Parity wise sow performance of Jharsuk pig under farm management

Mukesh Kumar, Ravindra Kumar and Sushil Prasad

Abstract
Pig farming is a traditional occupation of tribal population in Jharkhand pig farming plays an important role in improving the socio-economic status of pig farmers was tribal population of Jharkhand as compared to other livestock farming. The present investigations were carried out on Jharsuk Pigs maintained at Pig Breeding farm of Ranchi Veterinary College, Birsa Agricultural University, Ranchi (Jharkhand). 161 sows along with their 440 farrowing and 3414 piglets were taken into account in this study. Average age at first oestrus, age at first service, age at first farrowing and farrowing interval was observed to be 200±6.25, 216±2.56, 329±2.1 and 202±4.25 days. Average litter size at birth, litter size at weaning, litter weight at weaning observed to be 6.74±0.11, 6.24±0.11, 7.92±0.14, 56.88±0.96 respectively.

Keywords: Nucleocapsid, Domain, Tertiary Structure, NBD

Introduction
Reproductive performance is one of the main determinants of productivity of 2wz pig. High reproduction rates are essential for profit in pig production. The level of parity wise reproductive performance is dependent on the interaction of genetic and environmental factors and has to be given priority. Parity wise Reproductive efficiency as such can be measured and expressed as the farrowing rate, weaning rate, farrowing interval, litter size at birth and weaning Jharsuk pig is the popular variety of desi pig a many farmers because of high reproductive efficiency as compared local pig.

Material and Methods
The present investigations were carried out on Jharsuk Pigs maintained at Pig Breeding farm of Ranchi Veterinary College, Birsa Agricultural University, Ranchi (Jharkhand). The data for the present investigation were collected from the Jharsuk pigs maintained under different AICAR, MSP projects over a period of about five years from 2012 to 2017. The observations pertaining at parity and generation wise sow performance at 5th parity were recorded from history cum pedigree sheet of the farm. 161 sows along with their 3414 piglets were taken into account in this study.

Results and Discussion
1. Reproductive performance of Jharsuk pigs
Average reproduction performance of Jharsuk pigs viz Age at first oestrus, Age at first service, Age at first farrowing, Farrowing interval, Litter size at birth, Litter size at weaning, Litter weight at birth and Litter weight at weaning were observed to be 200±6.52 days, 216±2.56 days, 329±2.1 days, 202±4.25 days, 6.74±0.11, 6.24±0.11, 7.92±0.14 (kg) and 56.88±0.96 kg respectively The results have been tabulated in Table no 1. The results are in conformity with finding of Marksimovic et al., 1984 (7) reported the average Age at first oestrus in Swedish Landrace gilts were 240 days however Kouamo, et al. (2015) (4) reported to be age at first oestrus 210 to 230 days respectively.
Parity wise sow performance
Litter size at birth during different parity were observed to be 6.75±0.19, 6.57±0.19, 6.70±0.4, 6.45±0.4, and 7.22±0.61 kg during 1st, 2nd, 3rd, 4th and 5th parity respectively. Slightly highest parity on litter size at birth was observed during 5th, 7.22±0.61 kg followed by 1st, 6.75±0.19 kg, 3rd, 6.70±0.4 kg, 4th, 6.45±0.4 kg and 5th parity. However no significantly differences were observed among 1 st, 2 nd, 3 rd, 4 th, and 5 th parity respectively. (Table 1)

Table 1: Average reproductive performance of Jharsuk pigs

<table>
<thead>
<tr>
<th>Reproduction parameter</th>
<th>Observation of result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at first oestrus (days)</td>
<td>200±6.52 ('18)</td>
</tr>
<tr>
<td>Age at first service (days)</td>
<td>216±2.56 ('18)</td>
</tr>
<tr>
<td>Age at first farrowing (days)</td>
<td>329±2.11 ('18)</td>
</tr>
<tr>
<td>Farrowing interval (days)</td>
<td>202±4.25 ('18)</td>
</tr>
<tr>
<td>Litter size at birth</td>
<td>6.74±0.11 ('14)</td>
</tr>
<tr>
<td>Litter size at weaning</td>
<td>6.24±0.11 ('20)</td>
</tr>
<tr>
<td>Litter weight at birth</td>
<td>7.92±0.14 ('20)</td>
</tr>
<tr>
<td>Litter weight at weaning</td>
<td>56.86±6.96 ('20)</td>
</tr>
</tbody>
</table>

Summary and Conclusions
- Average age at first oestrus, age at first service, age at first farrowing and farrowing interval was observed to be 200±6.25, 216±2.56, 329±2.1 and 202±4.25 days.
- Average litter size at birth, litter size at weaning, litter weight at weaning observed to be 6.74±0.11, 6.24±0.11, 7.92±0.14, 56.86±0.96 respectively.
- Litter size had significant (P<0.05) influence on reproductive performance of sows.
- Parity had no significant (P>0.05) influence on reproductive performance of sows.

References
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