



Genetic Algorithm				binario	12.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial
6	12.000000	1	64922098	12.000000	5.860000
7	12.000000	1	26741939	12.000000	6.260000
5	12.000000	1	28960970	12.000000	5.720000
9	12.000000	1	21121115	12.000000	5.880000
7	12.000000	1	18146488	12.000000	5.660000
7	12.000000	1	17627476	12.000000	5.840000
2	12.000000	1	17312430	12.000000	5.880000
34	12.000000	1	17940142	12.000000	5.780000
5	12.000000	1	17285411	12.000000	5.960000
4	12.000000	1	25620788	12.000000	6.200000
8.662563	0.000000		13764023	0.0000	0.1826
8.600000	12.000000	100.0	25567885	12.0000	5.9040
Genetic Algorithm				binario	108.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial
72	89.000000	0	102008389	88.920000	55.440000
94	87.000000	0	78361603	87.000000	54.020000
93	91.000000	0	78424369	90.360000	52.680000
86	88.000000	0	79028396	87.440000	54.380000
93	90.000000	0	79229209	90.000000	53.740000
96	84.000000	0	84961422	84.000000	54.160000
88	88.000000	0	79468773	87.160000	54.340000
88	88.000000	0	79500449	87.820000	53.720000
99	90.000000	0	102567027	89.060000	54.000000
99	91.000000	0	126619898	89.500000	53.220000
7.573638	2.009975		15446206	1.7800	0.6962
90.800000	88.600000	0.0	89016953	88.1260	53.9700
Genetic Algorithm				binario	1200.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial

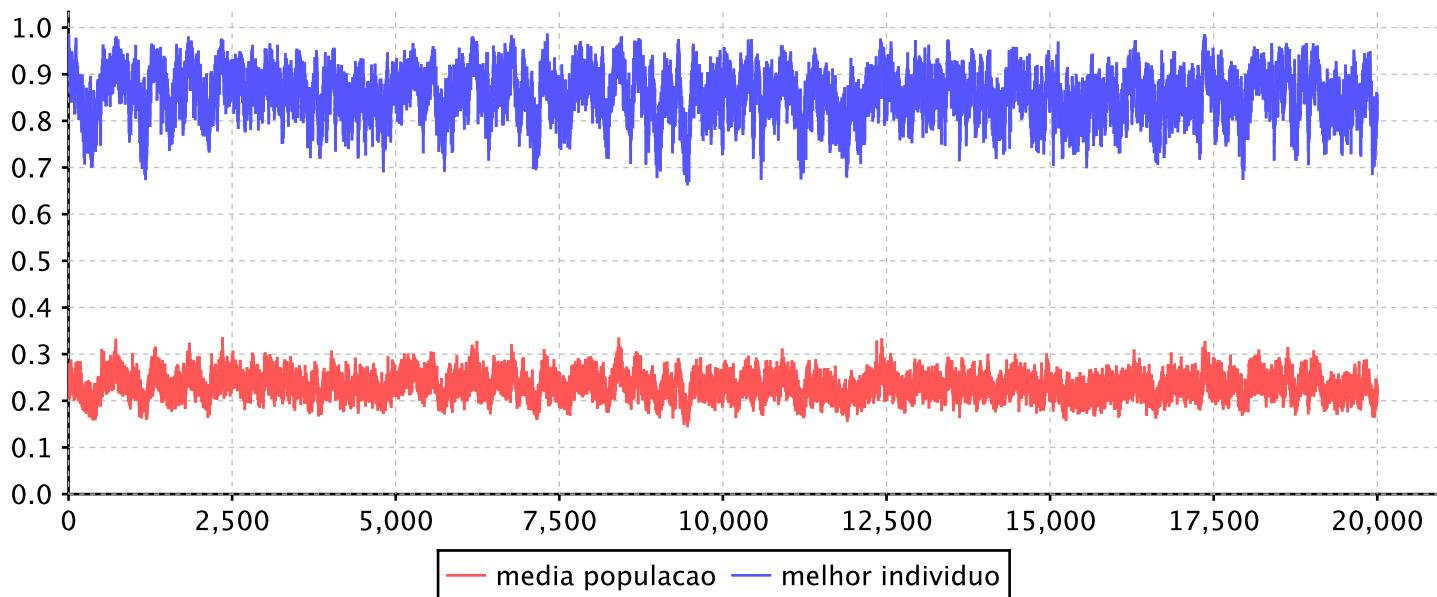
98	704.000000	0	993704881	703.200000	600.920000
98	714.000000	0	1123479058	713.340000	599.120000
97	699.000000	0	1308212890	698.040000	597.780000
97	718.000000	0	978026496	718.000000	603.940000
100	712.000000	0	920330189	710.580000	598.500000
98	714.000000	0	1129721276	713.120000	605.520000
96	688.000000	0	1002961499	687.260000	598.640000
98	681.000000	0	1032980828	681.000000	594.620000
96	693.000000	0	910927146	693.000000	599.260000
99	709.000000	0	947546271	708.080000	601.440000
1.187434	11.872658		115593557	11.7135	2.9699
97.700000	703.200000	0.0	1034789053	702.5620	599.9740
Iterated Hill Climbing Standard			binario	12.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial
920	11.000000	0	8996132	null	null
3138	11.000000	0	3633245	null	null
4310	12.000000	1	4005347	null	null
1700	11.000000	0	2753249	null	null
150	11.000000	0	5029422	null	null
70	12.000000	1	189465	null	null
70	12.000000	1	81915	null	null
70	12.000000	1	83238	null	null
70	12.000000	1	82948	null	null
70	12.000000	1	78000	null	null
1450.457914	0.489898		2845107	null	null
1056.800000	11.600000	60.0	2493296	null	null
Iterated Hill Climbing Standard			binario	108.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial
3400	70.000000	0	13142356	null	null
1350	69.000000	0	13808881	null	null
2780	68.000000	0	13291976	null	null
120	71.000000	0	12775216	null	null
320	67.000000	0	12371850	null	null
4550	68.000000	0	12942877	null	null

