

猪流行性腹泻

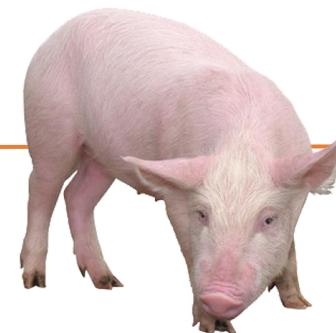
PED (Porcine Epidemic Diarrhea)

Porcine Epidemic Diarrhea (PED)



- Porcine epidemic diarrhea virus (PEDv), which is mainly transmitted through fecal-oral transmission;
- It has a long incubation period and is highly contagious, infecting pigs of all ages;
- One-week-old suckling piglets, the mortality rate is 80-100%;
- There is currently no effective treatment for PED;
- There are no commercial vaccines available in Taiwan, Europe and the United States.

Experiment on the treatment of PEDv-infected suckling piglets during lactation 1



1. Test unit: Taiwan xxx Corporation Livestock Division
 2. Experimental virus: porcine epidemic diarrhea virus (PEDv)
 3. Test substance: Oral administer diluted Zinc Oxide
 4. Experimental animals: suckling piglets exposed to virus during lactation (weight 3-5 Kg)
 5. Number of tests: 11 pigs infected
 6. Test method: Orally take 2ml a day until diarrhea improve and stop
 7. Test time: 2022/9/5
- * Test conducted in Taiwan is using material largely similar to Zinc Oxide material

Experiment on the treatment of PEDv-infected suckling piglets during lactation 1

September 5

- 5 suckling piglets in the lactation period developed diarrhea symptoms and were confirmed to be infected with PEDv after testing;
- Use Zinc Oxide by bottle feeding;

September 7

- The suckling piglets stopped diarrhea, and the treatment success rate was 100%.

Experiment on the treatment of PEDv-infected suckling piglets during lactation 1

1. During the experiment, another 6 suckling piglets were found to be infected with PEDv in the farm;
2. Bottle-feeding with Zinc Oxide for 3 days;
3. All were cured, and the treatment rate was 100%.

Current situation - The Animal Husbandry Division of Taiwan Sugar Corporation routinely uses Zinc Oxide as a feed additive.*

* It is important that while treating piglets, the adult pig shall have their feed mix with Zinc Oxide and continue using it as preventive measure. This is meant to address the source of the virus

Experiment on the treatment of PEDv-infected suckling piglets during lactation 1

Conclusion:

- Experiments have proved that Zinc Oxide has excellent prevention and control ability against PEDv;
- For preventive purpose, Zinc Oxide is used as a feed additive to healthy pigs, which can reduce the chance of infection in the farm;
- Through testing, it was found that the farm was infected.

Countermeasures:

- Infected pigs (adult) were bottle-fed with Zinc Oxide
- Atomize Zinc Oxide, mist to the entire farm in a free breathing way, and prevent the spread of the disease.

Rescue trial of weaned piglets infected with PEDv 2

1. Test unit: Institute of Military Veterinary Medicine, Military Medicine & Military Sciences
2. Experimental virus: porcine epidemic diarrhea virus (PEDv)
3. Test substance: Zinc Oxide
4. Test animals: weaned piglets (weight 8Kg)
5. Test method: Orally take 2ml a day until the symptoms of diarrhea improve and stop
6. Test time: 2023/5/4~2023/5/6

* Test conducted in China is using material largely similar to Zinc Oxide material

Rescue trial of weaned piglets infected with PEDv 2

The weaned piglets had diarrhea and were treated with antibiotics for more than ten days, but the treatment was ineffective.

May 4 - Bottle-feed **Zinc Oxide** 2ml a day, for 2 days in continuously.



Rescue trial of weaned piglets infected with PEDv 2

May 6

All stopped diarrhea, and the cure rate was 100%.



Rescue trial of weaned piglets infected with PEDv 2

Conclusion

- The treatment period is 2 days, and the cure rate is 100%;
- In the case where antibiotics are ineffective, Zinc Oxide can completely control pig diarrhea;
- Normalized breeding, with Zinc Oxide as an additive, mixed with feed, can reduce the chance of infection in the farm.

Zinc Oxide can completely control pig diarrhea

2023/5/4

