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LAMPIRAN

| Nama Sapi | Parameter | | |
|------------------|---------------------|-------------------|-------------------|
| | Fragmentasi DNA (%) | TAU (%) | MPU (%) |
| Singo | 3.17±1.63 | 92.81±2.18 | 95.21±1.47 |
| Sinyo | 4.27±2.20 | 91.74±2.51 | 93.74±2.75 |
| Hercules | 3.89±0.85 | 87.10±3.62 | 88.85±2.24 |
| Bima | 4.21±2.02 | 88.57±1.90 | 90.26±4.62 |
| Arjuna | 3.68±2.20 | 89.33±2.36 | 90.36±1.46 |
| Rewa | 3.45±1.41 | 91.00±1.54 | 89.60±2.84 |
| Lewa | 3.56±1.68 | 89.81±1.27 | 90.02±1.86 |
| Rowa | 2.07±1.22 | 91.34±3.63 | 93.88±2.62 |
| Dewa | 3.62±1.36 | 93.65±2.62 | 91.55±3.24 |
| Maiwa | 4.03±1.75 | 92.04±3.34 | 91.75±4.36 |
| Rata-rata | 3.59±1.67 | 90.74±3.09 | 91.52±3.37 |
| P-Value | 0.566 | 0.002 | 0.005 |

| Nama sapi | | | | | | | | | | |
|----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Parameter | Singo | Sinyo | Hercules | Bima | Arjuna | Rewa | Lewa | Rowa | Dewa | Maiwa |
| Fragmentasi DNA (%) | 3.17±1.63 | 4.27±2.20 | 3.89±0.85 | 4.21±2.02 | 3.68±2.20 | 3.45±1.41 | 3.56±1.68 | 2.07±1.22 | 3.62±1.36 | 4.03±1.75 |
| TAU (%) | 92.81±2.18 | 91.74±2.51 | 87.10±3.62 | 88.57±1.90 | 89.33±2.36 | 91.00±1.54 | 89.81±1.27 | 91.34±3.63 | 93.65±2.62 | 92.04±3.34 |
| MPU(%) | 95.21±1.47 | 93.74±2.75 | 88.85±2.24 | 90.26±4.62 | 90.36±1.46 | 89.60±2.84 | 90.02±1.86 | 93.88±2.62 | 91.55±3.24 | 91.75±4.36 |



**OUTPUT SPSS
FRAGMENTASI DNA**

Deskriptif

| Descriptives | | | | | | | | |
|---------------------|----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
| Fragmentasi DNA | | | | | | | | |
| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
| | | | | | Lower Bound | Upper Bound | | |
| Singo | 6 | 3.1667 | 1.63299 | 0.66667 | 1.4529 | 4.8804 | 1.00 | 5.00 |
| Sinyo | 6 | 4.2667 | 2.19697 | 0.89691 | 1.9611 | 6.5722 | 2.00 | 7.00 |
| Hercules | 6 | 3.8867 | 0.84946 | 0.34679 | 2.9952 | 4.7781 | 2.40 | 5.00 |
| Bima | 6 | 4.2117 | 2.02404 | 0.82631 | 2.0876 | 6.3358 | 2.00 | 7.30 |
| Arjuna | 6 | 3.6783 | 2.19749 | 0.89712 | 1.3722 | 5.9845 | 1.00 | 7.50 |
| Rewa | 6 | 3.4500 | 1.41138 | 0.57619 | 1.9688 | 4.9312 | 1.00 | 4.65 |
| Lewa | 6 | 3.5550 | 1.68296 | 0.68707 | 1.7888 | 5.3212 | 1.00 | 5.00 |
| Rowa | 6 | 2.0667 | 1.21596 | 0.49641 | 0.7906 | 3.3427 | 0.98 | 3.90 |
| Dewa | 6 | 3.6167 | 1.35597 | 0.55357 | 2.1937 | 5.0397 | 2.00 | 5.65 |
| Maiwa | 6 | 4.0317 | 1.75317 | 0.71573 | 2.1918 | 5.8715 | 1.50 | 6.54 |
| Total | 60 | 3.5930 | 1.66580 | 0.21505 | 3.1627 | 4.0233 | 0.98 | 7.50 |

Analysis of Variance

| ANOVA | | | | | |
|-----------------|----------------|----|-------------|-------|-------|
| Fragmentasi DNA | | | | | |
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 21.939 | 9 | 2.438 | 0.860 | 0.566 |
| Within Groups | 141.779 | 50 | 2.836 | | |
| Total | 163.718 | 59 | | | |



TUDUNG AKROSOM UTUH

Deskriptif

| Descriptives | | | | | | | | |
|--------------|----|---------|----------------|------------|----------------------------------|-------------|---------|---------|
| TAU | | | | | | | | |
| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
| | | | | | Lower Bound | Upper Bound | | |
| Singo | 6 | 92.8050 | 2.17673 | 0.88865 | 90.5207 | 95.0893 | 90.14 | 95.21 |
| Sinyo | 6 | 91.7367 | 2.51224 | 1.02562 | 89.1002 | 94.3731 | 87.34 | 94.32 |
| Hercules | 6 | 87.0983 | 3.62123 | 1.47836 | 83.2981 | 90.8986 | 82.30 | 92.32 |
| Bima | 6 | 88.5667 | 1.90053 | 0.77589 | 86.5722 | 90.5612 | 85.43 | 90.75 |
| Arjuna | 6 | 89.3333 | 2.36083 | 0.96380 | 86.8558 | 91.8109 | 84.78 | 91.65 |
| Rewa | 6 | 90.9983 | 1.54327 | 0.63004 | 89.3788 | 92.6179 | 89.98 | 94.02 |
| Lewa | 6 | 89.8100 | 1.27317 | 0.51977 | 88.4739 | 91.1461 | 87.34 | 91.00 |
| Rowa | 6 | 91.3467 | 3.62630 | 1.48043 | 87.5411 | 95.1522 | 84.78 | 94.32 |
| Dewa | 6 | 93.6450 | 2.61612 | 1.06803 | 90.8995 | 96.3905 | 89.65 | 96.08 |
| Maiwa | 6 | 92.0367 | 3.33712 | 1.36237 | 88.5346 | 95.5388 | 86.43 | 95.45 |
| Total | 60 | 90.7377 | 3.08703 | 0.39853 | 89.9402 | 91.5351 | 82.30 | 96.08 |