98	704.000000	0	993704881	703.200000	600.920000
98	714.000000	0	1123479058	713.340000	599.120000
97	699.000000	0	1308212890	698.040000	597.780000
97	718.000000	0	978026496	718.000000	603.940000
100	712.000000	0	920330189	710.580000	598.500000
98	714.000000	0	1129721276	713.120000	605.520000
96	688.000000	0	1002961499	687.260000	598.640000
98	681.000000	0	1032980828	681.000000	594.620000
96	693.000000	0	910927146	693.000000	599.260000
99	709.000000	0	947546271	708.080000	601.440000
1.187434	11.872658		115593557	11.7135	2.9699
97.700000	703.200000	0.0	1034789053	702.5620	599.9740
Iterated Hill Climbing Standard			binario	12.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial
920	11.000000	0	8996132	null	null
3138	11.000000	0	3633245	null	null
4310	12.000000	1	4005347	null	null
1700	11.000000	0	2753249	null	null
150	11.000000	0	5029422	null	null
70	12.000000	1	189465	null	null
70	12.000000	1	81915	null	null
70	12.000000	1	83238	null	null
70	12.000000	1	82948	null	null
70	12.000000	1	78000	null	null
1450.457914	0.489898		2845107	null	null
1056.800000	11.600000	60.0	2493296	null	null
Iterated Hill Climbing Standard			binario	108.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial
3400	70.000000	0	13142356	null	null
1350	69.000000	0	13808881	null	null
2780	68.000000	0	13291976	null	null
120	71.000000	0	12775216	null	null
320	67.000000	0	12371850	null	null
4550	68.000000	0	12942877	null	null

4160	69.000000	0	9465803	null	null
1400	70.000000	0	9895029	null	null
2770	76.000000	0	9189594	null	null
4515	68.000000	0	9532899	null	null
1578.467691	2.416609		1772803	null	null
2536.500000	69.600000	0.0	11641648	null	null
Iterated Hill Climbing Standard			binario		1200.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial
4980	649.000000	0	109554922	null	null
3410	647.000000	0	109272065	null	null
3630	661.000000	0	110228549	null	null
4690	647.000000	0	111965405	null	null
210	665.000000	0	117927409	null	null
700	655.000000	0	139715833	null	null
2590	652.000000	0	142220539	null	null
2400	663.000000	0	144389515	null	null
3270	653.000000	0	140631466	null	null
130	663.000000	0	139446226	null	null
1663.174375	6.621933		14975181	null	null
2601.000000	655.500000	0.0	126535192	null	null

