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## Comparison of Heat Detection Methods in Dairy Cattle

Oestrus detection is an increasing problem in UK dairy cows; cows show fewer behavioural signs of oestrus and for a shorter duration of time.

Liverpool University recently undertook a study comparing the various heat detection aids available.

A group of high yielding Holstein cows were recruited from twenty days after calving and fitted with both a pedometer and neck collar. The cows were also allocated a heat mount detector (scratchcard or kamar) or no heat mount detector to check the reliability of farm staff observation.

The farm staff observed for oestrus for a period of ten minutes six times a day. The cows were tested for progesterone in the milk daily to show when they actually were in oestrus.

### Results

The group of cows were followed for 6 months. Both the detection rate efficiency and accuracy of heat detection were measured. The results are shown in the table below.

For example Kamar detected 57% of heats and when the Kamar was triggered the cows were actually in heat 61% of the time.

Farm staff observation is still very effective with 57% of the heats detected and they were correct 92% of the time.

<b>Detection Method</b>	<b>Detection Rate (Efficiency)</b>	<b>% True heats (Accuracy)</b>
Kamar	57%	61%
Scratch Card	36%	64%
Neck Collars	59%	94%
Pedometers	63%	74%
Farm Staff (observation)	57%	93%
Neck Collar & Kamars	76%	63%
Neck Collar & Farm Staff	75%	92%
Pedometer & Farm Staff	74%	68%

The best results were achieved with neck collars and farm staff observation when 75% of bulling cows were detected with 92% accuracy.

## Conclusions

- **Worryingly 26% of heats remained undetected by any method!**
- There was no statistical difference between the detection rates of the various methods apart from scratchcards which were less efficient.
- Cows with poor body condition score (less than 2), lame with a mobility score of 2 or more or yielding more than 54 litres of milk a day were most likely to have missed heats - no surprises there then!

One tube should be infused every 24 hours for a total of three days. The milk withdrawal is 132 hours after the last dose.

## Forthcoming Meeting on Mastitis

We are holding a meeting for dairy clients on Tuesday September 27<sup>th</sup> starting at 7.30pm at the Doveridge Village Club.

The theme of this meeting will be mastitis and as well as an overview on mastitis there will be information presented on the benefits of using a non steroidal anti inflammatory drug alongside antibiotics in the treatment of mastitis.

## Ubro Yellow is back!



Ubro yellow, previously known as Leo Yellow, is now back in stock after a prolonged period of absence due to manufacturing problems.

Ubro yellow is a popular first choice mastitis tube and particularly effective against Strep. Uberis mastitis.

Work in New Zealand showed that cows with mastitis in which the non steroidal anti inflammatory drug Metacam was used had both lower SCC post treatment compared to antibiotics alone and a much lower subsequent culling rate in the 45 week s after treatment..