2001 ICAR Questionnaire on interlaboratory quality control in DHI laboratories

Summary of replies

Harrie van den Bijgaart Netherlands Milk Control Station, Zutphen



Milk Testing Laboratories Working Group

Replies (1)

	cow	goat	sheep	buffalo
Austria	X			
Belgium	X	X	X	
Cyprus	X	X	X	
Czech Republic	X			
Denmark	X			
Germany	X	X	X	
Estonia	X			
Finland	X			
France	X	X	X	
Hungary	X			
Ireland	X			
Israel	X			
Italy	X	X	X	X
Korea	X			
	Belgium Cyprus Czech Republic Denmark Germany Estonia Finland France Hungary Ireland Israel Italy	Austria X Belgium X Cyprus X Czech Republic X Denmark X Germany X Estonia X Finland X France X Hungary X Ireland X Israel X Italy X	Austria	Austria

Replies (2)

		cow	goat	sheep	buffalo
	Lebanon	X			
	Luxembourg	X			
	Netherlands	X	X	X	
	New Zealand	X			
	Norway	X	X		
	Slovenia	X	X	X	
	Spain	X	X	X	
	South Africa	X			
	Switzerland	X			
	Tunisia	X			
	United Kingdom	X			
	United Kingdom - Jersey	X			
NES,	Total	26	9	8	1
	Non-responding: 22				

Approvals, certification, accrediation

Laboratory approvals:

in 19 countries

ISO 9000 certification:

20+ % of labs in 9 countries

ISO 45001/17025 accreditation:

20+ % of labs in 5 countries



Evaluation of new methods

Evaluation of new methods:

procedure for approval:
 14 countries

body for approval:
 16 countries



Interlaboratory QA activities

National guidelines on QA:

(all parameters or partly) 15 countries

Regional/national program with IL comparisons:

(frequencies: weekly - half-yearly)

17 countries

Participation in international comparisons:

20 countries



Milk recording samples

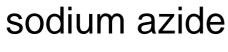
Milk sample volume

< 15 ml	1
18 - 30 ml	13
31 - 50 ml	11
> 50 ml	1

Sample preservation

bronopol

potassium dichromate



broad spectrum microtabs



Reference methods (1)

fat

Röse-Gottlieb

Gerber

IR?

protein

Kjeldahl (6.38)

amido black

IR?

lactose

enzymatic

HPLC

gravimetric

polarimetric

pH-difference

chloramine-T

urea

pH-difference

colorimetric

SCC

DMSCC

Fossomatic



Calibration samples

	F	P	L	U	SCC
bulk milk	14	12	10	6	10
ind. cows milk	7	6	7	9	8
modified milk samples					
(IDF 141 for F,P,L)	10	10	7	2	6
other	4	3	3	2	3
no calibration samples	1	1			7

majority calibrates at least monthly and after repairs/maintenance

Control samples

	F	P	L	U	SCC
bulk milk	18	17	14	11	19
ind. cows milk modified milk samples	3	4	4	8	4
(IDF 141 for F,P,L)	4	4	4	2	6
other	8	8	7	3	2

percentage of control samples: 0.2 - 10 %



specific goat and sheep milk control samples

Resumé

- Many labs approved
- Certification and accrediation gradually underway
- Networks with (I)IL comparisons are operational
- Reference for fat and protein beyond debate, attention required for lactose, (urea,) SCC
- Different sources for calibration and pilot milks
- Specific QA activities for



non-cow species are limited