

Table A

Descriptives per tank DHT experiment

| | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum | Levene's P= | t-test for Equality of Means | | | 95% Confidence Interval of the | |
|---------------------|--------|-----|-------|----------------|------------|----------------------------------|-------------|---------|---------|-------------|------------------------------|-----------------|-----------------------|--------------------------------|-------|
| | | | | | | Lower Bound | Upper Bound | | | | Sig. (2-tailed) P= | Mean Difference | Std. Error Difference | Lower | Upper |
| shell diameter (mm) | DWC-1 | 15 | 11.65 | 1.62 | 0.42 | 10.76 | 12.55 | 8.27 | 14.39 | 0.616 | 0.126 | -0.96 | 0.60 | -2.20 | 0.29 |
| | DWC-2 | 10 | 12.61 | 1.22 | 0.39 | 11.74 | 13.48 | 10.55 | 14.13 | | | | | | |
| | SC-1 | 20 | 11.26 | 1.17 | 0.26 | 10.71 | 11.80 | 7.61 | 12.84 | 0.482 | 0.314 | 0.40 | 0.39 | -0.40 | 1.20 |
| | SC-2 | 19 | 10.86 | 1.29 | 0.30 | 10.24 | 11.48 | 8.14 | 12.97 | | | | | | |
| | 62.5-1 | 19 | 9.84 | 1.32 | 0.30 | 9.21 | 10.48 | 6.78 | 11.47 | 0.422 | 0.009* | -1.09 | 0.40 | -1.89 | -0.28 |
| | 62.5-2 | 19 | 10.93 | 1.11 | 0.25 | 10.40 | 11.46 | 7.70 | 12.77 | | | | | | |
| | 125-1 | 15 | 12.52 | 1.57 | 0.41 | 11.65 | 13.39 | 9.41 | 15.17 | 0.806 | 0.271 | -0.60 | 0.53 | -1.69 | 0.49 |
| | 125-2 | 16 | 13.12 | 1.41 | 0.35 | 12.37 | 13.87 | 11.09 | 15.76 | | | | | | |
| | 250-1 | 1 | 12.73 | | | | | 12.73 | 12.73 | | | | | | |
| | 250-2 | 1 | 12.76 | | | | | 12.76 | 12.76 | | | | | | |
| | 500-1 | 6 | 11.99 | 2.34 | 0.96 | 9.53 | 14.45 | 7.54 | 13.99 | 0.144 | 0.914 | 0.11 | 0.96 | -2.01 | 2.22 |
| | 500-2 | 7 | 11.88 | 0.95 | 0.36 | 11.00 | 12.76 | 10.33 | 13.10 | | | | | | |
| | Total | 148 | | | | | | | | | | | | | |
| total weight (g) | DWC-1 | 15 | 0.36 | 0.12 | 0.03 | 0.29 | 0.42 | .18 | .60 | 0.473 | 0.169 | -0.07 | 0.05 | -0.16 | 0.03 |
| | DWC-2 | 10 | 0.42 | 0.10 | 0.03 | 0.35 | 0.49 | .26 | .57 | | | | | | |
| | SC-1 | 20 | 0.37 | 0.08 | 0.02 | 0.33 | 0.41 | .13 | .53 | 0.346 | 0.287 | 0.03 | 0.03 | -0.03 | 0.09 |
| | SC-2 | 19 | 0.33 | 0.10 | 0.02 | 0.29 | 0.38 | .13 | .52 | | | | | | |
| | 62.5-1 | 19 | 0.27 | 0.06 | 0.01 | 0.24 | 0.30 | .11 | .40 | 0.605 | 0.013* | -0.06 | 0.02 | -0.10 | -0.01 |
| | 62.5-2 | 19 | 0.33 | 0.07 | 0.02 | 0.29 | 0.36 | .14 | .47 | | | | | | |
| | 125-1 | 15 | 0.46 | 0.13 | 0.03 | 0.39 | 0.54 | .25 | .67 | 0.475 | 0.667 | -0.02 | 0.05 | -0.11 | 0.07 |
| | 125-2 | 16 | 0.48 | 0.12 | 0.03 | 0.42 | 0.54 | .33 | .70 | | | | | | |
| | 250-1 | 1 | 0.49 | | | | | .49 | .49 | | | | | | |
| | 250-2 | 1 | 0.47 | | | | | .47 | .47 | | | | | | |
| | 500-1 | 6 | 0.44 | 0.16 | 0.06 | 0.28 | 0.61 | .15 | .60 | 0.238 | 0.651 | 0.03 | 0.07 | -0.11 | 0.17 |
| | 500-2 | 7 | 0.41 | 0.07 | 0.03 | 0.35 | 0.48 | .30 | .50 | | | | | | |
| | Total | 148 | | | | | | | | | | | | | |

