



Service & Daten
aus einer Quelle

vit informiert

Official Milkrecording in Germany

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Official Milk Recording in Germany

- Official milk recording is independent from industry (A.I., herdbook)
- Organized by regional associations (13)
- Supervised by the government (until now)
- Participation is voluntary
 - ~ 70.0 % of dairy farms owning 85.0 % of all dairy cows
 - Depend on area, in the south lower, in the north higher

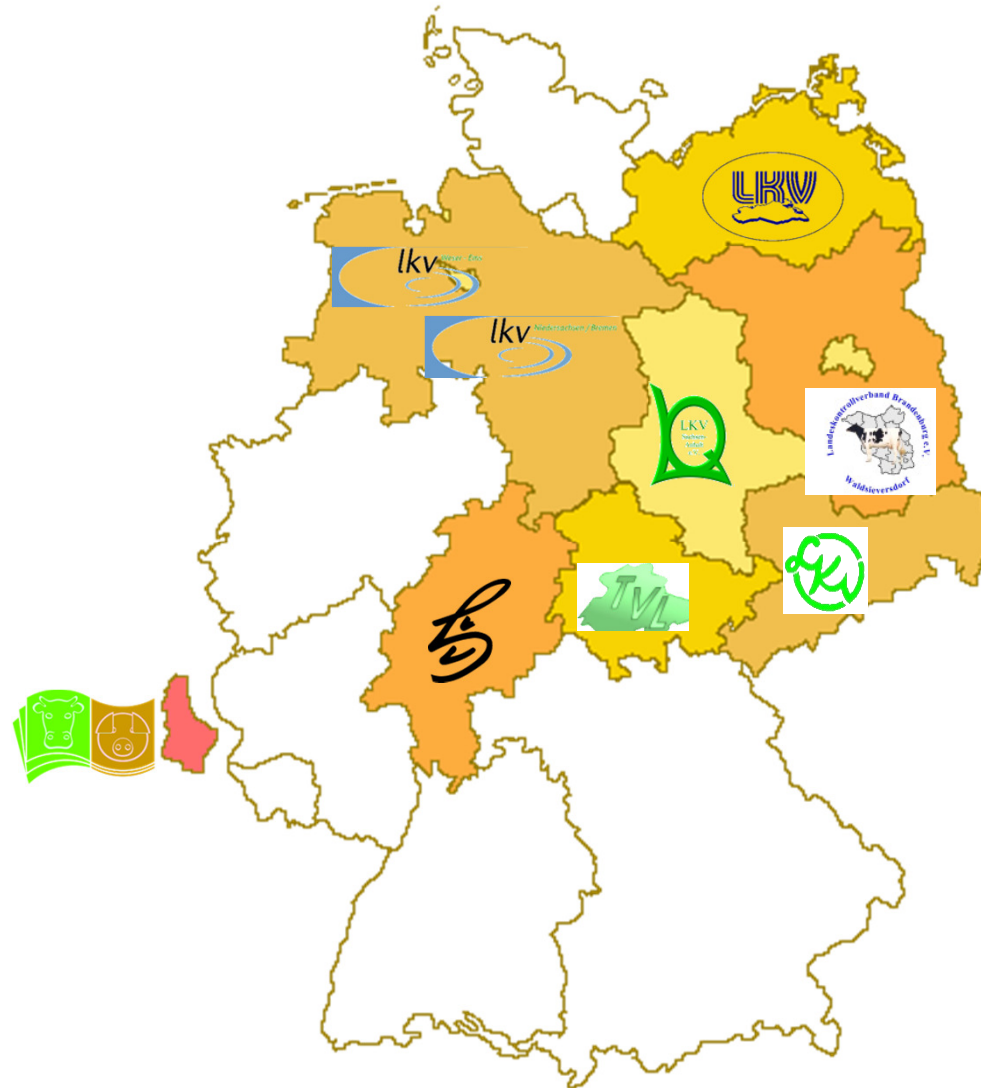
- Data processing by milk recording organizations themselves (5) or vit
- Main data source for herdbook and genetic evaluations



vit: Data Processing for Milk Recording



- for 1,650,000 Cows/month
= 75% of all officially
milk recorded
Holstein cows



ICAR systems applied

- Depends on organization
- Herd test day is labelled by recording system
- Individual cow test day is labelled by recording system
- Recording system is described by
 - Method (A,B,C)
 - Scheme (combination of type of milk recording and sample taking)
 - Recording Interval (weeks)
 - Frequency of milking per test day



