

Comment:

Experiment7	Setting
Mutation type	0: Uniform 1: Normal
Crossover type	0: probabilistic crossover 1: Single point crossover 2: linear combination crossover
Local search type	0: Uniform 1: Normal
Local search pattern	0: best of genotype and multiple phenotypes 1: best of genotype and phenotype

Lamarck (N, Pc, Nls)

This table is generated by mutation type: normal, crossover type: probabilistic crossover and local search type: normal.

Faction	combination	combination	combination	combination:	combination:	combination	combination:	combination:	combination:	combination:	combination:	combination:	combination:	combination:	combination:	combination:	combination:	combination:	combination:	combination:		
F1	80.0%	100.0%	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	10.0%	100.0%	100.0%	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	20.0%	
F2	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	0.0%	0.0%	
F3	100.0%	100.0%	70.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	20.0%	100.0%	100.0%	80.0%	100.0%	100.0%	100.0%	100.0%	100.0%	30.0%	20.0%	
F4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
F5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
F6	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	40.0%	100.0%	100.0%	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	50.0%	
F7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
F8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
F9	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	0.0%	0.0%
F10	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	0.0%	0.0%
F11	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
F12	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	0.0%	0.0%
F13	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	0.0%	0.0%
F14	50.0%	40.0%	20.0%	20.0%	50.0%	30.0%	60.0%	0.0%	50.0%	50.0%	30.0%	20.0%	20.0%	0.0%	10.0%	20.0%	40.0%	60.0%	0.0%	20.0%	0.0%	
F15	60.0%	60.0%	70.0%	0.0%	0.0%	20.0%	0.0%	70.0%	60.0%	90.0%	50.0%	60.0%	70.0%	90.0%	60.0%	0.0%	10.0%	0.0%	100.0%	0.0%	40.0%	30.0%
F16	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	50.0%	100.0%
F17	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
F18	90.0%	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	70.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
F19	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
F20	40.0%	30.0%	40.0%	40.0%	50.0%	40.0%	50.0%	40.0%	60.0%	50.0%	40.0%	70.0%	60.0%	60.0%	40.0%	40.0%	50.0%	30.0%				
F21	30.0%	0.0%	30.0%	30.0%	30.0%	20.0%	20.0%	30.0%	20.0%	40.0%	10.0%	30.0%	40.0%	0.0%	20.0%	50.0%	10.0%	30.0%	40.0%	30.0%	30.0%	50.0%
F22	0.0%	50.0%	10.0%	30.0%	0.0%	10.0%	20.0%	50.0%	10.0%	0.0%	10.0%	10.0%	30.0%	40.0%	10.0%	10.0%	20.0%	20.0%	20.0%	30.0%	20.0%	
F23	0.0%	20.0%	30.0%	10.0%	40.0%	10.0%	20.0%	20.0%	30.0%	10.0%	40.0%	20.0%	10.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%	20.0%	

Lamarck (N, Pc, Nls, 1)

This table is generated by mutation type: normal, crossover type: probabilistic crossover and local search type: normal. The final phenotype is min (1 genotype, 1 phenotype).

Faction	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination
F1	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	60.00%	100.00%	100.00%	90.00%	100.00%	100.00%	100.00%	100.00%	100.00%
F2	0.00%	10.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	100.00%	10.00%	30.00%
F3	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	60.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	30.00%
F4	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F5	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F6	90.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	60.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	30.00%
F7	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%
F8	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F9	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%
F10	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%
F11	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F12	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%
F13	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%
F14	30.00%	30.00%	60.00%	60.00%	70.00%	40.00%	30.00%	20.00%	20.00%	70.00%	10.00%	20.00%	30.00%	30.00%	30.00%	40.00%	100.00%	20.00%	50.00%
F15	50.00%	70.00%	70.00%	0.00%	0.00%	0.00%	10.00%	60.00%	40.00%	70.00%	40.00%	60.00%	70.00%	60.00%	40.00%	0.00%	100.00%	0.00%	50.00%
F16	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
F17	100.00%	100.00%	30.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
F18	90.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
F19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F20	40.00%	50.00%	30.00%	30.00%	40.00%	60.00%	40.00%	50.00%	40.00%	50.00%	50.00%	40.00%	30.00%	30.00%	30.00%	60.00%	60.00%	40.00%	60.00%
F21	50.00%	40.00%	20.00%	30.00%	30.00%	20.00%	20.00%	20.00%	30.00%	10.00%	20.00%	30.00%	20.00%	40.00%	10.00%	10.00%	30.00%	40.00%	30.00%
F22	30.00%	40.00%	20.00%	30.00%	40.00%	30.00%	20.00%	30.00%	30.00%	30.00%	40.00%	40.00%	40.00%	30.00%	0.00%	10.00%	10.00%	0.00%	20.00%
F23	30.00%	30.00%	10.00%	40.00%	40.00%	20.00%	10.00%	20.00%	10.00%	40.00%	30.00%	30.00%	30.00%	0.00%	30.00%	0.00%	40.00%	40.00%	20.00%

