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Impact of administering a mixture of organic acids, salts of sodium and bioflavonoids on Salmonella excretion in sows.

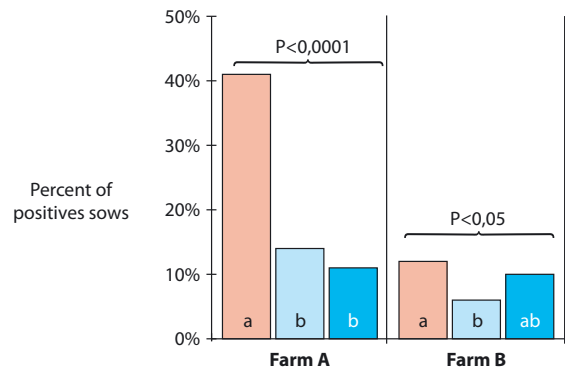
## Materials and methods

- Two farrow-to-finish farms with a high prevalence of Salmonella
- Bicial® administered to sows via drinking water at a rate of 1 liter per 1000 liters of water
- Monitoring the bacteriological prevalence of Salmonella in sows:
  - Before treatment
  - After 4 weeks of treatment
  - After 8 weeks of treatment
- For each stage, the following were analysed:
  - Fecal matter from 100 pregnant sows
  - 10 pooled samples, each with fecal matter from 10 sows

## Results

- Significant decrease in the excretion of Salmonella after the first 4 weeks of treatment for both farms
- Significant decrease in the number of positive Salmonella pools after 8 weeks of treatment for both farms
- The percent of sows which became negative after treatment was higher for farm A (highest initial rate of Salmonella)

Percent of sows with Salmonella



Stage	Farm A (%)	Farm B (%)
Before treatment	41%	12%
After 4 weeks of treatment	14%	6%
After 8 weeks of treatment	11%	10%

Percent of pooled samples positives for Salmonella

	Farm A (n=10)	Farm B (n=10)
Before treatment	80% a	50% a
After 4 weeks of treatment	80% a	30% a
After 8 weeks of treatment	30% b	10% b



## Conclusion

Bicial® administered to sows via drinking water at a rate of 1 liter per 1000 liters of water leads to:

- Significant decrease in the excretion of Salmonella after the first 4 weeks
- Significant positive Salmonella pools decrease after 8 weeks treatment, which could be due to excreted Salmonella quantity reduction.

The higher the initial Salmonella prevalence is, the better the treatment seems to operate.