Planning of recording

- Depends on organization
- For better utilization of laboratory some organizations use test day plans
 - For Example: At begin of the year all farms are randomly distributed to 4 groups. Every group has to be tested in given calendar weeks

Week of the year	1	2	3	4	5	6	7	8	9	10	11	12	13	...
Group	2	3	1	4	2	3	1	Holidays	4	2	3	1	4	...

- Farmer is informed about test day after last milking before start of test day
- All time the whole herd is tested



Data collection and sampling at farm

- by paper
- by pocket-PC- / PDA- software
- from farm PC's (herd management software)
- Milking robots (AMS)



Kontrollnummer		Kontrollnummer		Kontrollnummer	
01	02	03	04	05	06
01	02	03	04	05	06
07	08	09	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96
97	98	99	100	101	102



Data collection and sampling at farm

- All milk recording devices which are used in official milk recording have to be ICAR approved
 - TrueTester
 - Electronic TrueTester
 - Lactocorder
 - All kind of farm installed milk recording devices
- Equipment to determine the milk yield has to be calibrated every or every second year
- Connection of cow and sample
 - Barcode on bottle
 - Position of bottle in sample case
- Identification of cow
 - manually
 - Use of RFID devices or machine readable printing not in practice



Processing of yield and milk components data

- Directly after receiving
 - ~ 2 – 5 days after start of test day
 - Depends on logistic in milk recording organization

- ICAR reference methods are used to process the data



Calculations applied

- ICAR standard method of lactation calculation (TIM)
- Calculation method of daily yields from AM/PM milkings
 - Method of Liu et.al.
 - Method of Delorenzo and Wiggans
- Milk recording from AMS
 - Daily yield as an average of last 48 hours, starts with last sample
 - Lactation calculation with all milking records since last test day
(if the percentage of missing data is to high – use of TIM)
 - Milk samples are taken for a minimum of 24 hours (standard method in AMS)
 - For daily yield milk components are a weighted average of the samples per cow
 - TIM to calculate milk components for lactation yield



Information to farmer

- via
 - Paper
 - Fax
 - Email attachment (pdf)
 - Download for herdmanagementsystem
 - Standardized format (ADIS/ADED)
 - Internet application
 - Smartphone app



Information to farmer

- vit processes the DHI data 6 days a week
- farmer can choose from more than 60 different lists
 - herd summaries
 - animal lists with current test
 - animal lists with aggregated data (within lactation/year)
 - lists with breeding values and conformation
 - lists with udder health status and attention lists
 - lists with energy status (urea)
 - management lists for fertility, calving, etc.
 - registration and check lists from I&R
 - lists of young stock
 - Health data report
 -
- Yearly reports for animals and herd






Rules applied to have official record

Data processing according to:

- international rules (ICAR)
- national rules (ADR)
- additional request from clients (milk recording organizations)



What is ok, what is not ok

Okay:

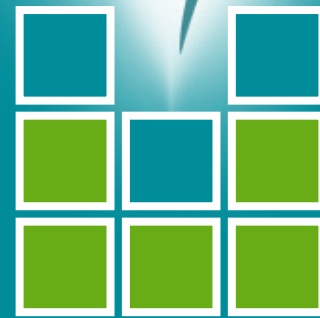
- ICAR guidelines are the frame for milk recording
- Enough room to adapt the rules on national standards
- Often there are alternative methodes in the guidelines

“Not okay” (personal point of view)

- ICAR guideline on missing results and range of daily test values has to be adapted to new technology (AMS)



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