**Anti Inflamatory and Anti Bacterial Activity of Sumbawa Oil**

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Antiinflammatory activity of Sumbawa oil products based on the average percentage of leg inflammation of rats

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample** | | **Average Percentage Of Rats Leg Inflammation (%)** | | | | | | **AUC**  **(ml/h)** |
| **1 h** | **2 h** | **3 h** | **4 h** | **5 h** | **6 h** |
| “Olat Samawa” (OS) | 82.67 ± 1.42 | | 74.33 ± 1.28 | 59.67 ± 1.28 | 50.33 ± 1.23 | 16.17 ± 1.01 | 17.17 ± 1.13 | 6.65 ± 0.20*a* |
| “Unter Bulaeng” (UB) | 82.83 ± 1.04 | | 77.67 ± 1.01 | 66.17 ± 1.01 | 44.50 ± 0.75 | 17.17 ± 0.88 | 7.5 ± 0.75 | 7.53 ± 0.11*b* |
| “Gunung Renggulu” (GR) | 85.33 ± 1.15 | | 70.50 ± 0.90 | 56.17 ± 1.13 | 43.67 ± 0.88 | 14.17 ± 0.80 | 6.83 ± 1.18 | 7.85 ± 0.02*b* |
| “Gunung Tambora” (GT) | 82.67 ± 1.04 | | 66.83 ± 1.18 | 53.00 ± 1.00 | 39.83 ± 1.46 | 16.50 ± 0.90 | 8.00 ± 0.88 | 7.47 ± 0.19*b* |
| “Beringin Putih” (BP) | 88.17 ± 0.95 | | 63.83 ± 1.18 | 52.17 ± 0.88 | 50.33 ± 1.01 | 25.00 ± 1.50 | 24.00 ± 1.00 | 6.42 ± 0.13*a* |
| “Rusa” (Rs) | 88.17 ± 1.18 | | 77.50 ± 0.90 | 62.33 ± 0.88 | 50.83 ± 1.18 | 25.00 ± 0.50 | 13.50 ± 1.09 | 7.47 ± 0.18 *b* |
| Na-diklofenak | 90.67 ± 1.38 | | 63.17 ± 1.04 | 49.67 ± 1.01 | 32.67 ± 1.13 | 12.00 ± 0.90 | 0.17 ± 0.14 | 9.05 ± 0.15*c* |

**Data Analysis**

(One-Way ANOVA)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Descriptives** | | | | | | | | |
| Aktivitas Antiinflamasi | | | | | | | | |
|  | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
| Lower Bound | Upper Bound |
| OS | 3 | 6.5533 | .19655 | .11348 | 6.0651 | 7.0416 | 6.33 | 6.70 |
| UB | 3 | 7.5367 | .11015 | .06360 | 7.2630 | 7.8103 | 7.43 | 7.65 |
| Gr | 3 | 7.8533 | .02517 | .01453 | 7.7908 | 7.9158 | 7.83 | 7.88 |
| Gt | 3 | 7.4600 | .19313 | .11150 | 6.9802 | 7.9398 | 7.25 | 7.63 |
| BP | 3 | 6.4200 | .12767 | .07371 | 6.1028 | 6.7372 | 6.28 | 6.53 |
| Rs | 3 | 7.4667 | .17559 | .10138 | 7.0305 | 7.9029 | 7.30 | 7.65 |
| Na | 3 | 9.0533 | .15373 | .08876 | 8.6714 | 9.4352 | 8.95 | 9.23 |
| Total | 21 | 7.4776 | .84028 | .18336 | 7.0951 | 7.8601 | 6.28 | 9.23 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Test of Homogeneity of Variances** | | | |
| Aktivitas Antiinflamasi | | | |
| Levene Statistic | df1 | df2 | Sig. |
| 1.352 | 6 | 14 | .299 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | |
| Aktivitas Antiinflamasi | | | | | |
|  | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 13.802 | 6 | 2.300 | 100.979 | .000 |
