



Kansainvälisesti kilpailukykyinen sianlihantuotantoketju -hanke



H7C – Insemination of sows

A well-made insemination on standing heat, is good basis to get well results.

1. It affect of insemination time, when sows come on heat and how long heat is

- You can inseminate the sow only, when it is on standing heat → gives you to do riding test
- In general, most of sows have insemination time 4 – 6 days after weaning, depending of do them show early or late heat.
- The ovulation will come, when length of the heat has pass 2/3
- The optimal insemination time is 24 hours before and 4 hours after ovulation.
- Re-inseminate the sows within 24 hours (doubling)
- Try to inseminate the sows 2 times / heat
- About one hour before and at least two hours after insemination should be peaceful time in the insemination room.

2. Boar contact

- During the heat checking and insemination time boar must be on front of the sows
- The boar should not have more than 4 – 6 sows at same time on contact, that how could have optimal nose contact.

3. Heat check on insemination time

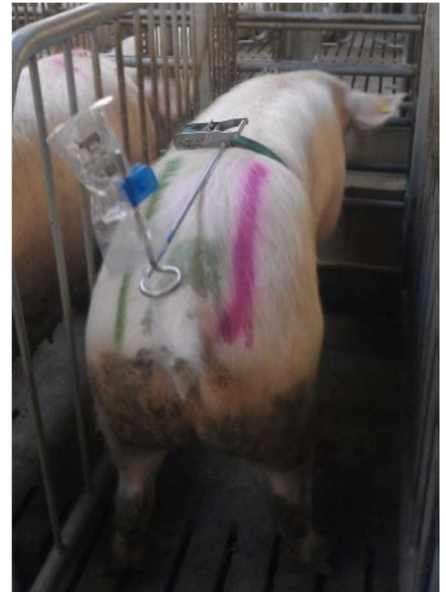
- Check the heats by using 5 -step model, or lighter model
- Do not “wake up” no more heats, what you could not inseminate within 20 minutes

4. Insemination

- Clean the sow’s vulva with paper
- Capillaries must be clean on using time
- Open vulva with one hand and push the capillary inside on little upturned position
- When the capillary is not go any deeper, pull little backwards, and push again with turning on same time. This will ensure the correct capillary place on a cervix.
- Put a seamen dose on the capillary, push only at first that air go out from capillary.
- The seamen dose could hold on “rubber band” etc., insemination band or hold on hand and same time sit on sow back.
- Do not push doses, if the sow is in heat, it will take sperm by shelf!
- If the sow takes slowly sperm, do more stimulation
- If the sperm does not go at all, check is the dose right attached on capillary. You can also try with low pressure, has sperm even possibilities to go into capillary.
- When seamen have end, remove capillary.

The sperm can “waiting right moment” inside on sow’s uterus for 24 hours.

It is recommended to do insemination on gate, not on free



Insemination band holding seamen dose

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

Use two boars on corridor, that how sow have all insemination time nose contact, even there is more than one worker.

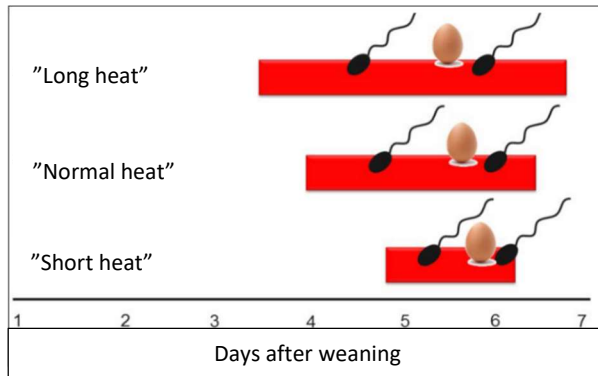


Kansainvälisesti kilpailukykyinen sianlihantuotantoketju -hanke



1. When 2/3 of length of the standing heat have past, will come ovulation. The optimal insemination time is 24 hours before and 4 hours after ovulation.

On the below figure shows the correct insemination time in relation of the heat starting time



It is recommended to inseminate the sows twice / heat (start + double). If you inseminate only once or more than twice, become risk for lower litter, approx. 0,5 piglets / litter. Only rarely of sows needs to inseminate three times / heat. The most important thing is do the inseminate in right time in relation of the sow's heat length. Insemination work is important, do it without hurry, with good focus, and without any disruption, especially if you work with young animals.

2. During the insemination time, the boar must be hole time on front of the sow, the sows must see boar and could have possibility to do nose contact. The smelling boar should be active. You could activate the boar exp. by giving a paper where is the sow's heat slime.
If you let the boar taking round on front of sows, it must do always under control and manage how boar moving forward. It would be good to move the boar all time at the same way, that how the boar and workers will make routine of that.
3. The sows which shows standing reflex, when the boar comes on front of sows, must inseminate within 20 minutes. From the boar contact oxytocin effect have ended after 20 minutes. The oxytocin hormone makes a uterus do constrictions and that how it can transport a sperm. The secretion of oxytocin will start from boar contact.
There is always sows, which needs more stimulation to show standing reflex. Also some of the sows shows standing reflex only into boar box, when boar stimulate it. These kind of sow's heats is sometimes difficult to find. On that kind of situation keep 30 – 40 minutes brake, and then re-stimulate same sow for insemination.
4. Based on the research, it has found that workers don't need to sit over the sow during the insemination time. The doses could hold on "rubber band" etc. or on insemination band. However, it is important to focus, how sows take sperm. Do not either use violence / scream to get the sows up. Some of the sows does not show heat like herd's normal line is or does not take normally seamen, these sows need more extra stimulation. For this reason, take focus on each sow and work right way for that animal. That kind of sows needs more stimulation and maybe also needs to sit all insemination time on sows back to doing stimulation. One option is to named person /persons who taking care of those sows what's heat behaviour is out of herd's normal line.