Effect of XTRACT on the performance of sows and their piglets until weaning

KEY FINDINGS

XTRACT 6930:
- Improved sow performance
- Increased number of piglets born alive

INTRODUCTION AND OBJECTIVES

Outside EU countries, as in Thailand, the feed production of lactating sows and suckling piglets is not using any AGP’s, which can promote the use of plant-based additives in order to improve sow performance.

The aim of the present study was to evaluate the effects of XTRACT 6930 versus a negative control on the performance of sows and their piglets performance.

MATERIALS AND METHOD

The study was conducted in an experimental farm of an animal feed producer in Thailand.

Experimental design
26 sows were allocated to 2 treatments:
- Negative control (C) – 16 sows,
- XTRACT 6930 at 150 g/t from 107 days of gestation until weaning – 10 sows

After birth, the piglets were standardized to 11 per sow whatever the treatments.

Experimental diet
The sows were fed a commercial diet and piglets a creep feed available from 7 days of age until weaning (21 days of age).

Measurements
- Total sow feed intake
- Total born piglets
- Total live-born piglets
- Number of weaned piglets
- Body weight of piglets at weaning.

Statistical Analysis
No statistics available.
RESULTS AND DISCUSSION
The effects of XTRACT 6930 vs. the negative control are presented in the following table.

Table: Effects of XTRACT 6930 on sow performance and piglet performance.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Control</th>
<th>XTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total feed intake during 1-3 week of lactation (kg/sow/day)</td>
<td>6.37 ±0.59</td>
<td>6.56±0.39</td>
</tr>
<tr>
<td>Total born piglets</td>
<td>10.55±4.95</td>
<td>11.18±3.16</td>
</tr>
<tr>
<td>Total born live piglets (pig)</td>
<td>10.0±4.38</td>
<td>10.73±3.13</td>
</tr>
<tr>
<td>Number of piglets - at start (pig)*</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Body weight of piglet - at start (kg/pig)</td>
<td>1.68±0.35</td>
<td>1.71±0.33</td>
</tr>
<tr>
<td>Number of weaned piglets</td>
<td>9.82±1.08</td>
<td>10.36±0.67</td>
</tr>
<tr>
<td>Body weight of piglet - at weaning (kg/pig)</td>
<td>7.56±0.61</td>
<td>7.12±0.73</td>
</tr>
</tbody>
</table>

No statistics available
* The standardisation of piglet number leads to the import of other piglets coming from other sows.

The feed intake in lactating sows was increased of 3.0% in average with XTRACT in comparison to the negative control (6.56 vs. 6.37 kg/sow/d).

The level of intake was recognized as relatively high compared to the usual intake (5.5 kg/sow/d). This could be related to the climate conditions during winter season.

The total number of born piglets was higher in XTRACT group than in the negative control (11.18 vs. 10.55). This tendency was confirmed also for the number of live-born piglets (10.73 vs. 10.0).

After birth, the number of piglets was standardised to 11 for each sow. One limit observed in this trial is the number of piglets available at start of the trial. Some piglets were transferred from other sows available to both groups, to complete the amount of 11 piglets/sow available.

The number of weaned piglets was also higher in the XTRACT group than in the negative group (10.36 vs. 9.82) alongside a lower standard deviation. It can be concluded that the XTRACT group was more homogeneous (Graph 1).

Graph 1: Effects of XTRACT 6930 on live-born piglets and weaned piglets

What was not described in the table is the fact that less creep feed was consumed by the piglets in the XTRACT group than in the control group but with similar body weight at weaning. It can be concluded that the nutrients were not provided by the creep feed but by the sow milk. This provides an indirect proof that the milk quantity was higher in the XTRACT group than in the negative group.

CONCLUSION
XTRACT 6930 improved sow performance by improving feed intake and milk production. This milk production increase is favourable for the growth of the suckling piglets. XTRACT increases also the productivity of sow by enhancing the number of weaned piglets. Finally XTRACT is a beneficial additive to improve sow productivity.