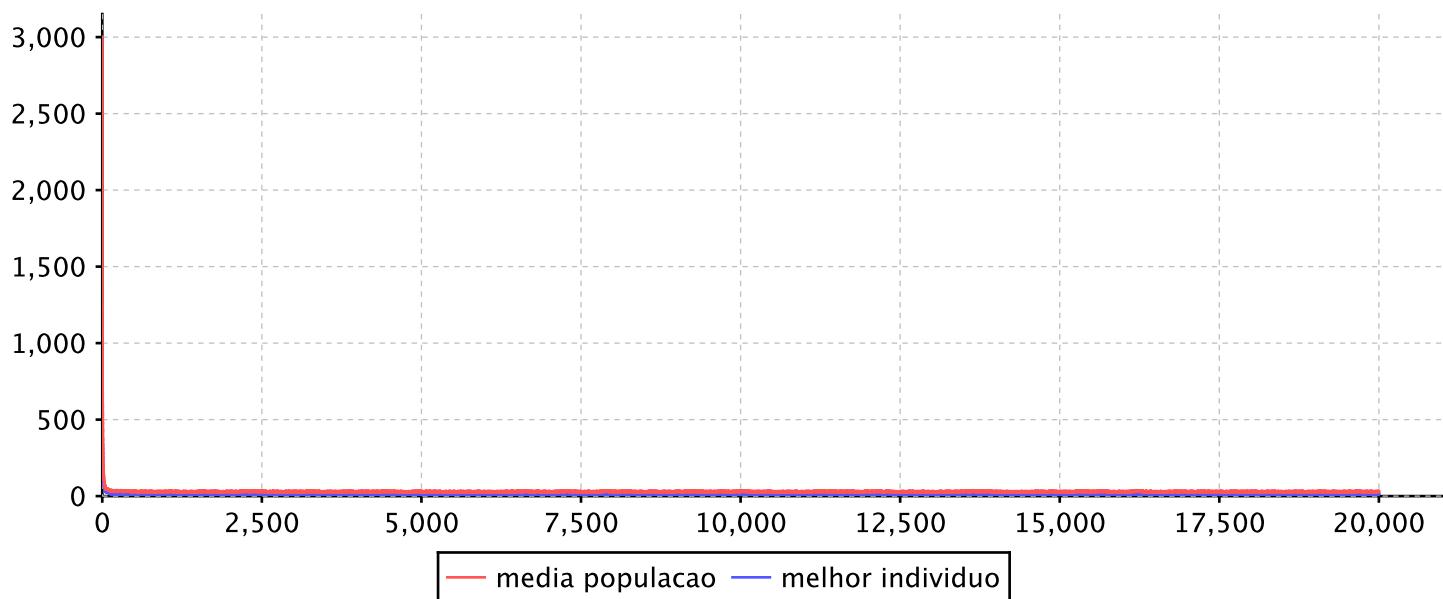


Genetic Algorithm		Function Unid			28.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
9965	1.000000	1	147677002000	0.225934	4.426078
16892	1.000000	1	147073103000	0.276985	3.610305
3745	1.000000	1	147096323000	0.209477	4.773801
19703	1.000000	1	146955780000	0.190065	5.261346
13000	1.000000	1	147935147000	0.410309	2.437190
3176	1.000000	1	148157914000	0.257028	3.890624
15801	1.000000	1	149202378000	0.170904	5.851226
19176	1.000000	1	149039591000	0.239276	4.179268
19839	1.000000	1	148802804000	0.171513	5.830461
17311	1.000000	1	148280871000	0.180616	5.536619
5961.464179	0.000000		783875044	0.0684	1.0419
13860.800000	1.000000	100.0	148022091300	0.2332	4.4734



