

MANUAL ON HOW TO PHASE OUT ZINC IN ORGANIC PIG PRODUCTION

Introduction

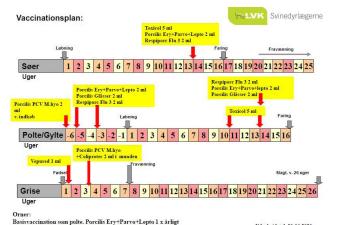
Despite the late weaning age (7 weeks postpartum), a large dry feed intake before weaning, and a high space allowance, organic pigs also suffer postweaning diarrhoea. So far, this challenge has been remedied by using medical zinc, however this alternative will end medio 2022 at the latest. Therefore, the industry requires other solutions.

This manual is the result of testing a natural product, collecting knowledge from the conventional production, gathering experiences from organic farmers, who have experimented with a production without zinc, and gathering experiences from the feedstuff industry.

Generally

Post weaning diarrhoea is multifactorial, and several factors related to the pig, management and housing conditions determine whether a pig develops post weaning diarrhoea or not. Thus, a single initiative will rarely be enough to solve the problem. Instead, a combination of several initiatives is necessary to avoid post weaning diarrhoea.

The effort with the phaseout of zinc is widespread – also in the conventional pig production. Keep updated on experiences in the indoor production. https://svineproduktion.dk/Search#q=zinkguide (in Danish)



Correct vaccination is important, and a well-considered vaccination plan is just as important.

Vaccinations are crucial!

Remember to vaccinate your sows. At a minimum, they should be inoculated against E. Coli and necrotising enterocolitis.

- The pigs
- Remember to vaccinate at the right time, for instance when in-oculating with COLIPROTEC F4/F18
- If the herd has oedema disease, you should also vaccinate the pigs against this (run tests for oedema disease by examining faeces for Vt2e).

If possible, avoid vaccinating at weaning. This may cause further stress in already pressured pigs and may also be the final factor that leads post weaning diarrhoea.



Management and handling

The sows

- Make sure the sows have a good body condition, especially in first parity. Be aware that the optimal body condition may differ between sows from different breeding lines. Further, the body condition should be adjusted according to season.
- Choose your nursing sows with care. The sow must have maternal instincts fitted to accepting fostered piglets, a good milk yield and a body condition to stand extended nursing.
- Make a strategy for litter equalization to minimize moving of piglets between litters. Every time a piglet is moved to a new litter or removed from a litter, the teat order must be reestablished. Thus, moving of piglets will be accompanied by increased fighting, which may affect piglet robustness.

At weaning

- If the pigs are to be moved into the housing unit, you should handle them carefully and transfer them in small groups.
- Be aware to not leave the pigs without water for too long! When
 the piglets are separated from the sow, water must be accessible
 after 2-3 hours at a maximum. Remember that a water surface
 (e.g. water provided in a trough or bowl) is a better option than
 water nipples.
- Consider weaning the pigs later and/or to wean on pasture. This
 may reduce weaning stress.

Generally

- Make a well-considered plan for treating coccidiosis and intestinal worm!
- Accept that production efficiency may be lowered until experiences have been built up.
- Perform a necropsy on dead problem pigs, a necropsy may provide useful information.
- Ensure an optimal temperature regulation in huts and wagons. If
 the sow is removed from the hut and the pigs stay for another day
 before being transferred to the housing unit, then remember that
 the pigs will be without a crucial heat source. This will cause stress
 amongst the pigs not only because the sow is absent but also
 due to the low temperature.
- Do not underestimate the value of having an experienced and well-educated staff.

Housing after weaning

- A small group size is preferred to lower the infection pressure.
- A dry and draught-free lying area is crucial, as cold pigs use energy to maintain their body temperature.
- Make sure the pigs have access to wa-ter of good quality. Provide
 the pigs access to a water surface to ensure their water intake at
 weaning. Also, make sure the small pigs can reach the water and
 manage the nipple drinker (if us-ing e.g. water bowls).
- You may offer dissolved electrolyte powder. Remember to ensure that the product is allowed for organic farming.

Experiences: access to soil appears to prevent post weaning diarrhoea.

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Feed

- Provide the pigs with access to the same type of feed after weaning as they received the last 1-2 weeks in the farrowing field.
- Ensure there are enough feeding spaces after weaning. One feeding space corresponds to the width across one pig's shoulders. As a rule of thumb, one feeding space in a simple dry feed dispenser can serve 4-5 pigs. Often more space will be advantageous.
- You may use fishmeal and dehusked oats for weaned pigs. Both ingredients have a good quality of protein, and dehusked oats benefit gastric health.
- Using home-mixed feed has provided positive results but remember that it re-quires an effort.
- Roughage should be of the best quali-ty. This means it should be correctly fermented, have a low dry feed per-centage (30-35%) and a short length of cut.
- It is fine to prefer "health food" but do not expect it to solve everything.
- Ensure your cooperation between feed supplier, advisor and veterinarian.

Learn more here:

- Landbrugsinfo / Økologi / grise
- https://svineproduktion.dk/Search#q=zink%20guide

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