* significant difference found between duplicate tanks of the same treatment

Table B

Descriptives per treatment DHT experiment

| | | N | Mean | Std. Deviation | Std. Error | Interval for Mean | | Minimum | Maximum |
|---------------------|-------|-----|-------|----------------|------------|-------------------|-------------|---------|---------|
| | | | | | | Lower Bound | Upper Bound | | |
| shell diameter (mm) | DWC | 25 | 12.04 | 1.52 | .30 | 11.41 | 12.66 | 8.27 | 14.39 |
| | SC | 39 | 11.06 | 1.23 | .20 | 10.66 | 11.46 | 7.61 | 12.97 |
| | 62.5 | 38 | 10.39 | 1.32 | .21 | 9.95 | 10.82 | 6.78 | 12.77 |
| | 125 | 31 | 12.83 | 1.49 | .27 | 12.28 | 13.37 | 9.41 | 15.76 |
| | 250 | 2 | 12.75 | 0.02 | .01 | 12.55 | 12.94 | 12.73 | 12.76 |
| | 500 | 13 | 11.93 | 1.66 | .46 | 10.93 | 12.93 | 7.54 | 13.99 |
| | Total | 148 | | | | | | | |
| total weight (g) | DWC | 25 | .38 | .12 | .02 | .33 | .43 | .18 | .60 |
| | SC | 39 | .35 | .09 | .01 | .32 | .38 | .13 | .53 |
| | 62.5 | 38 | .30 | .07 | .01 | .28 | .32 | .11 | .47 |
| | 125 | 31 | .47 | .12 | .02 | .43 | .52 | .25 | .70 |
| | 250 | 2 | .48 | .01 | .01 | .35 | .61 | .47 | .49 |
| | 500 | 13 | .43 | .11 | .03 | .36 | .50 | .15 | .60 |
| | Total | 148 | | | | | | | |

Table C

shell diameter - DHT

Tukey HSD

| tank1 | N | Subset for alpha = 0.05 | | |
|--------|----|-------------------------|---------|---------|
| | | 1 | 2 | 3 |
| 62.5-1 | 19 | 9.8437 | | |
| SC-2 | 19 | 10.8563 | 10.8563 | |
| 62.5-2 | 19 | 10.9300 | 10.9300 | |
| SC-1 | 20 | 11.2575 | 11.2575 | |
| DWC-1 | 15 | | 11.6533 | 11.6533 |
| 500-2 | 7 | | 11.8800 | 11.8800 |
| 500-1 | 6 | | 11.9867 | 11.9867 |
| 125-1 | 15 | | 12.5167 | 12.5167 |
| DWC-2 | 10 | | 12.6090 | 12.6090 |
| 125-2 | 16 | | | 13.1169 |
| Sig. | | .251 | .058 | .208 |

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 12.296.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not garenteed

Table D

Total weight - DHT

Tukey HSD

| tank1 | N | Subset for alpha = 0.05 | | | |
|--------|----|-------------------------|-------|-------|-------|
| | | 1 | 2 | 3 | 4 |
| 62.5-1 | 19 | .2718 | | | |
| 62.5-2 | 19 | .3289 | .3289 | | |
| SC-2 | 19 | .3346 | .3346 | .3346 | |
| DWC-1 | 15 | .3561 | .3561 | .3561 | .3561 |
| SC-1 | 20 | .3668 | .3668 | .3668 | .3668 |
| 500-2 | 7 | | .4141 | .4141 | .4141 |
| DWC-2 | 10 | | .4225 | .4225 | .4225 |
| 500-1 | 6 | | .4445 | .4445 | .4445 |
| 125-1 | 15 | | | .4625 | .4625 |
| 125-2 | 16 | | | | .4821 |
| Sig. | | .377 | .136 | .063 | .071 |

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 12.271.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Table E

