DAFTAR PUSTAKA


Hak Cipta Dilingual Undang-Undang tidak dilindungi. Pencetakan dan penyebaran boleh dengan memahami syarat yang wajar.

LAMPIRAN
### Lampiran 1.
#### Data Pertambahan Bobot Tubuh (kg/hari)

<table>
<thead>
<tr>
<th>Kelompok</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>Rataan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.152</td>
<td>1.241</td>
<td>1.116</td>
<td>1.277</td>
<td>1.214</td>
<td>1.200</td>
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<tr>
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<td>0.768</td>
<td>1.232</td>
<td>1.357</td>
<td>1.482</td>
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<td>1.286</td>
<td>0.955</td>
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<td>1.238</td>
<td>1.271</td>
<td>1.173</td>
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#### Analisis Ragam dan Uji Kontras Ortogonal Pertambahan Bobot Tubuh

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<thead>
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#### Data Efisiensi Penggunaan Ransum (kg bobot tubuh/kg ransum)

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<th>Rataan</th>
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#### Analisis Ragam dan Uji Kontras Ortogonal Efisiensi Penggunaan Ransum

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<td>0.0075</td>
<td>0.0019</td>
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<td>0.0020</td>
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#### Data Konsumsi Bahan Kering (g/kg bobot metabolik/hari)

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<tr>
<th>Kelompok</th>
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<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>Rataan</th>
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<tr>
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<td>93.3</td>
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#### Analisis Ragam dan Uji Kontras Ortogonal Konsumsi Bahan Kering

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<td>141.49</td>
<td>35.37</td>
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<tr>
<td>R1,R2,R4 vs R3,R5</td>
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<tr>
<td>R3 vs R5</td>
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<tr>
<td>R1 vs R2</td>
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<td>11.62</td>
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#### Data Konsumsi Bahan Organik (g/kg bobot metabolik/hari)

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<th>Kelompok</th>
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<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>Rataan</th>
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<tbody>
<tr>
<td></td>
<td>82.8</td>
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#### Analisis Ragam dan Uji Kontras Ortogonal Konsumsi Bahan Organik

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<th>P</th>
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<td>Kelompok</td>
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<td>R1,R2,R4 vs R3,R5</td>
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<td>126.400</td>
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<td>R1,R2,R4 vs R1,R3</td>
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### Lampiran 5
#### Data Kecernaan Bahan Kering (%)

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<th>R4</th>
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<th>Rataan</th>
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<tr>
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Rataan: 65.1

### Analisis Ragam dan Uji Kontras Ortogonal Kecernaan Bahan Kering

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Galat: 8
Total: 14 59.088

### Lampiran 6
#### Data Kecernaan Bahan Organik (%)

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Rataan: 67.1

### Analisis Ragam dan Uji Kontras Ortogonal Kecernaan Bahan Organik

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<td>R1, R4 vs R3, R5</td>
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<td>16.7800</td>
<td>3.69</td>
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Galat: 8 36.3580 4.5445
Total: 14 59.6480
### Lampiran 7
#### Data Kecernaan Protein (%)

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<th>R4</th>
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#### Analisis Ragam dan Uji Kontras Ortogonal Kecernaan Protein

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<td>R1 vs R2,R3,R4,R5</td>
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<td>61.823</td>
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<td>R2 vs R3,R5</td>
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<td>44.950</td>
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### Lampiran 8
#### Data Kecernaan Lemak (%)

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<th>R5</th>
<th>Rataan</th>
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#### Analisis Ragam dan Uji Kontras Ortogonal Kecernaan Lemak

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#### Analisis Ragam & Kontras Ortogonal Kecernaan Serat Deterjen Asam

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#### Analisis Ragam & Uji Kontras Ortogonal Kecernaan Energi

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### Analisis Ragam & Uji Kontras Ortogonal Populasi Bakteri Rumen

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### Analisis Ragam & Uji Kontras Ortogonal Populasi Protozoa Rumen

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### Lampiran 13

#### Data Konsentrasi Amonia Cairan Rumen (mM)

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| Rataan   | 11.03 | 12.93 | 8.77 | 9.27 | 7.33 | 9.87 |

#### Analisis Ragam dan Uji Kontras Ortogonal Amonia Cairan Rumen

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### Lampiran 14

#### Data pH Cairan Rumen

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#### Analisis Ragam dan Uji Kontras Ortogonal pH Cairan Rumen

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### Lampiran 15

#### Data Ekskresi Alantoin Urin (g/hari)

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#### Analisis Ragam dan Uji Kontras Ortogonal Alantoin Urin

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#### Analisis Ragam dan Uji Kontras Ortogonal Retensi Nitrogen

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### Lampiran 19

#### Data Konsentrasi Butirat Cairan Rumen (mM)

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#### Analisis Ragam dan Uji Kontras Ortogonal Butirat Cairan Rumen

