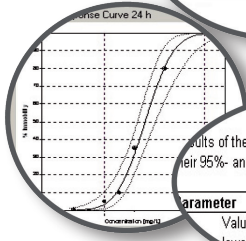
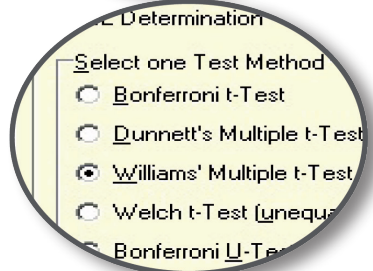
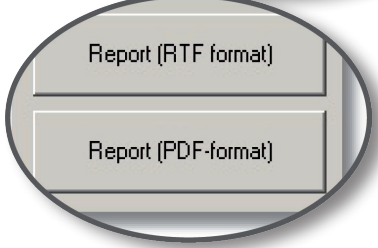


0 h	Control		
1	5		5
2	5		5
3	5		5
4	5		5
#Replicates	4		4
#Introduced	20,00		20,00
24,0 h			
1	0		0
2	0		0
3	0		0
4	0		0
Replicates	4		
File	0,00		



Results of the probit analysis: Selected effective concentrations and their 95%- and 99%-confidence limits (according to Fieller's theorem)

Parameter	EC10	EC20	EC50
Value (mg/L)	1,315	1,649	2,540
Lower 95%-cl	0,971	1,315	
Upper 95%-cl	1,592	1,983	





ToxRat saves time:



All statistical evaluations according to guideline as a 'batch order' at the press of one button ("RUN").

Calculation of validity criteria and check for validity according to guideline.

For the test to be valid, maximum control mortality in females must not exceed 20,0% and mean offspring number at day 21 must be at least 60,0. Present test mortality was 0,0% and mean offspring number was 105,9; so the test is valid.

Dose-Response-Analysis: Up to 6 effect concentrations user definable. Output of ECx including 95%-Confidence Interval.

Choose the x of ELx included in the results tables (enter 50 with EC50):
1. 2. 3.
4. 5. 6.

NOEC-Determination includes Minimal Detectable Difference (%MDD).

Test Procedure

Significance tests with "Control" by the t test procedure after Williams. Significance level: 0,05, one-sided smaller. Mean: arithmetic mean; n: sample size; s: standard deviation; likelihood mean; %MDD: minimum detectable difference to Control (in percent of Control); t: critical t for Ho: $\mu_1 = \mu_2 = \dots = \mu_k$; the differences are significant in case $|t| > |t^*|$; residual variance of an ANOVA was applied; df = N - k; N: sum of treatment replicates n(i); k: number of treatments).

Treatm. [mg/L]	Mean	s	df	LbM	%MDD	t	t*	Sign.
Control	1,6	0,15						
0,250	1,6	0,15	24	1,6	-11,6	0,00	-1,71	-
0,500	1,6	0,15	24	1,6	-12,3	0,00	-1,79	-
0,700	1,6	0,15	24	1,6	-12,3	0,00	-1,82	-
1,000	1,4	0,15	24	1,4	-12,4	-1,61	-1,83	-
1,400	1,2	0,15	24	1,2	-12,4	-3,27	-1,84	-
2,000	0,8	0,15	24	0,8	-12,5	-6,91	-1,84	-
4,000	0,0	0,15	24	0,0	-12,5	-14,77	-1,85	-

ToxRat Solutions provides software, service and support for statistical evaluation of biotests in ecotoxicology. ToxRat comes as a validated, GLP compliant software for the practitioner who wants to perform statistical analysis of biotests according to international guidelines (DIN EN ISO, OECD). ToxRat acts as an interface between ecotoxicology and statistics.

ToxRat Solutions GmbH