Descriptives per tank

normalised ovotestis weight

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum | Levene's P= | t-test for Equality of Means | | | 95% Confidence Interval of the Difference | |
|--------|-----|------|----------------|------------|----------------------------------|-------------|---------|---------|-------------|------------------------------|-----------------|-----------------------|---|-------|
| | | | | | Lower Bound | Upper Bound | | | | Sig. (2-tailed) P= | Mean Difference | Std. Error Difference | Lower | Upper |
| | | | | | | | | | | | | | | |
| DWC-1 | 8 | .022 | .007 | .002 | .016 | .028 | .016 | .038 | 0.452 | 0.372 | -0.004 | 0.004 | -0.013 | 0.005 |
| DWC-2 | 9 | .026 | .010 | .003 | .018 | .034 | .016 | .049 | | | | | | |
| SC-1 | 14 | .022 | .011 | .003 | .016 | .029 | .010 | .050 | 0.487 | 0.855 | 0.001 | 0.004 | -0.008 | 0.010 |
| SC-2 | 9 | .021 | .008 | .003 | .016 | .027 | .010 | .040 | | | | | | |
| 62.5-1 | 15 | .021 | .005 | .001 | .018 | .024 | .011 | .027 | 0.051 | 0.963 | 0.000 | 0.003 | -0.005 | 0.005 |
| 62.5-2 | 15 | .021 | .008 | .002 | .016 | .026 | .009 | .036 | | | | | | |
| 125-1 | 12 | .019 | .006 | .002 | .015 | .023 | .008 | .029 | 0.576 | 0.362 | -0.002 | 0.002 | -0.006 | 0.002 |
| 125-2 | 16 | .021 | .005 | .001 | .018 | .023 | .013 | .030 | | | | | | |
| 250-1 | 1 | .003 | | | | | .003 | .003 | | | | | | |
| 250-2 | 1 | .022 | | | | | .022 | .022 | | | | | | |
| 500-1 | 5 | .019 | .004 | .002 | .014 | .024 | .013 | .024 | 0.037# | 0.414 | 0.002 | 0.002 | -0.003 | 0.007 |
| 500-2 | 7 | .017 | .002 | .001 | .015 | .019 | .013 | .019 | | | | | | |
| Total | 112 | | | | | | | | | | | | | |

significant variance found; Welch's t Test used (equal variance not assumed)

Descriptives per treatment

normalised ovotestis weight

| | N | Mean | Std. Deviation | Std. Error | Interval for Mean | | Minimum | Maximum |
|-------|-----|-------|----------------|------------|-------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| DWC | 17 | .0242 | .00858 | .00208 | .0198 | .0286 | .02 | .05 |
| SC | 23 | .0218 | .00986 | .00206 | .0176 | .0261 | .01 | .05 |
| 62.5 | 30 | .0211 | .00680 | .00124 | .0186 | .0236 | .01 | .04 |
| 125 | 28 | .0200 | .00542 | .00102 | .0179 | .0221 | .01 | .03 |
| 250 | 2 | .0122 | .01323 | .00936 | -.1067 | .1311 | .00 | .02 |
| 500 | 12 | .0177 | .00308 | .00089 | .0158 | .0197 | .01 | .02 |
| Total | 112 | | | | | | | |

Levene Statistic

P= 0.055

Table G

ANOVA

normalised ovotestis weight

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | .000 | 5 | .000 | 1.841 | .111 |
| Within Groups | .006 | 106 | .000 | | |
| Total | .006 | 111 | | | |

Table F

Table H

Descriptives per tank

normalised albumen weight

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum | Levene's P= | t-test for Equality of Means | | | 95% Confidence Interval of the Difference | |
|--------|-----|-------|----------------|------------|----------------------------------|-------------|---------|---------|-------------|------------------------------|-----------------|-----------------------|---|---------|
| | | | | | Lower Bound | Upper Bound | | | | Sig. (2-tailed) P= | Mean Difference | Std. Error Difference | Lower | Upper |
| DWC-1 | 15 | .0199 | .00697 | .00180 | .0160 | .0237 | .010 | .030 | 0.359 | 0.891 | -0.00036 | 0.00263 | -0.00582 | 0.00509 |
| DWC-2 | 10 | .0202 | .00556 | .00176 | .0162 | .0242 | .010 | .030 | | | | | | |
| SC-1 | 19 | .0303 | .01180 | .00271 | .0246 | .0360 | .000 | .050 | 0.323 | 0.748 | -0.00119 | 0.00367 | -0.00866 | 0.00628 |
| SC-2 | 16 | .0315 | .00951 | .00238 | .0264 | .0366 | .010 | .050 | | | | | | |
| 62.5-1 | 18 | .0263 | .00757 | .00178 | .0225 | .0300 | .020 | .040 | 0.471 | 0.124 | -0.00471 | 0.00299 | -0.01079 | 0.00136 |
| 62.5-2 | 18 | .0310 | .01017 | .00240 | .0259 | .0360 | .020 | .060 | | | | | | |
| 125-1 | 15 | .0226 | .00663 | .00171 | .0189 | .0263 | .010 | .030 | 0.099 | 0.124 | -0.00471 | 0.00299 | -0.01079 | 0.00136 |
| 125-2 | 16 | .0328 | .03595 | .00899 | .0137 | .0520 | .020 | .160 | | | | | | |
| 250-1 | 1 | .0260 | . | . | . | . | .030 | .030 | | | | | | |
| 250-2 | 1 | .0466 | . | . | . | . | .050 | .050 | | | | | | |
| 500-1 | 6 | .0244 | .00686 | .00280 | .0172 | .0316 | .020 | .030 | 0.320 | 0.523 | 0.00229 | 0.00347 | -0.00535 | 0.00994 |
| 500-2 | 7 | .0221 | .00568 | .00215 | .0168 | .0273 | .020 | .030 | | | | | | |
| Total | 142 | | | | | | | | | | | | | |