| Within Groups | .319 | 14 | .023 |  |  |
| Total | 14.121 | 20 |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Multiple Comparisons** | | | | | | | |
| Dependent Variable: Aktivitas Antiinflamasi | | | | | | | |
|  | (I) Sampel uji | (J) Sampel uji | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|  | Lower Bound | Upper Bound |
| Bonferroni | OS | UB | -.98333\* | .12324 | .000 | -1.4392 | -.5275 |
| Gr | -1.30000\* | .12324 | .000 | -1.7559 | -.8441 |
| Gt | -.90667\* | .12324 | .000 | -1.3625 | -.4508 |
| BP | .13333 | .12324 | 1.000 | -.3225 | .5892 |
| Rs | -.91333\* | .12324 | .000 | -1.3692 | -.4575 |
| Na | -2.50000\* | .12324 | .000 | -2.9559 | -2.0441 |
| UB | OS | .98333\* | .12324 | .000 | .5275 | 1.4392 |
| Gr | -.31667 | .12324 | .467 | -.7725 | .1392 |
| Gt | .07667 | .12324 | 1.000 | -.3792 | .5325 |
| BP | 1.11667\* | .12324 | .000 | .6608 | 1.5725 |
| Rs | .07000 | .12324 | 1.000 | -.3859 | .5259 |
| Na | -1.51667\* | .12324 | .000 | -1.9725 | -1.0608 |
| Gr | OS | 1.30000\* | .12324 | .000 | .8441 | 1.7559 |
| UB | .31667 | .12324 | .467 | -.1392 | .7725 |
| Gt | .39333 | .12324 | .137 | -.0625 | .8492 |
| BP | 1.43333\* | .12324 | .000 | .9775 | 1.8892 |
| Rs | .38667 | .12324 | .153 | -.0692 | .8425 |
| Na | -1.20000\* | .12324 | .000 | -1.6559 | -.7441 |
| Gt | OS | .90667\* | .12324 | .000 | .4508 | 1.3625 |
| UB | -.07667 | .12324 | 1.000 | -.5325 | .3792 |
| Gr | -.39333 | .12324 | .137 | -.8492 | .0625 |
| BP | 1.04000\* | .12324 | .000 | .5841 | 1.4959 |
| Rs | -.00667 | .12324 | 1.000 | -.4625 | .4492 |
| Na | -1.59333\* | .12324 | .000 | -2.0492 | -1.1375 |
| BP | OS | -.13333 | .12324 | 1.000 | -.5892 | .3225 |
| UB | -1.11667\* | .12324 | .000 | -1.5725 | -.6608 |
| Gr | -1.43333\* | .12324 | .000 | -1.8892 | -.9775 |
| Gt | -1.04000\* | .12324 | .000 | -1.4959 | -.5841 |
| Rs | -1.04667\* | .12324 | .000 | -1.5025 | -.5908 |
| Na | -2.63333\* | .12324 | .000 | -3.0892 | -2.1775 |
| Rs | OS | .91333\* | .12324 | .000 | .4575 | 1.3692 |
| UB | -.07000 | .12324 | 1.000 | -.5259 | .3859 |
| Gr | -.38667 | .12324 | .153 | -.8425 | .0692 |
| Gt | .00667 | .12324 | 1.000 | -.4492 | .4625 |
| BP | 1.04667\* | .12324 | .000 | .5908 | 1.5025 |
| Na | -1.58667\* | .12324 | .000 | -2.0425 | -1.1308 |
| Na | OS | 2.50000\* | .12324 | .000 | 2.0441 | 2.9559 |
| UB | 1.51667\* | .12324 | .000 | 1.0608 | 1.9725 |
| Gr | 1.20000\* | .12324 | .000 | .7441 | 1.6559 |
| Gt | 1.59333\* | .12324 | .000 | 1.1375 | 2.0492 |
| BP | 2.63333\* | .12324 | .000 | 2.1775 | 3.0892 |