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### Lampiran 20

#### Data Konsentrasi Isobutirat Cairan Rumen (mM)

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#### Analisis Ragam & Uji Kontras Ortogonal Isobutirat Cairan Rumen

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Lampiran 21
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Analisis Ragam dan Uji Kontras Ortogonal Valerat Cairan Rumen

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Lampiran 22
Konsentrasi Isovalerat Cairan Rumen (mM)

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Analisis Ragam & Uji Kontras Ortogonal Isovalerat Cairan Rumen

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### Lampiran 23

**Data Konsentrasi Isoacids Cairan Rumen (mH)**

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### Analisis Ragam dan Uji Kontras Ortogonal Isoacids Cairan Rumen

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### Lampiran 24

**Data Konsentrasi Total VFA Cairan Rumen (mM)**

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### Analisis Ragam dan Uji Kontras Ortogonal Total VFA Cairan Rumen

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#### Analisis Ragam & Uji Kontras Ortogonal Nisbah A/P Cairan Rumen

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#### Lampiran 26

#### Data Angka Non-Gluconogenic Ratio (NGR) Cairan Rumen

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### Galat

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### Lampiran 27

**Data Konsentrasi Metionin Plasma (umol/100ml)**

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Analisis Ragam dan Uji Kontras Orthogonal Metionin Plasma

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### Lampiran 28

**Data Konsentrasi Sistin Plasma (umol/100ml)**

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Analisis Ragam dan Uji Kontras Orthogonal Sistin Plasma

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### Lampiran 29

#### Data Konsentrasi Isoleusin Plasma (umol/100ml)

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#### Analisis Ragam dan Uji Kontras Ortogonal Isoleusin Plasma

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### Lampiran 30

#### Data Konsentrasi Leusin Plasma (umol/100ml)

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#### Analisis Ragam dan Uji Kontras Ortogonal Leusin Plasma

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### Lampiran 31

#### Data Konsentrasi Valin Plasma (umol/100ml)

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#### Analisis Ragam dan Uji Kontras Ortogonal Valin Plasma

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### Lampiran 32

#### Data Konsentrasi Asam Amino Sulfur (AAS) Plasma (umol/100ml)

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#### Analisis Ragam dan Uji Kontras Ortogonal Konsentrasi AAS Plasma

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Analisis Ragam & Uji Kontras Ortogonal Konsentrasi AARC Plasma

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Lampiran 34
Data Kadar Air Tubuh Kosong (%)

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Analisis Ragam & Uji Kontras Ortogonal Kadar Air Tubuh Kosong

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<th>P</th>
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### Lampiran 35

#### Data Kadar Lemak Tubuh (%)

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|          | 29.23| 28.27| 29.65| 28.59| 29.16| 28.98  |

#### Analisis Ragam & Uji Kontras Ortogonal Kadar Lemak Tubuh (%)

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### Lampiran 36

#### Data Kadar Protein Tubuh (%)

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<th>R4</th>
<th>R5</th>
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#### Analisis Ragam & Uji Kontras Ortogonal Kadar Protein Tubuh (%)

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**Lampiran 37**

**Data Kadar Hineral Tubuh (%)**

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**Analisis Ragam dan Uji Kontras Ortogonal Kadar Mineral Tubuh**

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**Produksi Gas Metan (mM/100mM VFA)**

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**Analisis Ragam dan Uji Kontras Ortogonal Estimat Produksi Metan**

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### Analisis Data

#### Efisiensi Konversi Energi Heksosa ke VFA (\(X\))

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#### Analisis Ragam & Kontras Ortogonal Efisiensi Konversi Heksosa

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#### Data Perpembuhan/ Konsumsi ME

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<th>R4</th>
<th>R5</th>
<th>Rataan</th>
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<tbody>
<tr>
<td></td>
<td>21.19</td>
<td>21.84</td>
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<td>20.61</td>
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<td>15.07</td>
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| Rataan   | 15.75 | 19.36 | 22.40 | 21.38 | 22.69 | 20.32  |

#### Analisis Ragam & Uji Kontras Ortogonal Pertumbuhan/Konsumsi ME

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<th>KT</th>
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<th>P</th>
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### Data Deposisi Protein (g/hari)

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<th>Kelompok</th>
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<th>R2</th>
<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>Rataan</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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<td>164.62</td>
<td>195.09</td>
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<td>141.58</td>
<td>192.15</td>
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<tr>
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<td>6</td>
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<td>173.76</td>
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#### Analisis Ragam dan Uji Kontras Ortogonal Deposisi Protein

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### Data Kadar Energi Teretensi (MJ/hari)

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<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>Rataan</th>
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<tbody>
<tr>
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<td>19.61</td>
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<td>16.68</td>
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| Rataan | 14.74 | 16.50 | 19.04 | 18.38 | 19.10 | 17.55 |

#### Analisis Ragam & Uji Kontras Ortogonal Energi Teretensi (RE)

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<tr>
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### Lampiran 43