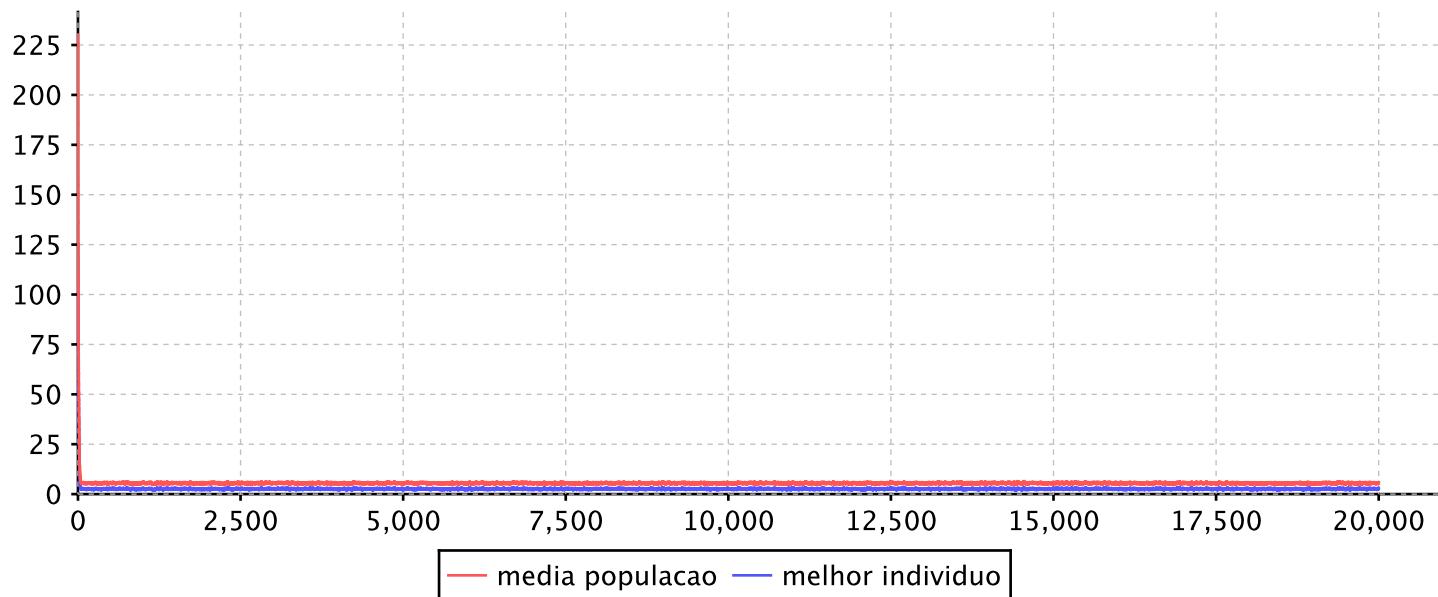


Genetic Algorithm		Function Rosenbrock			29.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
212	23.250352	0	159365726000	31.093154	0.747764
12452	12.813624	0	159201088000	23.054620	0.555794
15322	16.926654	0	159658731000	31.620351	0.535309
17231	18.775968	0	159646795000	33.568186	0.559338
15052	51.936032	0	159630582000	30.962334	1.677394
14998	23.666707	0	159667371000	37.290629	0.634656
4309	41.765853	0	159797548000	28.476345	1.466686
19125	38.178728	0	159499485000	39.015285	0.978558
6736	28.426561	0	159735313000	31.425668	0.904565
13685	15.643965	0	158711815000	28.373131	0.551365
5798.723477	12.211200		310418744	4.3012	0.3934
11912.200000	27.138445	0.0	159491445400	31.4880	0.8956



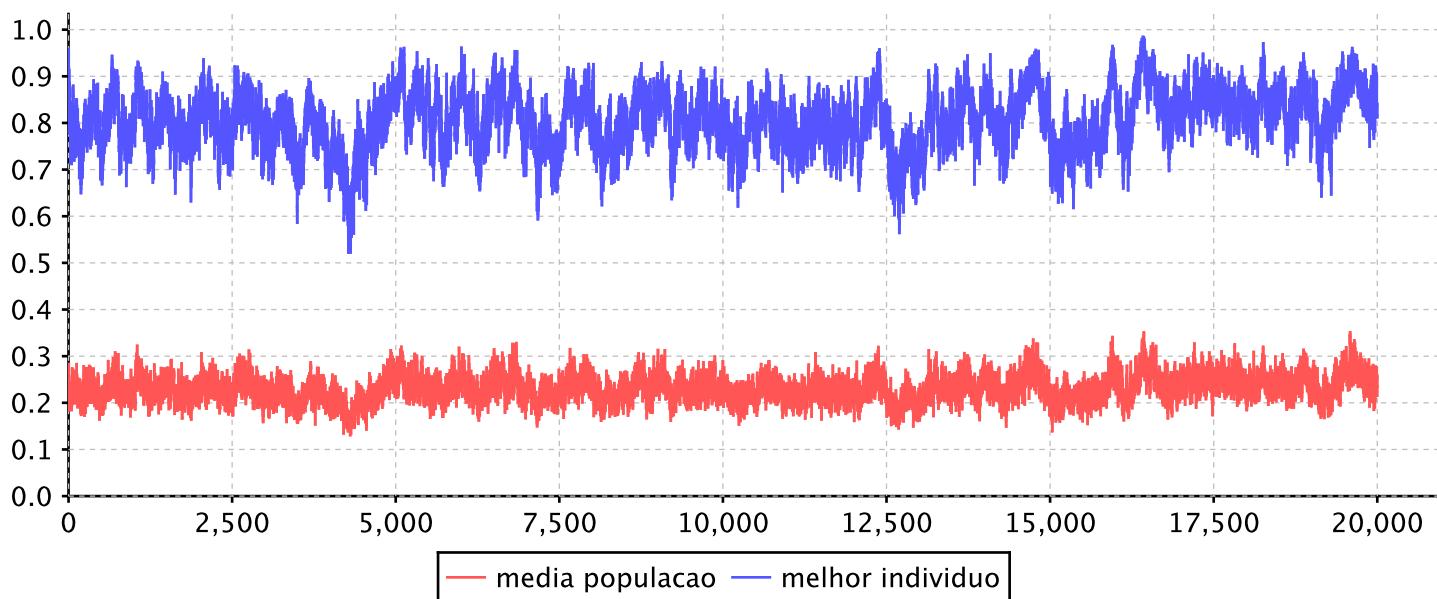


Genetic Algorithm		Function Griewank			30.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
8859	6.693309	0	579703732000	6.077732	1.101284
2357	6.436516	0	578862276000	5.253935	1.225085
13609	6.639319	0	580038713000	7.125879	0.931719
17161	7.255056	0	580407045000	6.682311	1.085711
5955	6.421346	0	580420705000	5.850938	1.097490
12913	4.489206	0	581652637000	5.840879	0.768584
12004	6.220290	0	580842080000	4.650083	1.337673
6161	6.414454	0	580647595000	5.824355	1.101316
807	4.422109	0	580841153000	4.978419	0.888256
16130	10.807690	0	579745018000	6.377668	1.694615
5367.275085	1.660599		732082364	0.7214	0.1635
9595.600000	6.579929	0.0	580316095400	5.8662	1.0597