Table I

Descriptives per treatment

normalised albumen weight

| | N | Mean | Std. Deviation | Std. Error | Interval for Mean | | Minimum | Maximum |
|-------|-----|-------|----------------|------------|-------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| DWC | 25 | .0200 | .00632 | .00126 | .0174 | .0226 | .007 | .034 |
| SC | 35 | .0309 | .01068 | .00180 | .0272 | .0345 | .003 | .053 |
| 62.5 | 36 | .0286 | .00915 | .00153 | .0255 | .0317 | .016 | .056 |
| 125 | 31 | .0279 | .02634 | .00473 | .0182 | .0375 | .012 | .164 |
| 250 | 2 | .0363 | .01454 | .01028 | -.0943 | .1669 | .026 | .047 |
| 500 | 13 | .0232 | .00610 | .00169 | .0195 | .0268 | .017 | .035 |
| Total | 142 | | | | | | | |

Levene Statistic

P= 0.290

Table J

ANOVA

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | .002 | 5 | .000 | 2.074 | .072 |
| Within Groups | .029 | 136 | .000 | | |
| Total | .031 | 141 | | | |

Table K

Descriptives per tank

normalised gladular complex

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum | Levene's P= | t-test for Equality of Means | | | 95% Confidence Interval of the Difference | |
|--------|----|-------|----------------|------------|----------------------------------|-------------|---------|---------|-------------|------------------------------|-----------------|-----------------------|---|---------|
| | | | | | Lower Bound | Upper Bound | | | | Sig. (2-tailed) P= | Mean Difference | Std. Error Difference | Lower | Upper |
| DWC-1 | 9 | .2543 | .09642 | .03214 | .1802 | .3284 | .15 | .45 | 0.024# | 0.064 | 0.06993 | 0.0331 | -0.00499 | 0.14485 |
| DWC-2 | 9 | .1843 | .02378 | .00793 | .1661 | .2026 | .14 | .21 | | | | | | |
| SC-1 | 13 | .1810 | .07450 | .02066 | .1359 | .2260 | .05 | .30 | 0.246 | 0.085 | -0.04724 | 0.02628 | -0.1016 | 0.00713 |
| SC-2 | 12 | .2282 | .05438 | .01570 | .1936 | .2627 | .16 | .36 | | | | | | |
| 62.5-1 | 14 | .2360 | .04619 | .01235 | .2094 | .2627 | .19 | .32 | 0.595 | 0.704 | 0.00843 | 0.0219 | -0.037 | 0.05386 |
| 62.5-2 | 10 | .2276 | .06131 | .01939 | .1837 | .2715 | .16 | .36 | | | | | | |
| 125-1 | 9 | .1895 | .06408 | .02136 | .1402 | .2387 | .11 | .30 | 0.577 | 0.905 | -0.00524 | 0.04273 | -0.09929 | 0.08881 |
| 125-2 | 4 | .1947 | .08712 | .04356 | .0561 | .3333 | .11 | .31 | | | | | | |
| 250-1 | 0 | | | | | | | | | | | | | |
| 250-2 | 0 | | | | | | | | | | | | | |
| 500-1 | 5 | .2033 | .03663 | .01638 | .1578 | .2487 | .14 | .23 | 0.595 | 0.38 | -0.02911 | 0.03074 | -0.10433 | 0.04612 |
| 500-2 | 3 | .2324 | .05131 | .02962 | .1049 | .3598 | .18 | .28 | | | | | | |
| Total | 88 | | | | | | | | | | | | | |

significant variance found; Welch's t Test used (equal variance not assumed)

Table L

Descriptives per treatment

normalised glandular complex

| | N | Mean | Std. Deviation | Std. Error | Interval for Mean | | Minimum | Maximum |
|--------|----|-------|----------------|------------|-------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| DWC | 18 | .2193 | .07704 | .01816 | .1810 | .2576 | .14 | .45 |
| SC | 25 | .2036 | .06863 | .01373 | .1753 | .2320 | .05 | .36 |
| 62.5ng | 24 | .2325 | .05191 | .01060 | .2106 | .2544 | .16 | .36 |
| 125ng | 13 | .1911 | .06813 | .01890 | .1499 | .2323 | .11 | .31 |
| 500ng | 8 | .2142 | .04178 | .01477 | .1792 | .2491 | .14 | .28 |
| Total | 88 | | | | | | | |

Levene Statistic

P= 0.636

Table M

ANOVA

normalised gladular complex

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | .018 | 4 | .005 | 1.101 | .362 |
| Within Groups | .344 | 83 | .004 | | |
| Total | .362 | 87 | | | |