| Rs | 1.58667\* | .12324 | .000 | 1.1308 | 2.0425 |
| Games-Howell | OS | UB | -.98333\* | .13009 | .023 | -1.7371 | -.2295 |
| Gr | -1.30000\* | .11441 | .028 | -2.2691 | -.3309 |
| Gt | -.90667\* | .15909 | .032 | -1.7002 | -.1131 |
| BP | .13333 | .13532 | .931 | -.6055 | .8722 |
| Rs | -.91333\* | .15217 | .027 | -1.6774 | -.1492 |
| Na | -2.50000\* | .14407 | .001 | -3.2416 | -1.7584 |
| UB | OS | .98333\* | .13009 | .023 | .2295 | 1.7371 |
| Gr | -.31667 | .06523 | .134 | -.8304 | .1970 |
| Gt | .07667 | .12837 | .992 | -.6617 | .8150 |
| BP | 1.11667\* | .09735 | .003 | .6255 | 1.6079 |
| Rs | .07000 | .11968 | .993 | -.5922 | .7322 |
| Na | -1.51667\* | .10919 | .002 | -2.0929 | -.9405 |
| Gr | OS | 1.30000\* | .11441 | .028 | .3309 | 2.2691 |
| UB | .31667 | .06523 | .134 | -.1970 | .8304 |
| Gt | .39333 | .11245 | .259 | -.5580 | 1.3447 |
| BP | 1.43333\* | .07513 | .008 | .8262 | 2.0405 |
| Rs | .38667 | .10242 | .227 | -.4731 | 1.2464 |
| Na | -1.20000\* | .08994 | .019 | -1.9450 | -.4550 |
| Gt | OS | .90667\* | .15909 | .032 | .1131 | 1.7002 |
| UB | -.07667 | .12837 | .992 | -.8150 | .6617 |
| Gr | -.39333 | .11245 | .259 | -1.3447 | .5580 |
| BP | 1.04000\* | .13367 | .016 | .3149 | 1.7651 |
| Rs | -.00667 | .15070 | 1.000 | -.7619 | .7486 |
| Na | -1.59333\* | .14252 | .003 | -2.3238 | -.8628 |
| BP | OS | -.13333 | .13532 | .931 | -.8722 | .6055 |
| UB | -1.11667\* | .09735 | .003 | -1.6079 | -.6255 |
| Gr | -1.43333\* | .07513 | .008 | -2.0405 | -.8262 |
| Gt | -1.04000\* | .13367 | .016 | -1.7651 | -.3149 |
| Rs | -1.04667\* | .12534 | .011 | -1.7051 | -.3882 |
| Na | -2.63333\* | .11537 | .000 | -3.2194 | -2.0473 |
| Rs | OS | .91333\* | .15217 | .027 | .1492 | 1.6774 |
| UB | -.07000 | .11968 | .993 | -.7322 | .5922 |
| Gr | -.38667 | .10242 | .227 | -1.2464 | .4731 |
| Gt | .00667 | .15070 | 1.000 | -.7486 | .7619 |
| BP | 1.04667\* | .12534 | .011 | .3882 | 1.7051 |
| Na | -1.58667\* | .13474 | .002 | -2.2650 | -.9083 |
| Na | OS | 2.50000\* | .14407 | .001 | 1.7584 | 3.2416 |
| UB | 1.51667\* | .10919 | .002 | .9405 | 2.0929 |
| Gr | 1.20000\* | .08994 | .019 | .4550 | 1.9450 |
| Gt | 1.59333\* | .14252 | .003 | .8628 | 2.3238 |
| BP | 2.63333\* | .11537 | .000 | 2.0473 | 3.2194 |
| Rs | 1.58667\* | .13474 | .002 | .9083 | 2.2650 |
| \*. The mean difference is significant at the 0.05 level. | | | | | | | |

Antibacterial activity of Sumbawa oil products based on the average of diameter inhibition zone (mm)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample** | | **Mean Diameter of Inhibition Zone (mm)** | | | | | |
