

Supplementary Files

Table S1: Effect of selected pesticides (ekalux, impala and neemstar) on changes in blood parameter in *M. keletius* exposed for 0-28 days

PESTICIDE		7 Days		14 Days		21 Days		28 Days	
		CONTROL	TEST	CONTROL	TEST	CONTROL	TEST	CONTROL	TEST
RBC (million/mm ³)	EKALUX	1.47 ± 0.069	1.43 ± 0.037	1.52 ± 0.042	1.37± 0.070	1.55 ± 0.034	1.29± 0.106	1.61± 0.073	1.18± 0.044
	IMPALA	1.42 ± 0.096	1.36± 0.030	1.45± 0.088	1.30 ± 0.096	1.49± 0.030	1.22± 0.065	1.56 ± 0.034	1.10 ± 0.151
	NEEMSTAR	1.59 ± 0.090	1.48 ± 0.051	1.62± 0.030	1.39± 0.035	1.66 ± 0.090	1.30± 0.056	1.68± 0.019	1.20± 0.055
WBC (10 ⁶)	EKALUX	16.70 ± 0.076	17.65± 0.013	16.75 ± 0.077	18.42± 0.199	16.80± 0.080	18.69± 0.061	16.58± 0.044	19.33± 0.011
	IMPALA	16.60 ± 0.106	18.20 ± 0.077	16.65± 0.069	18.80 ± 0.051	16.72± 0.056	19.95± 0.054	16.79± 0.078	22.54 ± 0.051
	NEEMSTAR	16.56± 0.089	17.88± 0.086	16.70 ± 0.096	17.91± 0.164	16.75± 0.133	17.98 ± 0.096	16.77± 0.055	18.27± 0.099
Hb (g/dl)	EKALUX	8.23± 0.030	6.59 ± 0.051	8.34± 0.030	3.74± 0.066	8.56± 0.030	2.34± 0.056	8.57± 0.077	2.00± 0.026
	IMPALA	6.10 ± 0.049	4.03± 0.079	6.15± 0.044	3.50 ± 0.096	6.22± 0.105	2.00± 0.098	6.24± 0.051	1.65± 0.106
	NEEMSTAR	7.92± 0.057	6.73 ± 0.096	7.98± 0.034	4.24 ± 0.051	8.03 ± 0.063	3.90 ± 0.096	8.09± 0.099	2.75± 0.077
Hc (%)	EKALUX	34.42± 0.111	32.75± 0.015	34.46 ± 0.063	28.15± 0.095	34.52± 0.045	26.45± 0.030	34.58± 0.091	22.68± 0.049
	IMPALA	33.41 ± 0.063	30.96± 0.135	33.46 ± 0.034	29.55± 0.051	33.15 ± 0.077	23.48± 0.106	33.54 ± 0.051	19.85± 0.091
	NEEMSTAR	36.35± 0.034	34.20 ± 0.096	36.39± 0.065	32.41 ± 0.096	36.43± 0.070	30.75± 0.035	36.47± 0.067	25.12 ± 0.034
MCV (cμ)	EKALUX	78.92 ± 0.090	78.24± 0.045	78.94± 0.056	77.27± 0.099	78.97± 0.047	76.07± 0.090	79.02± 0.033	73.46± 0.025
	IMPALA	78.15± 0.074	77.95± 0.049	78.19± 0.035	76.24± 0.034	78.23± 0.089	74.80± 0.075	78.29± 0.043	70.32 ± 0.063
	NEEMSTAR	79.47± 0.015	79.10± 0.030	79.53 ± 0.077	78.47 ± 0.051	79.59± 0.069	77.52± 0.106	79.62± 0.099	76.70 ± 0.096
MCH (μg)	EKALUX	25.99± 0.043	25.59± 0.070	26.04± 0.065	25.08± 0.026	26.09 ± 0.051	24.34 ± 0.096	26.11± 0.049	19.67± 0.033
	IMPALA	25.29 ± 0.044	23.66± 0.086	25.33 ± 0.090	22.94± 0.087	25.38± 0.059	21.96± 0.028	25.42± 0.097	17.39± 0.106
	NEEMSTAR	26.49± 0.088	26.17± 0.056	26.52± 0.095	25.97 ± 0.096	26.59± 0.039	25.55± 0.037	26.63± 0.088	21.32± 0.056
MCHC (%)	EKALUX	32.89± 0.034	32.52± 0.044	32.93± 0.030	32.02± 0.066	32.98± 0.041	31.46 ± 0.056	33.03± 0.069	23.39 ± 0.077
	IMPALA	32.37± 0.089	30.36± 0.092	32.41± 0.030	30.01± 0.091	32.48 ± 0.063	29.36± 0.043	32.55 ± 0.034	20.29± 0.087
	NEEMSTAR	33.33 ± 0.034	33.02± 0.093	33.36± 0.019	32.84 ± 0.034	33.41± 0.049	32.56± 0.070	33.49± 0.099	27.50 ± 0.077

All the values are average of triplicates ± SD; All the data are significant at p<0.05 level; All experiments were carried out at 28°C ± 1°C.

