



Hygiene surface quality analysis – Ruminants

Agar films/Sampling methodology

Compliance with a course of identical action for all samples during all controls is crucial.

Equipment used:

- ▶ Agar film with neutralizer allowing control of TOTAL FLORA.
- ▶ Indelible felt-tip pen
- ▶ Sterile gloves

Contact boxes storage:

Store in a cool dry place (Optimum 8-15 °C). Use before the expiry date on the box. Do not use agar films if there is any sign of growth before opening. Slides remain usable while the agar is smooth and attached to the slide. A small amount of water may collect in the bottom of the tube. This is condensate from the agar and does not affect performance, provided the agar still fills the tray.

Method of use:

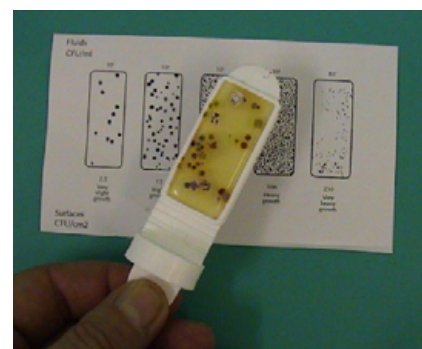
- ▶ Inoculation (Surfaces)
 - Samples are taken no earlier than 12 hours after the disinfection operations (dry surfaces)
 - Wash hands immediately before taking the sample and use disposable gloves
 - Remove cap and withdraw combined cap/tongue unit. Do not touch culture gel.
 - Holding the slide by the tabs at each end, press one side of the agar for 10 seconds against the surface under test. The ribbed portion above the agar will bend to allow full and constant pressure contact.
 - Repeat with the second side on an area close to the first sampling surface (20 cm² in total).
 - Replace the slide in the tube, seal firmly, label as required, and incubate 24-48 hours at 35 degrees.



1. Remove contact slide from its tube and press against the surface to be tested.



2. Turn the contact slide over and repeat the procedure with the second side. Replace the slide in the tube and incubate for 24-48 hours 35 °C



3. At the end of the period of incubation, read the results against the chart.

Samples distribution and identification

Table 1. Ruminant/Calf pens: 10 samplings

Location	Code	Nb of samples
Buildings		
Ground: central corridor	CC	1
Ground: external corridor	EC	1
Gable wall (> 1 m)	GW	1
Wall (length of the building)	WL	1
Calves Boxes		
Buckets	B1/B2	2
Duckboards	D1/D2	2
Hut walls	H1/H2	2

Interpretation

Table 2. Interpretation scale – Bacteria (red spots):

Colonies/Box	Quotation
0 to 9	Very good
10 to 49	Good
50 to 150	Acceptable
> 150	Bad

Disposal

Used slide should be incinerated, autoclaved or soaked in disinfectant before disposal.

Monitoring frequency

- ▶ in farms where results during a first check are good, a semi-annual check is sufficient.
- ▶ when the cleaning-disinfection has been judged to be average, the farms could be subject to further checks.
- ▶ in the case of farms with strong health problem or farms for which hygiene is not well controlled, it is advisable to carry out more continuous monitoring over time until the overall level of contamination has reached the acceptable threshold.
- ▶ a check is indicated following significant changes in the cleaning-disinfection protocol.

Conclusions

The frequency of checks depends on the type of breeding and the requirements of the breeder or the organization. Hygiene monitoring allows the breeders to follow up the efficiency of cleaning and disinfection operations, to optimize their daily practice and to enhance the value of often boring and difficult work.