| ***S. aureus*** | | | ***E. coli*** | | |
| “Olat Samawa”  (OS) | I | 12.00 | 11.83 | 0.76 | 10.25 | 10.67 | 0.52 |
| II | 12.50 | 10.50 |
| III | 11.00 | 11.25 |
| “Unter Bulaeng”  (UB) | I | 14.50 | 14.00 | 0.50 | 12.00 | 12.00 | 0.50 |
| II | 14.00 | 12.50 |
| III | 13.50 | 11.50 |
| “Gunung Renggulu”  (GR) | I | 15.75 | 14.67 | 1.13 | 12.00 | 12.17 | 0.52 |
| II | 14.75 | 12.75 |
| III | 13.50 | 11.75 |
| “Gunung Tambora”  (GT) | I | 15.25 | 14.83 | 0.52 | 12.25 | 12.33 | 0.38 |
| II | 15.00 | 12.75 |
| III | 14.25 | 12.00 |
| “Beringin Putih”  (BP) | I | 14.25 | 13.42 | 0.76 | 11.50 | 11.50 | 0.50 |
| II | 12.75 | 12.00 |
| III | 13.25 | 11.00 |
| “Rusa”  (Rs) | I | 13.50 | 12.50 | 0.90 | 11.00 | 10.83 | 0.76 |
| II | 11.75 | 11.50 |
| III | 12.25 | 10.00 |
| Chloramphenicol | I | 18.50 | 18.33 | 0.52 | 20.00 | 19.50 | 0.50 |
| II | 18.75 | 19.50 |
| III | 17.75 | 19.00 |

**Data Analysis**

(One-Way ANOVA)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Descriptives** | | | | | | | | | |
|  | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
| Lower Bound | Upper Bound |
| SA | OS | 3 | 11.8333 | .76376 | .44096 | 9.9360 | 13.7306 | 11.00 | 12.50 |
| UB | 3 | 14.0000 | .50000 | .28868 | 12.7579 | 15.2421 | 13.50 | 14.50 |
| GR | 3 | 14.6667 | 1.12731 | .65085 | 11.8663 | 17.4671 | 13.50 | 15.75 |
| GT | 3 | 14.8333 | .52042 | .30046 | 13.5405 | 16.1261 | 14.25 | 15.25 |
| BP | 3 | 13.4167 | .76376 | .44096 | 11.5194 | 15.3140 | 12.75 | 14.25 |
| Rs | 3 | 12.5000 | .90139 | .52042 | 10.2608 | 14.7392 | 11.75 | 13.50 |
| Kloramphenikol | 3 | 18.3333 | .52042 | .30046 | 17.0405 | 19.6261 | 17.75 | 18.75 |
| Total | 21 | 14.2262 | 2.10491 | .45933 | 13.2680 | 15.1843 | 11.00 | 18.75 |
| EC | OS | 3 | 10.6667 | .52042 | .30046 | 9.3739 | 11.9595 | 10.25 | 11.25 |
| UB | 3 | 12.0000 | .50000 | .28868 | 10.7579 | 13.2421 | 11.50 | 12.50 |
| GR | 3 | 12.1667 | .52042 | .30046 | 10.8739 | 13.4595 | 11.75 | 12.75 |
| GT | 3 | 12.3333 | .38188 | .22048 | 11.3847 | 13.2820 | 12.00 | 12.75 |
| BP | 3 | 11.5000 | .50000 | .28868 | 10.2579 | 12.7421 | 11.00 | 12.00 |
| Rs | 3 | 10.8333 | .76376 | .44096 | 8.9360 | 12.7306 | 10.00 | 11.50 |
| Kloramphenikol | 3 | 19.5000 | .50000 | .28868 | 18.2579 | 20.7421 | 19.00 | 20.00 |
| Total | 21 | 12.7143 | 2.93820 | .64117 | 11.3768 | 14.0517 | 10.00 | 20.00 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test of Homogeneity of Variances** | | | | |
|  | Levene Statistic | df1 | df2 | Sig. |
