

1. Calculation of 240-h LC 50 for *Dugesia tigrina* Girard [Weber, 1972] - PDA

Concentration [mg/dm ³]	Number of animals <i>n</i>	Number of dead animals		Logarithm of concentration <i>x</i>	Empirical probites <i>y</i>
		Number of individuals <i>r</i>	Percentage of individuals <i>P</i>		
1.	2.	3.	4.	5.	6.
116	30	27	90,00	2,06	6,282
97,22	30	24	80,00	1,99	5,842
81,02	30	21	70,00	1,91	5,524
67,52	30	16	53,33	1,83	5,169
56,26	30	11	36,67	1,75	4,66
46,86	30	5	16,67	1,67	4,034
39,07	30	2	6,67	1,59	3,501
32,56	30	1	3,33	1,51	3,162

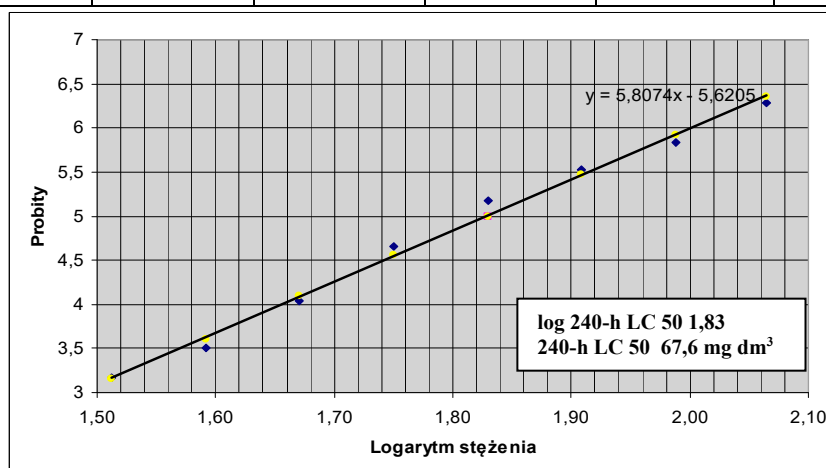


Fig.1. Calculation of LC 50 by graphic method

Checking the graphic method of calculating LC 50 using the χ^2 test

Logarithm of concentration <i>x</i>	<i>y</i> theoretical	<i>P</i> theoretical	<i>n</i>	<i>r</i>	<i>nP</i>	<i>r - nP</i>	$\frac{(r - nP)^2}{nP(1 - P)}$
1.	2.	3.	4.	5.	6.	7.	8.
2,06	6,35	0,912	30	27	27,36	-0,36	0,0538
1,99	5,92	0,822	30	24	24,66	-0,66	0,0992
1,91	5,47	0,674	30	21	20,22	0,78	0,0923
1,83	5,00	0,500	30	16	15,00	1,00	0,1333
1,75	4,56	0,330	30	11	9,9	1,1	0,1824
1,67	4,10	0,185	30	5	5,55	-0,55	0,0669
1,59	3,61	0,083	30	2	2,49	-0,49	0,1052
1,51	3,16	0,033	30	1	0,99	0,01	0,0001
Number of degrees of freedom: $f = 8 - 2 = 6$. Dla χ^2 0,7333 ; $P = 98\%$							0,7333

2. Calculation of 48-h LC 50 for *Daphnia magna* [Weber, 1972]- PDA

Concentration [mg/dm ³]	Number of animals <i>n</i>	Number of dead animals		Logarithm of concentration <i>x</i>	Empirical probites <i>y</i>
		Number of individuals <i>r</i>	Percentage of individuals <i>P</i>		
1.	2.	3.	4.	5.	6.
116	30	24	80,00	2,06	5,842
97,22	30	20	66,67	1,99	5,4316
81,02	32	16	50,00	1,91	5,0828
67,52	30	12	40,00	1,83	4,7467
56,26	30	10	33,33	1,75	4,5684
46,86	30	4	13,33	1,67	3,8877
39,07	30	3	10,00	1,59	3,7184
32,56	31	1	3,23	1,51	3,162