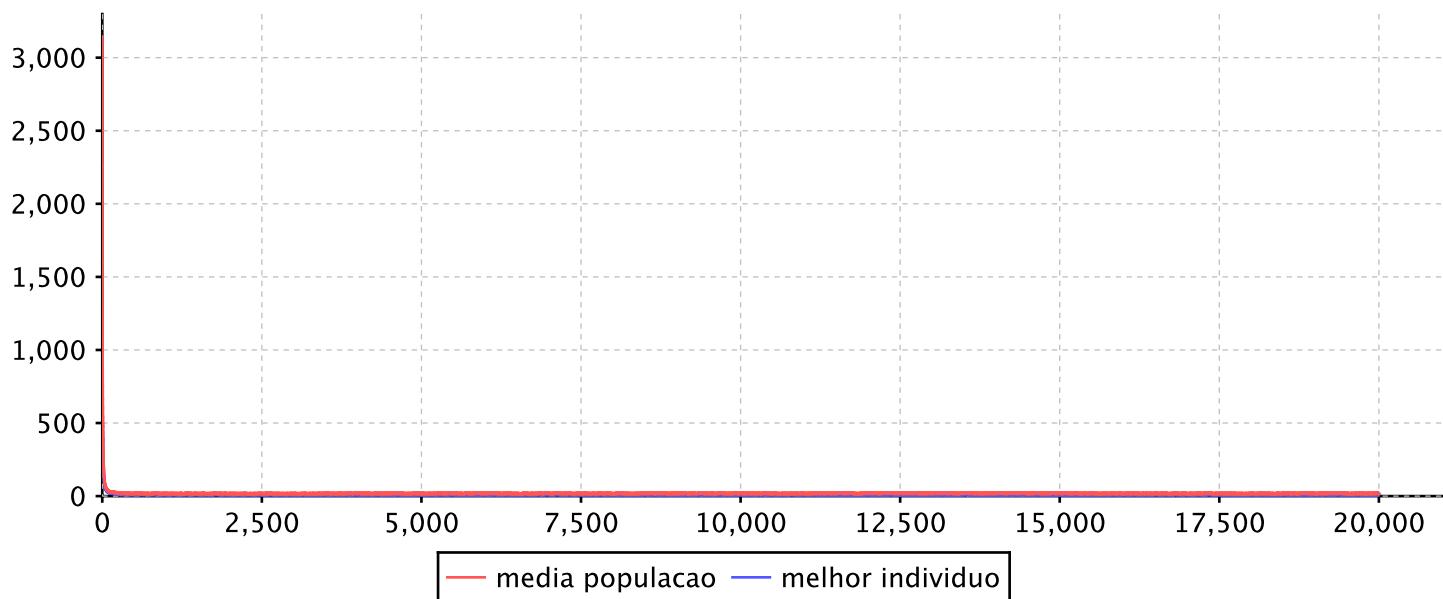


Genetic Algorithm		Function Unid			22.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
16880	1.000000	1	124451393000	0.427177	2.340949
7467	1.000000	1	124557288000	0.242576	4.122416
15703	1.000000	1	124876080000	0.370334	2.700266
5446	1.000000	1	124790475000	0.112515	8.887700
8128	1.000000	1	124707932000	0.221577	4.513102
19634	1.000000	1	124845548000	0.315001	3.174591
8435	1.000000	1	125039218000	0.341135	2.931390
12214	1.000000	1	124910766000	0.132017	7.574759
12038	1.000000	1	124843181000	0.153660	6.507892
11996	1.000000	1	124899132000	0.233681	4.279347
4320.098227	0.000000		166561760	0.1007	2.2220
11794.100000	1.000000	100.0	124792101300	0.2550	4.7503