Table S2: Effect of Ekalux, Impala and Neemstar on activity of respiratory enzymes (mg reduced TTC/g/wet wt/h) in tissues of *M. keletius*

Pesticide	Tissue	Activity of respiratory enzymes (mg reduced TTC/g/wet wt/h)								
		ENZYME	7 th Day		14 th Day		21 st Day		28 th Day	
			CONTROL	TEST	CONTROL	TEST	CONTROL	TEST	CONTROL	TEST
Ekalux	Brain	SDH	0.762	0.500	0.767	0.470	0.772	0.460	0.779	0.441
		MDH	1.128	0.959	1.136	0.859	1.147	0.741	1.159	0.633
		GDH	0.584	0.813	0.589	0.835	0.592	1.069	0.596	1.196
	Gill	SDH	1.428	1.314	1.429	1.169	1.436	1.054	1.440	0.815
		MDH	1.038	0.902	1.045	0.861	1.050	0.726	1.053	0.611
		GDH	0.722	0.885	0.721	1.079	0.730	1.132	0.813	1.712
	Liver	SDH	2.175	2.129	2.180	2.045	2.186	1.733	2.191	1.226
		MDH	1.169	0.912	1.174	0.877	1.778	0.723	1.786	0.589
		GDH	1.089	1.473	1.093	1.986	0.982	2.378	1.104	2.814
	Muscle	SDH	1.760	1.625	1.767	1.432	1.772	1.326	1.778	1.022
		MDH	1.146	0.852	1.157	0.621	1.165	0.428	1.172	0.221
		GDH	0.818	1.339	0.822	1.468	0.829	1.796	0.835	1.966
Impala	Brain	SDH	0.725	0.424	0.713	0.368	0.732	0.340	0.738	0.320
		MDH	1.110	0.915	1.110	0.810	1.118	0.705	1.124	0.658
		GDH	0.596	0.810	0.592	0.850	0.614	1.078	0.619	1.400
	Gill	SDH	1.290	0.908	1.296	0.864	1.382	0.724	1.510	0.558
		MDH	1.038	0.836	1.045	0.720	1.072	0.690	1.078	0.490
		GDH	0.720	1.092	0.728	1.115	0.768	1.545	0.798	1.765
	Liver	SDH	1.170	1.424	1.168	0.910	1.183	0.835	1.197	0.765
		MDH	1.168	0.780	1.172	0.652	1.178	0.560	1.185	0.342
		GDH	1.098	1.580	1.095	2.126	1.162	2.558	1.194	2.925
	Muscle	SDH	1.765	1.405	1.776	0.895	1.179	0.808	1.832	0.684
		MDH	1.146	0.856	1.158	0.725	1.165	0.624	1.174	0.440
		GDH	0.816	1.432	0.833	1.676	0.897	2.046	0.915	2.154
Neemstar	Brain	SDH	0.724	0.620	0.712	0.570	0.728	0.545	0.732	0.516
		MDH	1.125	0.980	1.112	0.890	1.128	0.736	1.138	0.570
		GDH	0.595	0.765	0.592	0.820	0.598	1.040	0.612	1.185
	Gill	SDH	1.435	1.395	1.428	1.310	1.439	1.200	1.445	0.985
		MDH	1.038	0.936	1.035	0.830	1.039	0.724	1.043	0.590
		GDH	0.720	0.845	0.728	0.975	0.745	1.040	0.812	1.410
	Liver	SDH	2.170	2.115	2.162	2.090	2.242	1.758	2.257	1.438
		MDH	1.168	0.985	1.189	0.780	1.235	0.552	1.254	0.342
		GDH	1.098	1.372	1.112	1.710	1.153	2.040	1.176	2.700
	Muscle	SDH	1.762	1.686	1.732	1.545	1.831	1.368	1.846	1.205
		MDH	1.146	0.856	1.148	0.624	1.153	0.445	1.255	0.280
		GDH	0.816	1.336	0.767	1.420	0.819	1.450	0.845	1.555

All the values are average of triplicates \pm SD; All the data are significant at $p < 0.05$ level; All experiments were carried out at $28^\circ\text{C} \pm 1^\circ\text{C}$.