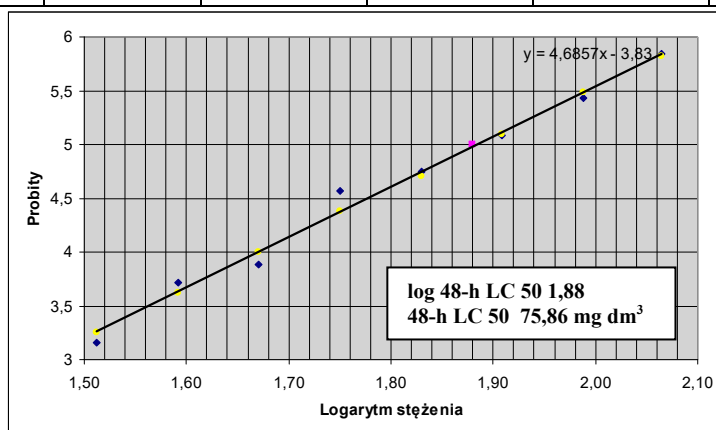


Fig.2. Calculation of LC 50 by graphic method

Checking the graphic method of calculating LC 50 using the χ^2 test

Logarithm of concentration <i>x</i>	<i>y</i> theoretical	<i>P</i> theoretical	<i>n</i>	<i>r</i>	<i>nP</i>	<i>r - nP</i>	$\frac{(r - nP)^2}{nP(1 - P)}$
1.	2.	3.	4.	5.	6.	7.	8.
2,06	5,82	0,794	30	24	23,82	0,18	0,0066
1,99	5,48	0,685	30	20	20,55	-0,55	0,0467
1,91	5,1	0,54	32	16	17,28	-1,28	0,2061
1,83	4,70	0,383	30	12	11,49	0,51	0,0367
1,75	4,38	0,268	30	10	8,04	1,96	0,6527
1,67	4,00	0,159	30	4	4,77	-0,77	0,1478
1,59	3,62	0,084	30	3	2,52	0,48	0,0998
1,51	3,25	0,04	31	1	1,24	-0,24	0,0484
Number of degrees of freedom: $f = 8 - 2 = 6$. Dla χ^2 1,2449; $P = 97\%$							1,2449

3. Calculation of 240-h LC 50 for *Dugesia tigrina* Girard [Weber, 1972] - MEA

Concentration [mg/dm ³]	Number of animals <i>n</i>	Number of dead animals		Logarithm of concentration <i>x</i>	Empirical probites <i>y</i>
		Number of individuals <i>r</i>	Percentage of individuals <i>P</i>		
1.	2.	3.	4.	5.	6.
200	30	17	56,67	2,30	5,169
166,7	30	15	50,00	2,22	5
138,9	30	12	40,00	2,14	4,7467
115,7	30	10	33,33	2,06	4,5684
96,5	30	6	20,00	1,98	4,1584
80,4	30	4	13,33	1,91	3,8877
67	30	3	10,00	1,83	3,7184
55,8	30	1	3,33	1,75	3,162