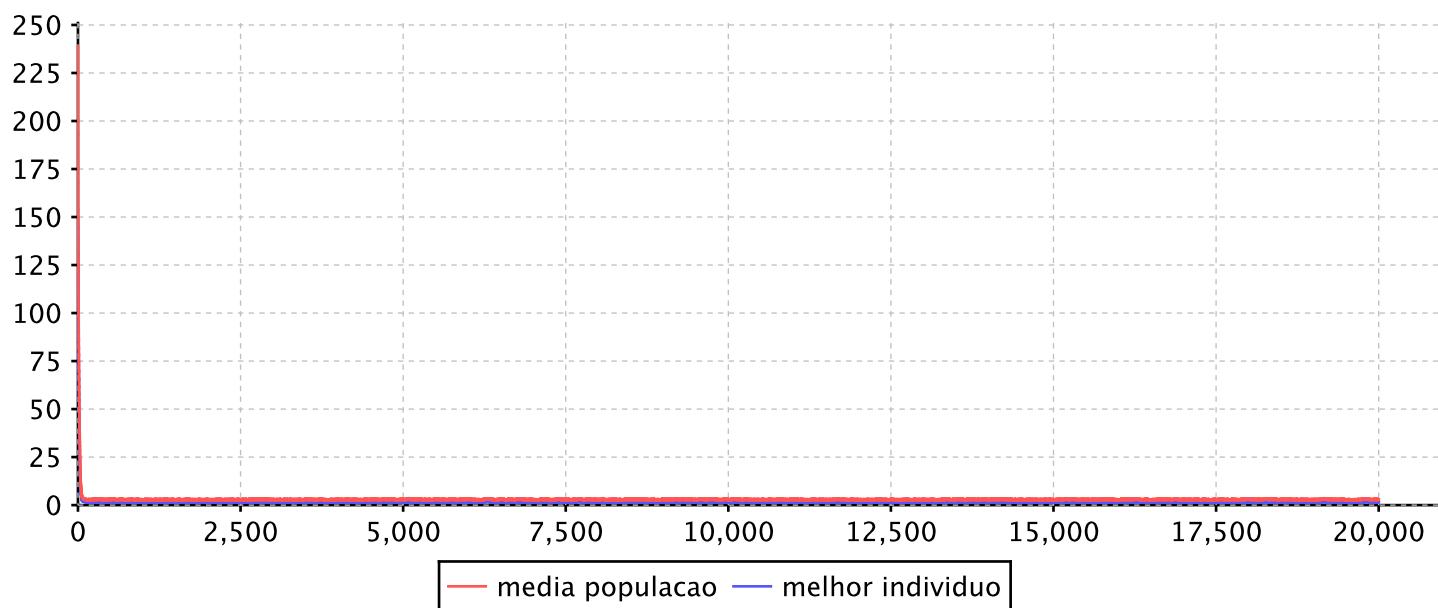


Genetic Algorithm		Function Rosenbrock			23.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
14183	20.896609	0	149483486000	20.041739	1.042654
7537	14.749623	0	148677732000	17.715612	0.832578
7834	15.708863	0	149333245000	26.922674	0.583481
11848	23.430505	0	152103075000	13.947654	1.679889
19028	20.568659	0	151612215000	28.264606	0.727718
17814	10.920709	0	148630617000	13.546706	0.806152
13766	11.986849	0	148745560000	13.859350	0.864893
2020	11.999034	0	149277654000	14.686860	0.816991
14479	14.917495	0	149196901000	15.352520	0.971664
15341	16.530099	0	149079960000	15.925002	1.037997
4937.636337	4.009779	0		5.1469	0.2943
12385.000000	16.170844	0.0	149614044500	18.0263	0.9251



