122	122	1.5	10	1:1						t
14	100 935 93	100	16	20	и						t
A.	13 396			283							t
3.5	2 9 300 a	hal-	Art	20							T
25	20 10 1 THE R. P. LEWIS CO., LANS.	0.01776									t
2.2	14 7000 6	566.3	-31	604							r
25	1. 12 Sec. 6.44	6400									ı
24	27 P. 25/05/2003	4000	100	180				1.			ı
22	ALC: 200 64		1.00	0.5				3.0			ı
100		0.9856	LT	-						- 11	ı
\$	12 100 100		-37	VST		111	_			- 11	П
30		1300	70	-		11.1	-				ı
44	48.740.00	Trace		307	1		-	-			4
38	47.750256	2.500	24	243	-	1	-	-	to the last		4
53	12 88 2	de		245	1	_	-	-	C. C. C.		Į.
20			-20	237		_	-	-			ŧ.
523	\$ 200,00			206.0	-		-	-			ł
18	22.201.32	-	15	137	-	-	+	-			ł
16	12 201 80	200	11		+	-	+	1			t
15	<b>推震数</b>		25	250		-	-	1			t
40	25 128 28	22.33	3.4	33,		_		111			t
44	1490	1660	80	228		_	1	111		-11	t
	1 V. E. 2 C.A. 4 .	400	1,00			_	_	_		_	-



# Data acquisition and data provision in Herd



- □ Validity check, whether all of the data are listed (Herd-PC and Palm)
- Fill in accompanying documents (farm, date, technician, box number)
- transfer the MR-Data via dialup, mail-box, email or electronic volume to the Milkrecording Organisation (MRO)







### Sample Transport



- Provision of the samples and documents in the farm or in collecting points and transport with reefer
- Collection of the samples through own courier service according to schedule



### Sample accepting and analysis

- Incoming inspection
  - (farm, box number, sample number, conservation, fill level, completeness of the documents)
- Analysis: fat, protein, lactose, somatic cell, urea





#### **Processing Data and Inform the Farmer**



- Merging: cow number and milk weight with ingredients of milk (milk composition)
- Performance Calculation (day of MR, milking average, herd average, sliding annual performance, 100-daysperformance, 305-days-performance, annual performance, 305-daily output, life-performance, and so on)
- Data storage

#### Inform the Farmer

The MRO and the Data Center inform the farmer via:

Internet	Fax	Mail
Gorarios  Gorarios  Coperinos  Co		







# Thank you for your attention!

Certification
DIN EN ISO 9001:2008-12



Akkreditation
DIN EN ISO 17025