|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **IPP** | **PPM** | | | | |
|  | **0** | **1000** | **3000** | **10,000** | **15,000** |
| No. of time-mated females | 22 | 22 | 15 | 22 | 15 |
| No. of pregnanta | 15 | 21 | 12 | 16 | 12 |
| Female Littered | 12 | 17 | 12 | 13 | 8 |
| Gestation length | 22.5 ± 0.2 | 22.2 ± 0.1 | 22.3 ± 0.2 | 22.3 ± 0.2 | 22.8 ± 0.3 |
| Litter parameters (PND0) |  |  |  |  |  |
| No. of Viable Litters | 12 | 17 | 12 | 12 | 8 |
| Fecundity ratio | 100% | 94% | 100% | 100% | 80% |
| Total no. of pups | 12.1 ± 1.2†† | 12.3 ± 0.5 | 10.8 ± 0.9 | 10.7 ± 1.1 | 8.8 ± 1\* |
| No. live pups | 13 ± 0.7†† | 10.5 ± 0.6 | 9.9 ± 0.9 | 10.5 ± 1 | 7 ± 2.1\* |
| % Survival PND 0 | 91 ± 8†† | 85 ± 3\* | 82 ± 8\* | 74 ± 12\* | 40 ± 16\*\* |
| % Survival PND 1-4 | 99 ± 1†† | 98 ± 1 | 72 ± 12\* | 29 ± 12\*\* | 0 ± 0\*\* |
| % Survival post cull PND 5-28c | 99 ± 1†† | 96 ± 3 | 83 ± 10\* | 74 ± 14\* | NAb |
| PND 1 pup weights  Combined | 7.4 ± 0.14†† | 6.8 ± 0.14 | 6.0 ± 0.34\*\* | 4.9 ± 0.37\*\* | NAb |
| Male | 7.7 ± 0.16†† | 6.8 ± 0.13\* | 6.1 ± 0.41\*\* | 5 ± 0.38\*\* | NAb |
| Female | 7.2 ± 0.16†† | 6.6 ± 0.15 | 5.8 ± 0.34\*\* | 4.8 ± 0.36\*\* | NAb |

Table 2. Mean TPHP and IPP reproductive performance and litter parameter

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TPHP** | **PPM** | | | | |
|  | **0** | **1000** | **3000** | **10,000** | **15,000** |
| No. of time-mated females | 22 | 22 | 15 | 22 | 15 |
| No. of pregnanta | 19 | 19 | 12 | 18 | 11 |
| Female Littered | 15 | 16 | 12 | 15 | 11 |
| Gestation length | 22.2 ± 0.1 | 22.3 ± 0.1 | 22.3 ± 0.1 | 22.1 ± 0.1 | 22.4 ± 0.2 |
| Litter parameters (PND0) |  |  |  |  |  |
| No. of Viable Litters  Fecundity ratiob | 15  94% | 16  100% | 12  100% | 15  100% | 11  100% |
| Total no. of pups | 12.2 ± 0.8 | 11.9 ± 0.9 | 13.4 ± 0.5 | 12.9 ± 0.6 | 11.8 ± 0.5 |
| No live pups | 11.8 ± 0.8 | 11.7 ± 0.9 | 13.2 ± 0.5 | 12.7 ± 0.7 | 11.7 ± 0.5 |
| % Survival PND 0 | 96 ± 2 | 98 ± 1 | 98 ± 1 | 98 ± 1 | 89 ± 9 |
| % Survival PND 1-4 | 99 ± 1†† | 100 ± 0 | 100 ± 0 | 90 ± 6 | 89 ± 3\*\* |
| % Survival post cull PND 4-28c | 97 ± 2†† | 94 ± 5 | 97 ± 1 | 86 ± 8 | 62 ± 11\*\* |
| PND 1 pup weights  Combined | 7.2 ± 0.13†† | 7.0 ± 0.11 | 7.4 ± 0.13 | 6.4 ± 0.19\*\* | 5.9 ± 0.19\*\* |
| Male | 7.4 ± 0.17†† | 7.2 ± 0.11 | 7.7 ± 0.13 | 6.6 ± 0.2\*\* | 6.1± 0.18\*\* |
| Female | 7.1 ± 0.13†† | 6.9 ± 0.12 | 7.2 ± 0.14 | 6.2 ± 0.18\*\* | 5.7 ± 0.2\*\* |

†† Significant trend at p≤0.01.

\* Significantly different from control at p≤0.05; \*\*p≤0.01.

aIncludes 3 pregnant animals per group removed on GD 18 and PND 4 for biological sampling from 0, 1000 and 10,000 ppm dose groups for biological sampling.

bCalculated as the number of litters divided by the number of pregnant females (excluding those taken for biological sampling)

cValues were not available (NA) due to early termination of the groups on PND1-3