Lamarck (N, Pc, Nls, 1)- Lamarck (N, Pc, Nls)

[illegible]

Lamarck (N, SPc, Nls)

This table is generated by mutation type: normal, crossover type: single point crossover and local search type: normal.

[illegible]

Lamarck (N, SPc, Nls, 1)

This table is generated by mutation type: normal, crossover type: single point crossover and local search type: normal. The final phenotype is min (1 genotype, 1 phenotype).

[illegible]

Lamarck (N, SPc, Nls, 0)

This table is generated by mutation type: normal, crossover type: single point crossover and local search type: normal. The final phenotype is min (1 genotype, 3 phenotypes).

[illegible]

Lamarck (N, SPc, Nls, 1)- Lamarck (N, SPc, Nls)

[illegible]

Lamarck (N, SPc, Nls, 0)- Lamarck (N, SPc, Nls)

[illegible]

Lamarck (N, LCc, Nls)

This table is generated by mutation type: normal, crossover type: linear combination crossover and local search type: normal.

Fuction	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination	combination
F1	100.00%	100.00%	100.00%	40.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	80.00%	100.00%	100.00%	100.00%	90.00%	100.00%	100.00%	100.00%
F2	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
F3	100.00%	100.00%	70.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	80.00%	100.00%	100.00%	90.00%	90.00%	100.00%	100.00%	100.00%
F4	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%	0.00%
F5	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F6	100.00%	100.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	90.00%	100.00%	100.00%	90.00%	90.00%	100.00%	100.00%	100.00%
F7	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F8	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F9	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
F10	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
F11	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.00%	0.00%
F12	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
F13	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
F14	10.00%	0.00%	0.00%	0.00%	10.00%	10.00%	0.00%	10.00%	0.00%	20.00%	10.00%	10.00%	10.00%	0.00%	0.00%	10.00%	0.00%	30.00%
F15	40.00%	60.00%	60.00%	0.00%	10.00%	10.00%	0.00%	0.00%	50.00%	70.00%	70.00%	60.00%	60.00%	50.00%	50.00%	70.00%	0.00%	80.00%
F16	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
F17	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
F18	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
F19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
F20	40.00%	60.00%	60.00%	20.00%	10.00%	20.00%	50.00%	40.00%	30.00%	50.00%	40.00%	40.00%	20.00%	50.00%	60.00%	40.00%	30.00%	80.00%
F21	30.00%	50.00%	50.00%	40.00%	60.00%	50.00%	10.00%	40.00%	30.00%	30.00%	40.00%	40.00%	40.00%	40.00%	50.00%	30.00%	20.00%	30.00%
F22	40.00%	20.00%	40.00%	20.00%	50.00%	40.00%	30.00%	10.00%	40.00%	50.00%	30.00%	30.00%	40.00%	60.00%	30.00%	10.00%	30.00%	40.00%
F23	50.00%	50.00%	40.00%	20.00%	30.00%	10.00%	30.00%	10.00%	10.00%	60.00%	30.00%	10.00%	50.00%	50.00%	30.00%	50.00%	20.00%	30.00%

Lamarck (N, LCc, Nls, 1)

This table is generated by mutation type: normal, crossover type: linear combination crossover and local search type: normal. The final phenotype is min (1 genotype, 1 phenotype).

[illegible]

Lamarck (N, LCc, Nls, 0)

This table is generated by mutation type: normal, crossover type: linear combination crossover and local search type: normal. The final phenotype is min (1 genotype, 3 phenotypes).

[illegible]

Lamarck (N, LCc, Nls, 1)- Lamarck (N, LCc, Nls)

[illegible]

Lamarck (N, LCc, Nls, 0)- Lamarck (N, LCc, Nls)

[illegible]