| SA | .606 | 6 | 14 | .722 |
| EC | .341 | 6 | 14 | .903 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | | |
|  | | Sum of Squares | df | Mean Square | F | Sig. |
| SA | Between Groups | 80.530 | 6 | 13.422 | 23.246 | .000 |
| Within Groups | 8.083 | 14 | .577 |  |  |
| Total | 88.613 | 20 |  |  |  |
| EC | Between Groups | 168.619 | 6 | 28.103 | 97.347 | .000 |
| Within Groups | 4.042 | 14 | .289 |  |  |
| Total | 172.661 | 20 |  |  |  |

**Post Hoc Tests**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Multiple Comparisons** | | | | | | | | |
| Dependent Variable | | (I) Sampel | (J) Sampel | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
| Lower Bound | Upper Bound |
| SA | Bonferroni | OS | UB | -2.16667 | .62042 | .075 | -4.4617 | .1284 |
| GR | -2.83333\* | .62042 | .009 | -5.1284 | -.5383 |
| GT | -3.00000\* | .62042 | .006 | -5.2951 | -.7049 |
| BP | -1.58333 | .62042 | .484 | -3.8784 | .7117 |
| Rs | -.66667 | .62042 | 1.000 | -2.9617 | 1.6284 |
| Kloramphenikol | -6.50000\* | .62042 | .000 | -8.7951 | -4.2049 |
| UB | OS | 2.16667 | .62042 | .075 | -.1284 | 4.4617 |
| GR | -.66667 | .62042 | 1.000 | -2.9617 | 1.6284 |
| GT | -.83333 | .62042 | 1.000 | -3.1284 | 1.4617 |
| BP | .58333 | .62042 | 1.000 | -1.7117 | 2.8784 |
| Rs | 1.50000 | .62042 | .627 | -.7951 | 3.7951 |
| Kloramphenikol | -4.33333\* | .62042 | .000 | -6.6284 | -2.0383 |
| GR | OS | 2.83333\* | .62042 | .009 | .5383 | 5.1284 |
| UB | .66667 | .62042 | 1.000 | -1.6284 | 2.9617 |
| GT | -.16667 | .62042 | 1.000 | -2.4617 | 2.1284 |
| BP | 1.25000 | .62042 | 1.000 | -1.0451 | 3.5451 |
| Rs | 2.16667 | .62042 | .075 | -.1284 | 4.4617 |
| Kloramphenikol | -3.66667\* | .62042 | .001 | -5.9617 | -1.3716 |
| GT | OS | 3.00000\* | .62042 | .006 | .7049 | 5.2951 |
| UB | .83333 | .62042 | 1.000 | -1.4617 | 3.1284 |
| GR | .16667 | .62042 | 1.000 | -2.1284 | 2.4617 |
| BP | 1.41667 | .62042 | .809 | -.8784 | 3.7117 |
| Rs | 2.33333\* | .62042 | .044 | .0383 | 4.6284 |
| Kloramphenikol | -3.50000\* | .62042 | .001 | -5.7951 | -1.2049 |
| BP | OS | 1.58333 | .62042 | .484 | -.7117 | 3.8784 |
| UB | -.58333 | .62042 | 1.000 | -2.8784 | 1.7117 |
| GR | -1.25000 | .62042 | 1.000 | -3.5451 | 1.0451 |
| GT | -1.41667 | .62042 | .809 | -3.7117 | .8784 |
| Rs | .91667 | .62042 | 1.000 | -1.3784 | 3.2117 |
| Kloramphenikol | -4.91667\* | .62042 | .000 | -7.2117 | -2.6216 |
| Rs | OS | .66667 | .62042 | 1.000 | -1.6284 | 2.9617 |
| UB | -1.50000 | .62042 | .627 | -3.7951 | .7951 |
| GR | -2.16667 | .62042 | .075 | -4.4617 | .1284 |