Analysis of Variance

| ANOVA | | | | | |
|----------------|----------------|----|-------------|-------|-------|
| TAU | | | | | |
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 219.848 | 9 | 24.428 | 3.567 | 0.002 |
| Within Groups | 342.408 | 50 | 6.848 | | |
| Total | 562.256 | 59 | | | |

Duncan's Test

| TAU | | | | | |
|---------------------|---|-------------------------|---------|---------|---------|
| Duncan ^a | | | | | |
| Sapi Bali | N | Subset for alpha = 0.05 | | | |
| | | 1 | 2 | 3 | 4 |
| Hercules | 6 | 87.0983 | | | |
| Bima | 6 | 88.5667 | 88.5667 | | |
| Arjuna | 6 | 89.3333 | 89.3333 | 89.3333 | |
| Lewa | 6 | 89.8100 | 89.8100 | 89.8100 | |
| Rewa | 6 | | 90.9983 | 90.9983 | 90.9983 |
| Rowa | 6 | | 91.3467 | 91.3467 | 91.3467 |
| Sinyo | 6 | | 91.7367 | 91.7367 | 91.7367 |
| Singo | 6 | | 92.0367 | 92.0367 | 92.0367 |
| | 6 | | | 92.8050 | 92.8050 |
| | 6 | | | | 93.6450 |
| | | 0.107 | 0.050 | 0.050 | 0.131 |



Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

MEMBRAN PLASMA UTUH

Deskriptif

| MPU | | | | | | | | |
|----------|----|---------|----------------|------------|----------------------------------|-------------|---------|---------|
| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
| | | | | | Lower Bound | Upper Bound | | |
| Singo | 6 | 95.2050 | 1.46603 | 0.59850 | 93.6665 | 96.7435 | 92.76 | 96.75 |
| Sinyo | 6 | 93.7400 | 2.75433 | 1.12445 | 90.8495 | 96.6305 | 89.98 | 96.65 |
| Hercules | 6 | 88.8533 | 2.24343 | 0.91588 | 86.4990 | 91.2077 | 86.43 | 92.13 |
| Bima | 6 | 90.2550 | 4.61364 | 1.88351 | 85.4133 | 95.0967 | 85.48 | 96.70 |
| Arjuna | 6 | 90.3550 | 1.46231 | 0.59699 | 88.8204 | 91.8896 | 87.90 | 92.13 |
| Rewa | 6 | 89.5917 | 2.84477 | 1.16137 | 86.6063 | 92.5771 | 86.43 | 93.87 |
| Lewa | 6 | 90.0217 | 1.86394 | 0.76095 | 88.0656 | 91.9777 | 87.00 | 92.35 |
| Rowa | 6 | 93.8750 | 2.61593 | 1.06795 | 91.1297 | 96.6203 | 90.34 | 96.54 |
| Dewa | 6 | 91.5483 | 3.23715 | 1.32156 | 88.1512 | 94.9455 | 86.54 | 96.50 |
| Maiwa | 6 | 91.7450 | 4.36452 | 1.78181 | 87.1647 | 96.3253 | 87.24 | 97.87 |
| Total | 60 | 91.5190 | 3.37357 | 0.43553 | 90.6475 | 92.3905 | 85.48 | 97.87 |

Analysis of Variance

| ANOVA | | | | | |
|----------------|----------------|----|-------------|-------|-------|
| MPU | | | | | |
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 240.823 | 9 | 26.758 | 3.107 | 0.005 |
| Within Groups | 430.654 | 50 | 8.613 | | |
| Total | 671.477 | 59 | | | |

Duncan's Test

| MPU | | | | |
|---------------------|---|-------------------------|---------|---------|
| Duncan ^a | | | | |
| Sapi Bali | N | Subset for alpha = 0.05 | | |
| | | 1 | 2 | 3 |
| Hercules | 6 | 88.8533 | | |
| Rewa | 6 | 89.5917 | | |
| Lewa | 6 | 90.0217 | 90.0217 | |
| Bima | 6 | 90.2550 | 90.2550 | |
| Arjuna | 6 | 90.3550 | 90.3550 | |
| | 6 | 91.5483 | 91.5483 | 91.5483 |
| | 6 | 91.7450 | 91.7450 | 91.7450 |
| | 6 | | 93.7400 | 93.7400 |
| | 6 | | 93.8750 | 93.8750 |



| | | | | |
|--|---|-------|-------|---------|
| Singo | 6 | | | 95.2050 |
| Sig. | | 0.147 | 0.053 | 0.058 |
| Means for groups in homogeneous subsets are displayed. | | | | |
| a. Uses Harmonic Mean Sample Size = 6.000. | | | | |



DOKUMENTASI



Ket: *Thawing* Sampel Semen Beku



Ket: Pengujian MPU, TAU, dan Fragmentasi DNA



Ket: Pengujian MPU, TAU, Dan Fragmentasi DNA Menggunakan Mikroskop Fluoresen



Ket: Larutan AO

