African swine fever virus experiment



1. Experimental virus: African swine fever (ASFV)

Test substance: Zinc Oxide *

3. Test animal: Pig (白肉猪)





- 4. Test quantity: 173 infected pigs, only 158 were left when the treatment officially started
- 5. Test method: Drinking water mixed with Zinc Oxide + spray on eye
 - + Mix the above water with pig feed

(upon mixing water with Zinc Oxide, mixed material needs to consume within 5 hours for maximum effect, the sooner the better)

Test time: 2022/8/19 (the test is over 12 days. Observation is made for additional 5 days)

* All tests conducted in China/Taiwan are using material similar to Zinc Oxide

African swine fever treatment records



August 14 (173 heads)

After receiving the news from the pig farm, 4 pigs had died. Immediately, our technical team was sent to the farm to check, and the symptoms of the dead pigs were initially judged as "African swine fever".





Gross autopsy of dead infected pigs

Transparent large intestine, heart contraction, hepatomegaly, black lumps, enlarged spleen, black





African swine fever treatment results

On 8/19, the treatment officially started (158 infected pigs),

After drinking water mixed with Farmour material for 8 days (8/19~8/26), the symptoms began to stabilize,

Continue to observe for another 5 days (8/27~8/31), and infected pigs recovered to normal,

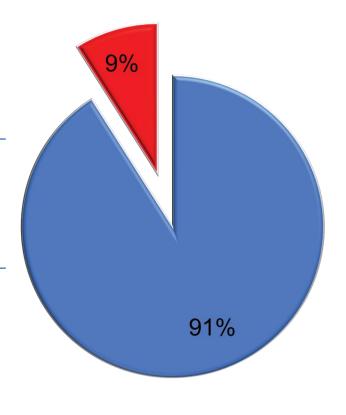
A total of 144 pigs were rescued, with a survival rate of 91.14%*.

Although we missed the best time to start treatment, the infected pigs still have a cure rate of 91%, which shows that Farmour material has a certain effect on African swine fever;

In the future, if it is combined with on-site preventive operations, it is expected to create excellent treatment results.

Formal experiment with 158 infected pigs

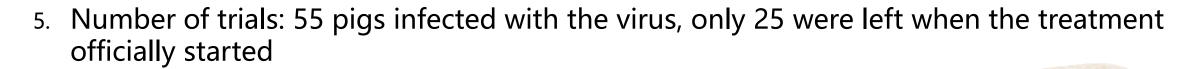




^{*} This survival rate is the best result that I heard so far. I understand that other farmers shared that survival rate is in the range around 60% - 80% range.

African Swine Fever Virus Control Trial 2

- 1. Test unit: Institute of Military Veterinary Medicine, Military Medicine & Military Sciences (军事科学院军事医学研究院军事兽医研究所, a military standard research centre for animal)
- 2. Experimental virus: African swine fever (ASFV)
- Test substance: Zinc Oxide*
- 4. Experimental animal: white meat pig (weight about 25Kg)



- 6. Test method: 2x mixed with food, day 1 and day 3
- 7. Test time: 2023/3/16~2023/5/5



For test conducted In China, the material used is largely similar with Zinc Oxide material

Initially - 55 pigs were infected with the virus.

February

At the start of treatment - 30 pigs had died of illness, only 25 pigs remained in stock;

Mixed Zinc Oxide with food to 25 virus-infected pigs for treatment,

After treatment, 1 died and 24 survived.



After about 1 month, in March, ASF attacks again...

Another ASF-infected pig was discovered. There are 2 severe cases, not eating;

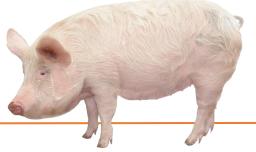
Mixed Zinc Oxide with feed to 24 virus-infected pigs, day 1 and day 3; then observe for 18 days.

May 5 - the rescue trial was completed, with 1 death and 23 survivors.



African swine fever treatment 2 - Conclusion

- 1. 25 African Swine Fever infected pigs were treated orally with Zinc Oxide, 2 died and 23 survived, with a cure rate of 92.0%;
- 2. After completing the treatment for the first time, after half a month, ASF appeared again; it means that after the completion of the treatment, you must continue to take Zinc Oxide for prevention.
- 3. 2 severe disease pigs were treated, 1 was cured and 1 died, which shows that Zinc Oxide has a strong ability to inactivate African swine fever virus (ASFV).



