

Table 1:
Number of trials out of 150, which has final hybrid fitness in certain ranges:

	extinct	<0.1	0.1 – 0.8	>0.8
Hybrid fitness (1)	42	33	74	1
Hybrid fitness (1 with thr)	92	14	35	9
Hybrid fitness (2)	59	65	25	1
Hybrid fitness (2 with thr)	68	28	38	16
Hybrid fitness (3)	51	42	52	5
Hybrid fitness (3 with thr)	150	0	0	0
Hybrid fitness (4)	70	57	23	0
Hybrid fitness (4 with thr)	95	23	21	11
Hybrid fitness (5)	92	42	15	1
Hybrid fitness (5 with thr)	106	26	7	11

*Extinct column shows the number of trials in which the parents are gone extinct and the hybrid fitness is not calculated for them.

z

Table 2:
The values retrieved by comparing final hybrid fitness from simulations with and without threshold.

	Statistical values					P-values				
	1	2	3	4	5	1	2	3	4	5
t-test	3.267	4.417	NA	3.186	2.162	0.002	1.97E-05	NA	0.002	0.034
Wilcox test	4051	4688	NA	2756	1326	0.002	0.004	NA	0.013	0.738
KS-test	0.279	0.373	NA	0.377	0.301	0.004	7.11E-06	NA	0.0001	0.016

*All the parents died in the simulation with threshold and optimum phenotype moving to 0.05.

- 1: Optimum phenotype is moved to 0.75 over 1000 generations.
- 2: Optimum phenotype is moved to 0.50 over 1000 generations.
- 3: Optimum phenotype is moved to 0.05 over 1000 generations.
- 4: Optimum phenotype is moved to 0.50 over 2000 generations.
- 5: Optimum phenotype is moved to 0.50 over 4000 generations

Table 3:
The correlation coefficients between hybrid fitness and parental fitness are shown for each run.

	1	2	3	4	5	1 (t)	2(t)	3(t)	4(t)	5(t)
Parent 1	-0.053	0.023	-0.201	-0.190	0.150	0.015	0.080	NA	-0.138	0.093
Parent 2	0.119	-0.028	-0.045	0.048	-0.009	0.183	-0.036	NA	-0.007	0.022

*NA: All the parents died in the simulation with threshold and optimum phenotype moving to 0.05.

all mutations

	mean fitness		avg. count		mean phenotype	
	1 1(t)		1 1(t)		1 1(t)	
bs1	-0.054	-0.100	30.483	29.766	-0.0035	0.0006
bs2	-0.359	-0.571	29.561	29.604	-0.0213	-0.0064
bs3	-0.353	-0.618	29.717	29.942	-0.0222	-0.0083
bs4	-0.363	-0.666	30.222	30.247	-0.0241	-0.0057
tf1	-0.367	-0.583	29.989	30.045	-0.0226	-0.0063
tf2	-0.348	-0.618	29.683	29.909	-0.0224	-0.0139
tf3	-0.358	-0.669	30.289	29.338	-0.0228	-0.0080
tf4	-0.058	-0.669	29.756	29.396	-0.0031	-0.0009

	mean fitness		avg. count		mean phenotype	
	2 2(t)		2 2(t)		2 2(t)	
bs1	-0.0521368	-0.07738036	29.64535	29.69	-0.0026	0.0000
bs2	-0.35417892	-0.41720032	30.32558	29.89	-0.0179	-0.0012
bs3	-0.36304472	-0.48041719	29.17442	29.64333	-0.0164	-0.0007
bs4	-0.36406382	-0.55258993	29.38372	29.93	-0.0168	0.0024
tf1	-0.36875866	-0.41695417	29.68023	29.53667	-0.0181	-0.0004
tf2	-0.36553671	-0.47231451	29.34884	29.56333	-0.0182	-0.0006
tf3	-0.35605274	-0.55932005	30.2907	29.44333	-0.0173	0.0021
tf4	-0.06250006	-0.07773588	29.41279	29.81333	-0.0032	0.0000

	mean fitness		avg. count		mean phenotype	
	3 3(t)		3 3(t)		3 3(t)	
bs1	-0.04020602	-0.03188927	29.86333	29.8375	-0.0021	0.0001
bs2	-0.23245954	-0.15960203	29.87333	30.0875	-0.0110	0.0007
bs3	-0.23766314	-0.19394002	29.91	29.84375	-0.0123	0.0013
bs4	-0.23413012	-0.25832139	29.94667	29.95	-0.0119	0.0069
tf1	-0.23671671	-0.1689802	29.94333	30.075	-0.0111	0.0013
tf2	-0.23569849	-0.2007111	29.65	28.91875	-0.0110	0.0040
tf3	-0.23414312	-0.24820986	30.18667	29.14375	-0.0107	0.0071
tf4	-0.033614	-0.03277061	29.84333	29.1875	-0.0019	0.0021