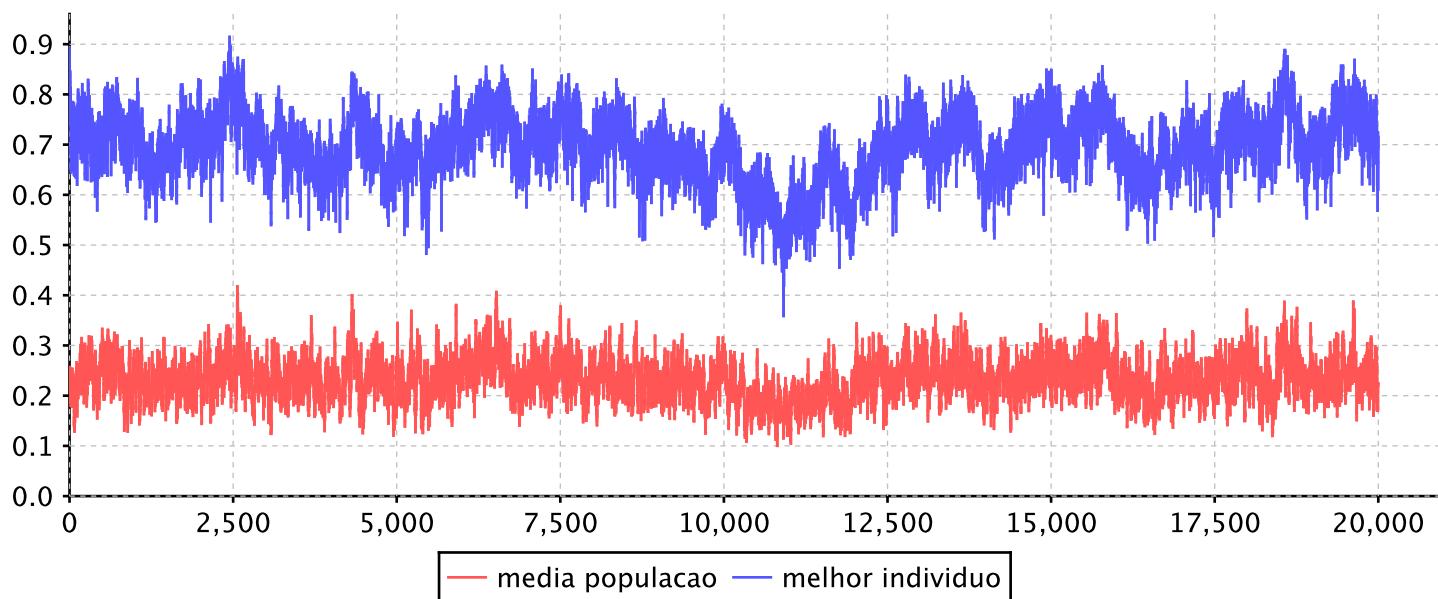


Genetic Algorithm		Function Griewank			24.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
8232	2.061892	0	539890057000	2.694648	0.765181
8450	1.876726	0	544065549000	2.261004	0.830041
16183	2.884367	0	544796365000	3.186041	0.905314
3789	3.234097	0	544008289000	3.297840	0.980671
1133	1.720154	0	543903679000	2.449253	0.702318
6569	2.043975	0	544404710000	3.363605	0.607674
6244	3.489328	0	543819750000	2.780893	1.254751
13945	4.328975	0	544008388000	3.717188	1.164583
7347	5.443176	0	544013975000	2.737192	1.988598
14319	3.066281	0	544708539000	3.586132	0.855039
4572.514220	1.128665	0		0.4661	0.3945
8621.100000	3.014897	0.0	543761930100	3.0074	1.0221