| GT | -2.33333\* | .62042 | .044 | -4.6284 | -.0383 |
| BP | -.91667 | .62042 | 1.000 | -3.2117 | 1.3784 |
| Kloramphenikol | -5.83333\* | .62042 | .000 | -8.1284 | -3.5383 |
| Kloramphenikol | OS | 6.50000\* | .62042 | .000 | 4.2049 | 8.7951 |
| UB | 4.33333\* | .62042 | .000 | 2.0383 | 6.6284 |
| GR | 3.66667\* | .62042 | .001 | 1.3716 | 5.9617 |
| GT | 3.50000\* | .62042 | .001 | 1.2049 | 5.7951 |
| BP | 4.91667\* | .62042 | .000 | 2.6216 | 7.2117 |
| Rs | 5.83333\* | .62042 | .000 | 3.5383 | 8.1284 |
| Games-Howell | OS | UB | -2.16667 | .52705 | .112 | -5.0361 | .7027 |
| GR | -2.83333 | .78617 | .156 | -7.0606 | 1.3940 |
| GT | -3.00000\* | .53359 | .043 | -5.8635 | -.1365 |
| BP | -1.58333 | .62361 | .333 | -4.6932 | 1.5266 |
| Rs | -.66667 | .68211 | .936 | -4.1187 | 2.7854 |
| Kloramphenikol | -6.50000\* | .53359 | .003 | -9.3635 | -3.6365 |
| UB | OS | 2.16667 | .52705 | .112 | -.7027 | 5.0361 |
| GR | -.66667 | .71200 | .940 | -5.2261 | 3.8928 |
| GT | -.83333 | .41667 | .519 | -2.9130 | 1.2464 |
| BP | .58333 | .52705 | .895 | -2.2861 | 3.4527 |
| Rs | 1.50000 | .59512 | .370 | -1.9636 | 4.9636 |
| Kloramphenikol | -4.33333\* | .41667 | .003 | -6.4130 | -2.2536 |
| GR | OS | 2.83333 | .78617 | .156 | -1.3940 | 7.0606 |
| UB | .66667 | .71200 | .940 | -3.8928 | 5.2261 |
| GT | -.16667 | .71686 | 1.000 | -4.6806 | 4.3473 |
| BP | 1.25000 | .78617 | .701 | -2.9773 | 5.4773 |
| Rs | 2.16667 | .83333 | .322 | -2.1004 | 6.4337 |
| Kloramphenikol | -3.66667 | .71686 | .085 | -8.1806 | .8473 |
| GT | OS | 3.00000\* | .53359 | .043 | .1365 | 5.8635 |
| UB | .83333 | .41667 | .519 | -1.2464 | 2.9130 |
| GR | .16667 | .71686 | 1.000 | -4.3473 | 4.6806 |
| BP | 1.41667 | .53359 | .319 | -1.4468 | 4.2801 |
| Rs | 2.33333 | .60093 | .142 | -1.1056 | 5.7722 |
| Kloramphenikol | -3.50000\* | .42492 | .008 | -5.6190 | -1.3810 |
| BP | OS | 1.58333 | .62361 | .333 | -1.5266 | 4.6932 |
| UB | -.58333 | .52705 | .895 | -3.4527 | 2.2861 |
| GR | -1.25000 | .78617 | .701 | -5.4773 | 2.9773 |
| GT | -1.41667 | .53359 | .319 | -4.2801 | 1.4468 |
| Rs | .91667 | .68211 | .808 | -2.5354 | 4.3687 |
| Kloramphenikol | -4.91667\* | .53359 | .009 | -7.7801 | -2.0532 |
| Rs | OS | .66667 | .68211 | .936 | -2.7854 | 4.1187 |
| UB | -1.50000 | .59512 | .370 | -4.9636 | 1.9636 |
| GR | -2.16667 | .83333 | .322 | -6.4337 | 2.1004 |
| GT | -2.33333 | .60093 | .142 | -5.7722 | 1.1056 |
| BP | -.91667 | .68211 | .808 | -4.3687 | 2.5354 |
| Kloramphenikol | -5.83333\* | .60093 | .010 | -9.2722 | -2.3944 |