	mean fitness		avg. count		mean phenotype	
	4 4(t)		4 4(t)		4 4(t)	
bs1	-0.041	-0.119	119.693	119.663	-0.0041	-0.0028
bs2	-0.264	-0.698	117.803	119.720	-0.0263	-0.0170
bs3	-0.262	-0.744	117.643	118.487	-0.0263	-0.0178
bs4	-0.264	-0.808	119.147	119.113	-0.0266	-0.0186
tf1	-0.262	-0.696	119.347	119.670	-0.0263	-0.0161
tf2	-0.264	-0.744	120.163	117.617	-0.0264	-0.0189
tf3	-0.265	-0.807	119.683	118.167	-0.0268	-0.0170
tf4	-0.042	-0.119	118.243	119.213	-0.0041	-0.0025

	mean fitness		avg. count		mean phenotype	
	5 5(t)		5 5(t)		5 5(t)	
bs1	-0.074	-0.102	118.707	119.017	-0.0025	0.0002
bs2	-0.459	-0.545	118.387	119.920	-0.0167	0.0012
bs3	-0.463	-0.619	118.680	119.310	-0.0178	0.0013
bs4	-0.459	-0.716	118.873	118.447	-0.0171	0.0019
tf1	-0.463	-0.544	118.937	119.113	-0.0170	-0.0002
tf2	-0.465	-0.619	118.093	119.717	-0.0180	0.0004
tf3	-0.462	-0.715	119.687	119.023	-0.0172	0.0003
tf4	-0.076	-0.103	119.020	118.577	-0.0029	0.0004

- 1 P_opt = 0.75 2000 gen
- 2 P_opt = 0.50 2000 gen
- 3 P_opt = 0.05 2000 gen
- 4 P_opt = 0.95 4000 gen
- 5 P_opt = 0.50 4000 gen

fixed mutations

	mean fitness		avg. count		mean phenotype	
	1 1(t)		1 1(t)		1 1(t)	
bs1	0.046	0.174	0.906	0.435	-0.008	-0.020
bs2	0.053	0.154	4.656	2.903	-0.010	-0.020
bs3	0.051	0.158	4.644	2.526	-0.010	-0.020
bs4	0.058	0.172	4.572	2.052	-0.011	-0.021
tf1	0.051	0.163	4.594	2.818	-0.009	-0.021
tf2	0.048	0.170	4.450	2.468	-0.009	-0.022
tf3	0.051	0.170	4.639	1.883	-0.009	-0.024
tf4	0.041	0.154	0.739	0.506	-0.009	-0.021

	mean fitness		avg. count		mean phenotype	
	2 2(t)		2 2(t)		2 2(t)	
bs1	0.112	0.217	0.971	0.583	-0.014	-0.032
bs2	0.133	0.215	5.779	4.563	-0.017	-0.025
bs3	0.123	0.221	5.366	3.593	-0.016	-0.026
bs4	0.127	0.233	5.209	2.897	-0.016	-0.030
tf1	0.125	0.207	5.320	4.450	-0.017	-0.025
tf2	0.125	0.218	5.308	3.727	-0.016	-0.027
tf3	0.124	0.249	5.622	2.593	-0.016	-0.030
tf4	0.132	0.201	0.814	0.600	-0.014	-0.023

	mean fitness		avg. count		mean phenotype	
	3 3(t)		3 3(t)		3 3(t)	
bs1	0.2094	0.2551	1.1000	0.7000	-0.0225	-0.0312
bs2	0.2149	0.2165	6.5000	4.5625	-0.0247	-0.0238
bs3	0.2125	0.2445	6.6600	4.3313	-0.0242	-0.0303
bs4	0.2199	0.3114	6.5067	3.5500	-0.0250	-0.0393
tf1	0.2148	0.2365	6.6200	4.4875	-0.0245	-0.0267
tf2	0.2109	0.2411	6.7633	4.0313	-0.0236	-0.0293
tf3	0.2134	0.3163	6.8000	3.2250	-0.0239	-0.0385
tf4	0.2275	0.1950	1.1867	0.6875	-0.0254	-0.0245

	mean fitness		avg. count		mean phenotype	
	4 4(t)		4 4(t)		4 4(t)	
bs1	0.001	0.015	1.153	0.513	-0.0013	-0.0060
bs2	0.001	0.015	6.507	3.600	-0.0013	-0.0055
bs3	0.001	0.017	6.753	3.060	-0.0013	-0.0062
bs4	0.001	0.016	6.750	2.133	-0.0013	-0.0060
tf1	0.001	0.017	7.013	3.963	-0.0013	-0.0065
tf2	0.001	0.016	6.787	3.057	-0.0013	-0.0059
tf3	0.001	0.016	7.047	2.117	-0.0013	-0.0063
tf4	0.001	0.016	1.147	0.527	-0.0013	-0.0062

	mean fitness		avg. count		mean phenotype	
	5 5(t)		5 5(t)		5 5(t)	
bs1	0.030	0.066	1.757	1.457	-0.0070	-0.0120
bs2	0.033	0.057	11.217	12.213	-0.0078	-0.0106
bs3	0.033	0.067	11.237	8.263	-0.0084	-0.0121
bs4	0.035	0.067	11.383	5.530	-0.0080	-0.0122
tf1	0.033	0.059	11.333	11.797	-0.0081	-0.0109
tf2	0.034	0.064	10.730	8.220	-0.0078	-0.0122
tf3	0.032	0.070	11.063	5.713	-0.0081	-0.0124
tf4	0.033	0.065	1.903	1.537	-0.0076	-0.0108