#### Data Deposisi Lemak (g/hari)

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<th>R3</th>
<th>R4</th>
<th>R5</th>
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### Lampiran 44

#### Data Konsumsi Protein (g/kg bobot metabolik/hari)

<table>
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<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>Rataan</th>
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### Analisis Ragam dan Uji Kontras Ortogonal Deposisi Lemak

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<td>Galat</td>
<td>8</td>
<td>26667</td>
<td>3333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>47284</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Analisis Ragam dan Uji Kontras Ortogonal Konsumsi Protein

<table>
<thead>
<tr>
<th>Sumber Keragaman</th>
<th>db</th>
<th>JK</th>
<th>KT</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelompok</td>
<td>2</td>
<td>6.839</td>
<td>3.420</td>
<td>3.58</td>
<td></td>
</tr>
<tr>
<td>R1,R2,R4 vs R3,R5</td>
<td>4</td>
<td>2.368</td>
<td>0.592</td>
<td>0.62</td>
<td></td>
</tr>
<tr>
<td>R1,R2 vs R4</td>
<td>1</td>
<td>1.921</td>
<td>1.921</td>
<td>2.01</td>
<td></td>
</tr>
<tr>
<td>R1 vs R2</td>
<td>1</td>
<td>0.172</td>
<td>0.172</td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>R3 vs R5</td>
<td>1</td>
<td>0.275</td>
<td>0.275</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>Galat</td>
<td>8</td>
<td>7.633</td>
<td>0.954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>16.840</td>
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</tr>
</tbody>
</table>
## Lampiran 45.

### Data Bobot Badan Sapi pada Awal Percobaan.

<table>
<thead>
<tr>
<th>Perlakuan</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>Rataan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>kg</td>
</tr>
<tr>
<td></td>
<td>199</td>
<td>154</td>
<td>209</td>
<td>171</td>
<td>191</td>
<td>184.8</td>
</tr>
<tr>
<td></td>
<td>227</td>
<td>223</td>
<td>228</td>
<td>229</td>
<td>213</td>
<td>224.0</td>
</tr>
<tr>
<td></td>
<td>257</td>
<td>230</td>
<td>231</td>
<td>230</td>
<td>232</td>
<td>236.0</td>
</tr>
<tr>
<td></td>
<td>227.7</td>
<td>202.3</td>
<td>222.7</td>
<td>210.0</td>
<td>212.0</td>
<td>214.9</td>
</tr>
</tbody>
</table>

## Lampiran 46.

### Data Bobot Badan Sapi pada Akhir Percobaan (8 minggu).

<table>
<thead>
<tr>
<th>Perlakuan</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>Rataan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>kg</td>
</tr>
<tr>
<td></td>
<td>264</td>
<td>223</td>
<td>271</td>
<td>242</td>
<td>259</td>
<td>251.8</td>
</tr>
<tr>
<td></td>
<td>270</td>
<td>292</td>
<td>304</td>
<td>312</td>
<td>265</td>
<td>292.6</td>
</tr>
<tr>
<td></td>
<td>314</td>
<td>280</td>
<td>303</td>
<td>283</td>
<td>305</td>
<td>291.0</td>
</tr>
<tr>
<td></td>
<td>282.5</td>
<td>265.3</td>
<td>292.8</td>
<td>279.3</td>
<td>283.2</td>
<td>280.6</td>
</tr>
</tbody>
</table>
### Tinjauan Aspek Ekonomi Ransum Perlakuan

<table>
<thead>
<tr>
<th>Uraian</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
<th>R4</th>
<th>R5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pertambahan bobot tubuh (kg/hari)</td>
<td>0.979</td>
<td>1.125</td>
<td>1.253</td>
<td>1.238</td>
<td>1.271</td>
</tr>
<tr>
<td>Harga sapi (Rp. per kg)</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
</tr>
<tr>
<td>Penerimaan (1x2) (Rp. per hari)</td>
<td>3916</td>
<td>4500</td>
<td>5012</td>
<td>4952</td>
<td>5084</td>
</tr>
<tr>
<td>Konsumsi ransum (kg/hari)</td>
<td>6.94</td>
<td>6.46</td>
<td>6.67</td>
<td>6.90</td>
<td>6.34</td>
</tr>
<tr>
<td>Harga ransum (Rp. per kg)</td>
<td>368</td>
<td>368</td>
<td>385</td>
<td>447</td>
<td>476</td>
</tr>
<tr>
<td>Biaya pakan (4x5) (Rp. per hari)</td>
<td>2561</td>
<td>2379</td>
<td>2572</td>
<td>3089</td>
<td>3014</td>
</tr>
<tr>
<td>Pendapatan di atas biaya pakan (3-6) (Rp. per hari)</td>
<td>1355</td>
<td>2121</td>
<td>2440</td>
<td>1863</td>
<td>2070</td>
</tr>
</tbody>
</table>