| Kloramphenikol | OS | 6.50000\* | .53359 | .003 | 3.6365 | 9.3635 |
| UB | 4.33333\* | .41667 | .003 | 2.2536 | 6.4130 |
| GR | 3.66667 | .71686 | .085 | -.8473 | 8.1806 |
| GT | 3.50000\* | .42492 | .008 | 1.3810 | 5.6190 |
| BP | 4.91667\* | .53359 | .009 | 2.0532 | 7.7801 |
| Rs | 5.83333\* | .60093 | .010 | 2.3944 | 9.2722 |
| EC | Bonferroni | OS | UB | -1.33333 | .43870 | .186 | -2.9562 | .2895 |
| GR | -1.50000 | .43870 | .087 | -3.1229 | .1229 |
| GT | -1.66667\* | .43870 | .041 | -3.2895 | -.0438 |
| BP | -.83333 | .43870 | 1.000 | -2.4562 | .7895 |
| Rs | -.16667 | .43870 | 1.000 | -1.7895 | 1.4562 |
| Kloramphenikol | -8.83333\* | .43870 | .000 | -10.4562 | -7.2105 |
| UB | OS | 1.33333 | .43870 | .186 | -.2895 | 2.9562 |
| GR | -.16667 | .43870 | 1.000 | -1.7895 | 1.4562 |
| GT | -.33333 | .43870 | 1.000 | -1.9562 | 1.2895 |
| BP | .50000 | .43870 | 1.000 | -1.1229 | 2.1229 |
| Rs | 1.16667 | .43870 | .392 | -.4562 | 2.7895 |
| Kloramphenikol | -7.50000\* | .43870 | .000 | -9.1229 | -5.8771 |
| GR | OS | 1.50000 | .43870 | .087 | -.1229 | 3.1229 |
| UB | .16667 | .43870 | 1.000 | -1.4562 | 1.7895 |
| GT | -.16667 | .43870 | 1.000 | -1.7895 | 1.4562 |
| BP | .66667 | .43870 | 1.000 | -.9562 | 2.2895 |
| Rs | 1.33333 | .43870 | .186 | -.2895 | 2.9562 |
| Kloramphenikol | -7.33333\* | .43870 | .000 | -8.9562 | -5.7105 |
| GT | OS | 1.66667\* | .43870 | .041 | .0438 | 3.2895 |
| UB | .33333 | .43870 | 1.000 | -1.2895 | 1.9562 |
| GR | .16667 | .43870 | 1.000 | -1.4562 | 1.7895 |
| BP | .83333 | .43870 | 1.000 | -.7895 | 2.4562 |
| Rs | 1.50000 | .43870 | .087 | -.1229 | 3.1229 |
| Kloramphenikol | -7.16667\* | .43870 | .000 | -8.7895 | -5.5438 |
| BP | OS | .83333 | .43870 | 1.000 | -.7895 | 2.4562 |
| UB | -.50000 | .43870 | 1.000 | -2.1229 | 1.1229 |
| GR | -.66667 | .43870 | 1.000 | -2.2895 | .9562 |
| GT | -.83333 | .43870 | 1.000 | -2.4562 | .7895 |
| Rs | .66667 | .43870 | 1.000 | -.9562 | 2.2895 |
| Kloramphenikol | -8.00000\* | .43870 | .000 | -9.6229 | -6.3771 |
| Rs | OS | .16667 | .43870 | 1.000 | -1.4562 | 1.7895 |
| UB | -1.16667 | .43870 | .392 | -2.7895 | .4562 |
| GR | -1.33333 | .43870 | .186 | -2.9562 | .2895 |
| GT | -1.50000 | .43870 | .087 | -3.1229 | .1229 |
| BP | -.66667 | .43870 | 1.000 | -2.2895 | .9562 |
| Kloramphenikol | -8.66667\* | .43870 | .000 | -10.2895 | -7.0438 |
| Kloramphenikol | OS | 8.83333\* | .43870 | .000 | 7.2105 | 10.4562 |
| UB | 7.50000\* | .43870 | .000 | 5.8771 | 9.1229 |
| GR | 7.33333\* | .43870 | .000 | 5.7105 | 8.9562 |
| GT | 7.16667\* | .43870 | .000 | 5.5438 | 8.7895 |