- 1. Test unit: Institute of Military Veterinary Medicine, Military Medicine & Military Sciences
- 2. Experimental virus: African swine fever (ASFV)
- 3. Test substance: Zinc Oxide*
- 4. Test animal: white meat pig (body weight 35-50 Kg)



- 5. Test quantity: 200 infected pigs, 197 left when the treatment officially started
- 6. Test method: 2 injections, day 1 & day 3; For severe cases, 3 injections, once a day (note, This is merely for knowledge sharing on what happen in China and it is conducted in their special lab.).
- 7. Test time: 2023/4/18~2023/5/5

^{*} Test in China is using material similar to Zinc Oxide. Suggest that fever medicine shall be given especially if pig has no appetite. However, try to spread out the feeding of Zinc Oxide and fever medication for better result.

- 1. 200 infected pigs, weighing between 35-50 Kg;
- 2. On April 18, 3 animals died;
- 3. Use Zinc Oxide to inject into pigs, inject 2x, on day 1 and day 3.
- 4. For those severely infected pigs, they were given injections once a day, for 3 days continuously.

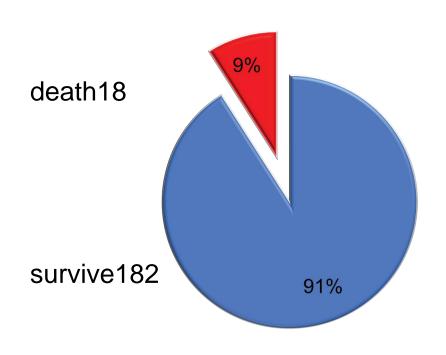




Conclusion

200 infected pigs were treated for 17 days, 18 died*, 182 survived, and the cure rate was 91.0%.

* Note – Observation seems indicate that most death occurred during the initial days of injection. Thereafter usually will be stabilized.



- 1. Test unit: Institute of Military Veterinary Medicine, Military Medicine & Military Sciences
- 2. Experimental virus: unknown virus
- 3. Test substance: Zinc Oxide*
- 4. Experimental animal: white meat pig (weight about 50Kg)
- 5. Number of tests: 14 pigs were infected
- 6. Test method: 2 times injection, day 1 & day 3; For severe cases, 3 times injection, once a day (note, This is merely for knowledge sharing on what happen in China and it is conducted in their special lab.).
- 7. Test time: 2023/3/4~2023/5/1

^{*} Tests conducted in China is using material largely similar to Zinc Oxide. Suggest that fever medicine shall be given especially if pig has no appetite. However, try to spread out the feeding of Zinc Oxide and fever medication for better result.

Purchase 14 piglets weighing about 50Kg. After a week of on-site observation, they were brought back to the farm and they were completely normal.

On February 20, the 14 pigs were naturally divided into 2 circles;

On February 26, there were 7 of them in 1 circle. One of the group did not eat, were depressed, and had abdominal breathing;

On March 1, there were 3 pigs with purple ears and discoloration all over the body; the other 7 pigs in the other group were also infected; the initial judgment was that they were infected with Porcine Reproductive and Respiratory Syndrome "PRRS"; but the PRRS vaccine did not improve; the use of antibiotics was also ineffective. The course of disease is more than 10 days. The farm owner said: The pig vomited and had diarrhea.

On March 4,

14 infected pigs were injected with Zinc Oxide, give injection on day 1, day 3 and day 6, a total of 3 injections; the pigs gradually improved and started eating.

The pigs were observed for another 21 days.

The observation period ends on May 1. Total 3 dead* and 11 cured.

* Note – Observation seems indicate that most death occurred during the initial days of injection. Thereafter usually will be stabilized.

in conclusion

- Rescue and treat 14 infected pigs for 6 days;
- 3 dead, 11 cured, 78.6% cure rate;
- It shows that Zinc Oxide has excellent control ability against unknown viruses.

Swine fever + porcine blue ear virus, mixed infection

- 1. Experimental virus: swine fever + porcine blue ear virus (PRRSV)
- 2. Test substance: Zinc Oxide *
- 3. Experimental animals: white meat pigs (about 10 Kg in weight)
- 4. Number of tests: 14 pigs were infected
- 5. Test method: 2 times of injection, day 1 & day 3; 3 times for severe cases, once a day (note, This is merely for knowledge sharing on what happen in China and it is conducted in their special lab.).
- 6. Test time: 2023/3/4~2023/5/1

^{*} For test conducted in China, material similar to Zinc Oxide is used. Suggest that fever medicine shall be given especially if pig has no appetite. However, try to spread out the feeding of Zinc Oxide and fever medication for better result.

Swine fever + PRRSV, mixed infection







Swine fever + PRRSV, mixed infection