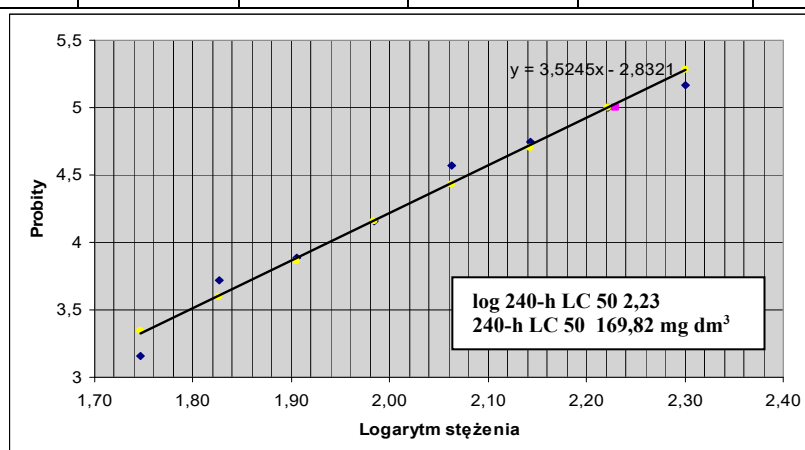


Fig.3. Calculation of LC 50 by graphic method

Checking the graphic method of calculating LC 50 using the χ^2 test

Logarithm of concentration <i>x</i>	<i>y</i> theoretical	<i>P</i> theoretical	<i>n</i>	<i>r</i>	<i>nP</i>	<i>r - nP</i>	$\frac{(r - nP)^2}{nP(1 - P)}$
1.	2.	3.	4.	5.	6.	7.	8.
2,30	5,28	0,611	30	17	18,33	-1,33	0,2481
2,22	5	0,5	30	15	15	0	0,0000
2,14	4,7	0,383	32	12	12,256	-0,256	0,0087
2,06	4,43	0,285	30	10	8,55	1,45	0,3439
1,98	4,16	0,201	30	6	6,03	-0,03	0,0002
1,91	3,86	0,128	30	4	3,84	0,16	0,0076
1,83	3,6	0,081	30	3	2,43	0,57	0,1455
1,75	3,34	0,049	31	1	1,519	-0,519	0,1865
Number of degrees of freedom: $f = 8 - 2 = 6$. Dla χ^2 0,9405; $P = 98\%$							0,9405

4. Calculation of 48-h LC 50 for *Daphnia magna* [Weber, 1972]- MEA

Concentration [mg/dm ³]	Number of animals <i>n</i>	Number of dead animals		Logarithm of concentration <i>x</i>	Empirical probites <i>y</i>
		Number of individuals <i>r</i>	Percentage of individuals <i>P</i>		
1.	2.	3.	4.	5.	6.
250	30	22	73,33	2,40	5,622
208,3	30	16	53,33	2,32	5,0828
173,6	30	12	40,00	2,24	4,7467
144,7	30	10	33,33	2,16	4,5684
120,5	30	6	20,00	2,08	4,1584
100,5	30	4	13,33	2,00	3,8877
83,7	30	3	10,00	1,92	3,7184
69,7	31	1	3,23	1,84	3,1478

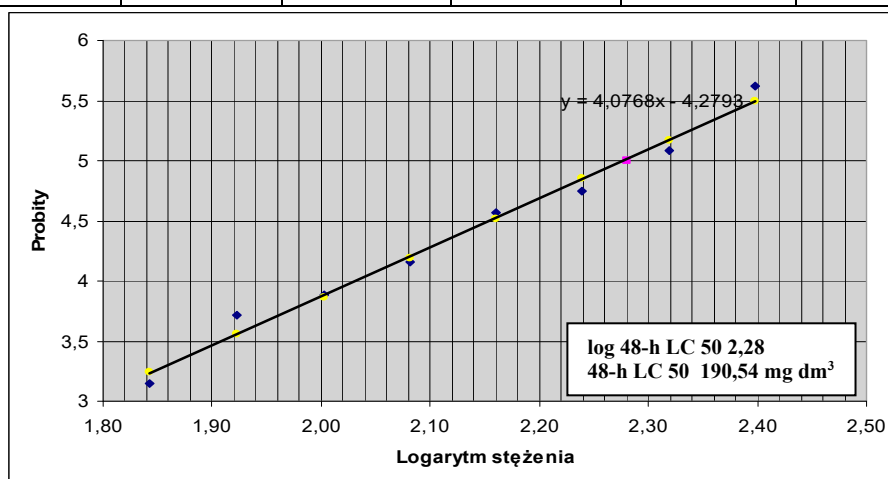


Fig.4. Calculation of LC 50 by graphic method

Checking the graphic method of calculating LC 50 using the χ^2 test

Logarithm of concentration <i>x</i>	<i>y</i> theoretical	<i>P</i> theoretical	<i>n</i>	<i>r</i>	<i>nP</i>	<i>r - nP</i>	$\frac{(r - nP)^2}{nP(1 - P)}$
1.	2.	3.	4.	5.	6.	7.	8.
2,40	5,5	0,692	30	22	20,76	1,24	0,2405
2,32	5,17	0,568	30	16	17,04	-1,04	0,1469
2,24	4,85	0,441	32	12	14,112	-2,112	0,5654
2,16	4,52	0,316	30	10	9,48	0,52	0,0417
2,08	4,19	0,209	30	6	6,27	-0,27	0,0147
2,00	3,86	0,128	30	4	3,84	0,16	0,0076
1,92	3,56	0,075	30	3	2,25	0,75	0,2703
1,84	3,24	0,04	31	1	1,24	-0,24	0,0484
Number of degrees of freedom: $f = 8 - 2 = 6$. Dla χ^2 1,3355; $P = 85\%$							1,3355

