



Kansainvälisesti kilpailukykyinen sianlihantuotantoketju -hanke



H7B – Sows heat check for insemination

It is important to make sure, that all the sows on heat have found by heat checking.

1. Heat

- Sow's heat cycle is 21 days
- Sow will show heat 1 - 3 days
- Sow will show standing heat 1 – 2 days = stand at riding test

2. Different types of sow's behaviour

- The sow what have suckled 3 to 4 weeks, will usually come on heat 3 to 4 days after weaning.
- The sows what come early on heat, have usually long heat and sows what come late on heat have usually short heat.
- All the sows what have long lasting suckling time, more than 4 weeks, exp. nurse sows, could come heat on farrowing room, immediately or 1 – 2 weeks after weaning.
- Heat checking including also returned and non-heat sows of previous groups. These sows could come on heat irregularly.

3. Sow's heat must check daily

Sows what have suckled 3 - 4 weeks, expected heat times



Sows what have long lasting suckled time, non-heat or emty



Check the sow's heats by them heat cycles, that how you could found return -heat after insemination.

4. Heat checking can do using with two ways

- Use 5 -step model, if results need rising and if workers have not a lot experiences of work
- Use partly lighter 5 -step model, if farrowing -% is satisfying and workers have good experience of work
- Use every time boar on front of sows.
- The boar can move by wagon or boar contact could restricted by gates for 4 to 6 sows at the same time.

Signs of heat:

Pre -heat:

- Reduced appetite
- Swollen/red vulva
- Restlessness/increased activity

Heat:

- Stand at riding test

5 -Step model

1. Push on the side with hand or knee
2. Push and lift from groin
3. Push under the vulva
4. Push on the back
5. Do riding test

Lighter 5 -step model

1. Do visual assessment of standing heat
2. Do riding test



Image of lifting groin (upper) and later coming riding test (downer)



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1. Signs of coming heat on sows, is increased activity and restlessness, also reduced appetite. If the sows are free, these signs are stronger, sows could also jump over each other. The sows have also swollen and red vulvas. This period called pre -heat. These heat signs will come 3 to 4 days after weaning and could stay 1 – 3 days long.
Pre -heat will move gradually to the real heat, where the sow shows standing reflex and accept the boar's jump or doing riding test on insemination time. The sow will stand without moving, the back is little curve and ears are stand up. This will call standing heat. When 2/3 of length of the standing heat have past, will come ovulation. This heat usually stays 2 to 3 days. The length of heat depends of herd, sows age and how often / well have done heat checking.
2. The heat process will start when piglets are weaned, and stimulation of the udder ends. The weaning will affect of milk yield, also feeding level will changed from high to lower level on the insemination room. The nursing sows and others what has long lasting suckling time could start heat process, if they feel similar mechanism like normal way weaned sows have. If them have less stimulation of the udder, when you have change smaller piglets to sow, or there is some period, when sow have less piglets, or piglets have changed, then it is possible that the sow will come heat on farrowing section and next heat will come 21 days later. That's why these sows will not come on heat in the same time with other sows with normal behaviour. If the heat has found on farrowing section, you should inseminate that sow. It could still cost 1 – 1,5 less total born piglets, if you do insemination on lactation period. The time from weaning to heat time is inversely correlating of length of the heat. In other words, the sow what come soon on heat have long heat, but the sow what come late on heat have short heat.
3. The sows what come on heat 3 to 6 days after weaning could checked once / day. The gilts and sows what come on heat later than 5 days after weaning could be difficult to estimate length of the heat. That's why it is recommended that these animals should checked twice / day. The nursing sows, partly weaning sows etc. can come immediately on heat after weaning or after long time. With these sows should do once / day heat checking all the time. Mark these sows in farrowing room. Please note the personally behaviour of sows on heat checking, how long time the sow is on heat and when it is over. Try also do average specify of heat length on your herd, with that you could make general routines to do heat checking. On hole farm need to do heat checking twice / day, before you can do own specify routines for heat checking, because of the year seasonal variation and the amount of day light will also affect of heats.
4. When you do 5 -step model on insemination time, you simulate the work how the boar stimulates to sow. If the sow is on standing heat, it does not prevent that you sit on hers back. The sow what is still on pre -heat, will show to you her situation, at least when you try to do riding test, it will keep noise or/and be restlessness. That's why it is absolutely important to do riding test, that you find real heat time. On the beginning and end of heat you need to do stimulation, that the sow will show the standing heat.
The workers who have good experience of insemination work, could do the 5 -step model only for the sows what need it, so only for those sows what are not showing standing heat to the boar, but with extra stimulation become on standing heat. For the sows what shows already standing heat for boar, you could use lighter 5 -step model. If you haven't good experience of insemination work, it is better to use 5 -step model, until you have enough well experience to notice situations where it is enough to use lighter model. It is recommended to use always 5 -step model to the gilts. On insemination work the boar / boars must be active. You could activate the boar exp. by giving a paper where is the sow's heat slime. You should always keep on eye of the boar on heat checking time.