| BP | 8.00000\* | .43870 | .000 | 6.3771 | 9.6229 |
| Rs | 8.66667\* | .43870 | .000 | 7.0438 | 10.2895 |
| Games-Howell | OS | UB | -1.33333 | .41667 | .191 | -3.4130 | .7464 |
| GR | -1.50000 | .42492 | .146 | -3.6190 | .6190 |
| GT | -1.66667 | .37268 | .081 | -3.6189 | .2856 |
| BP | -.83333 | .41667 | .519 | -2.9130 | 1.2464 |
| Rs | -.16667 | .53359 | 1.000 | -3.0301 | 2.6968 |
| Kloramphenikol | -8.83333\* | .41667 | .000 | -10.9130 | -6.7536 |
| UB | OS | 1.33333 | .41667 | .191 | -.7464 | 3.4130 |
| GR | -.16667 | .41667 | .999 | -2.2464 | 1.9130 |
| GT | -.33333 | .36324 | .949 | -2.2146 | 1.5480 |
| BP | .50000 | .40825 | .856 | -1.5359 | 2.5359 |
| Rs | 1.16667 | .52705 | .452 | -1.7027 | 4.0361 |
| Kloramphenikol | -7.50000\* | .40825 | .000 | -9.5359 | -5.4641 |
| GR | OS | 1.50000 | .42492 | .146 | -.6190 | 3.6190 |
| UB | .16667 | .41667 | .999 | -1.9130 | 2.2464 |
| GT | -.16667 | .37268 | .998 | -2.1189 | 1.7856 |
| BP | .66667 | .41667 | .694 | -1.4130 | 2.7464 |
| Rs | 1.33333 | .53359 | .360 | -1.5301 | 4.1968 |
| Kloramphenikol | -7.33333\* | .41667 | .000 | -9.4130 | -5.2536 |
| GT | OS | 1.66667 | .37268 | .081 | -.2856 | 3.6189 |
| UB | .33333 | .36324 | .949 | -1.5480 | 2.2146 |
| GR | .16667 | .37268 | .998 | -1.7856 | 2.1189 |
| BP | .83333 | .36324 | .416 | -1.0480 | 2.7146 |
| Rs | 1.50000 | .49301 | .264 | -1.5001 | 4.5001 |
| Kloramphenikol | -7.16667\* | .36324 | .000 | -9.0480 | -5.2854 |
| BP | OS | .83333 | .41667 | .519 | -1.2464 | 2.9130 |
| UB | -.50000 | .40825 | .856 | -2.5359 | 1.5359 |
| GR | -.66667 | .41667 | .694 | -2.7464 | 1.4130 |
| GT | -.83333 | .36324 | .416 | -2.7146 | 1.0480 |
| Rs | .66667 | .52705 | .838 | -2.2027 | 3.5361 |
| Kloramphenikol | -8.00000\* | .40825 | .000 | -10.0359 | -5.9641 |
| Rs | OS | .16667 | .53359 | 1.000 | -2.6968 | 3.0301 |
| UB | -1.16667 | .52705 | .452 | -4.0361 | 1.7027 |
| GR | -1.33333 | .53359 | .360 | -4.1968 | 1.5301 |
| GT | -1.50000 | .49301 | .264 | -4.5001 | 1.5001 |
| BP | -.66667 | .52705 | .838 | -3.5361 | 2.2027 |
| Kloramphenikol | -8.66667\* | .52705 | .001 | -11.5361 | -5.7973 |
| Kloramphenikol | OS | 8.83333\* | .41667 | .000 | 6.7536 | 10.9130 |
| UB | 7.50000\* | .40825 | .000 | 5.4641 | 9.5359 |
| GR | 7.33333\* | .41667 | .000 | 5.2536 | 9.4130 |
| GT | 7.16667\* | .36324 | .000 | 5.2854 | 9.0480 |
| BP | 8.00000\* | .40825 | .000 | 5.9641 | 10.0359 |
| Rs | 8.66667\* | .52705 | .001 | 5.7973 | 11.5361 |
| \*. The mean difference is significant at the 0.05 level. | | | | | | | | |