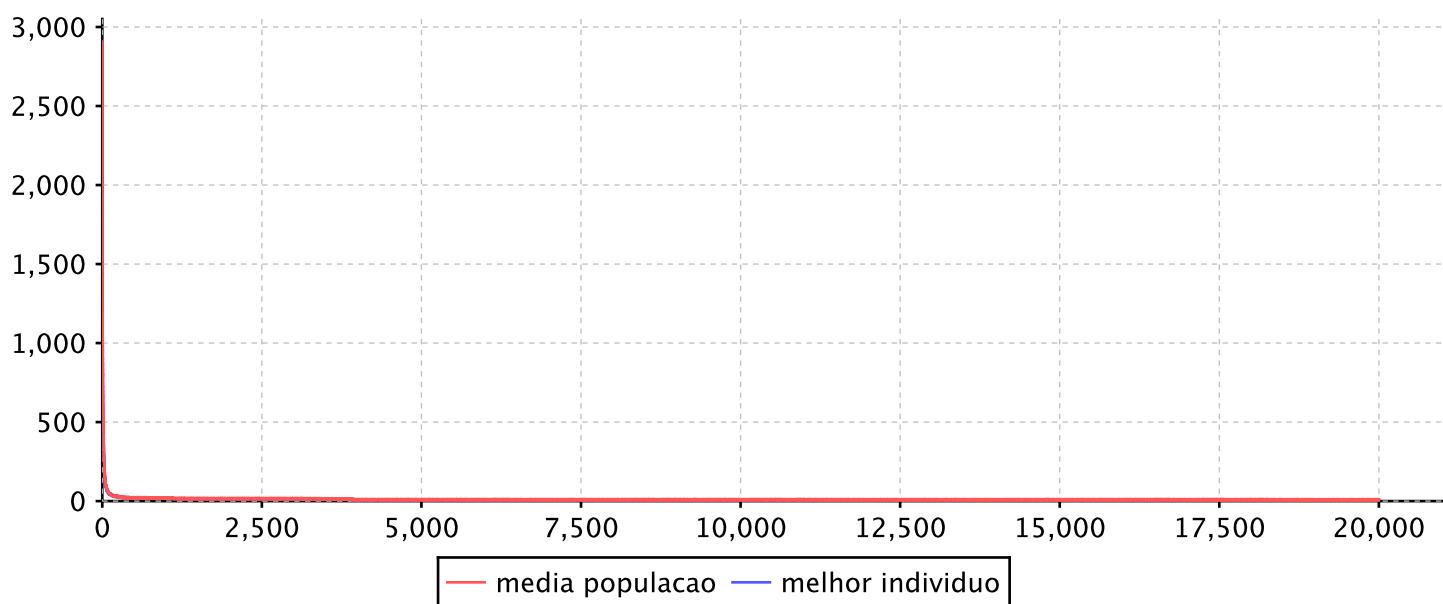


Genetic Algorithm		Function Unid			4.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19406	1.000000	1	126105074000	0.195358	5.118798
9805	1.000000	1	127156731000	0.113091	8.842421
711	1.000000	1	126561813000	0.605748	1.650852
13735	1.000000	1	126616118000	0.114677	8.720158
14137	1.000000	1	126384247000	0.070912	14.101946
4723	1.000000	1	126072194000	0.312622	3.198755
16508	1.000000	1	126176291000	0.092086	10.859468
17874	1.000000	1	126410778000	0.127945	7.815881
6310	1.000000	1	126226135000	0.106082	9.426663
2798	1.000000	1	126006507000	0.475010	2.105220
6324.069450	0.000000		326706935	0.1748	3.6485
10600.700000	1.000000	100.0	126371588800	0.2214	7.7483



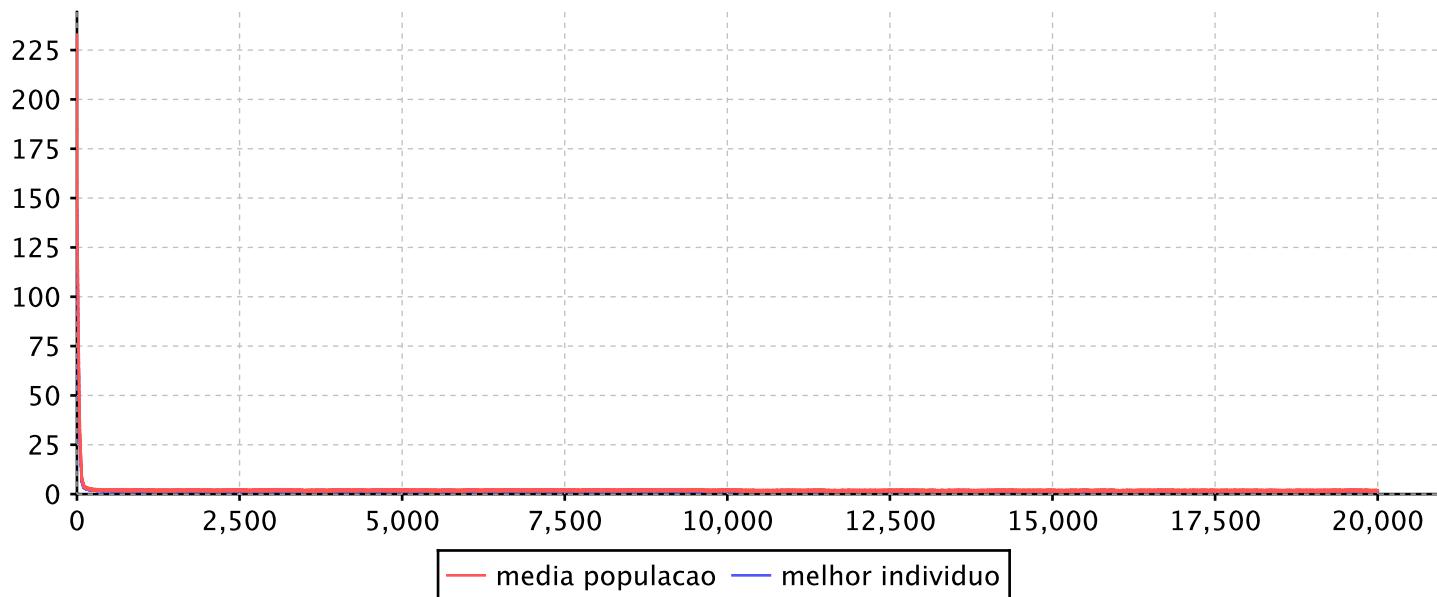


Genetic Algorithm		Function Rosenbrock			5.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
18971	9.983454	0	138924061000	10.489958	0.951715
10551	7.814913	0	138302545000	7.861347	0.994093
19703	8.980109	0	139312613000	8.905074	1.008426
18676	7.935290	0	137527417000	8.316559	0.954155
11787	7.931773	0	137081796000	8.017307	0.989331
15506	7.544632	0	140735638000	7.883255	0.957045
19449	7.760869	0	138098939000	8.054965	0.963489
17252	13.526552	0	138463293000	9.857476	1.372212
7093	9.856178	0	139045190000	10.554621	0.933826
13591	7.639374	0	136882205000	8.168224	0.935255
4128.909576	1.768300		1089583325	1.0288	0.1287
15257.900000	8.897314	0.0	138437369700	8.8109	1.0138



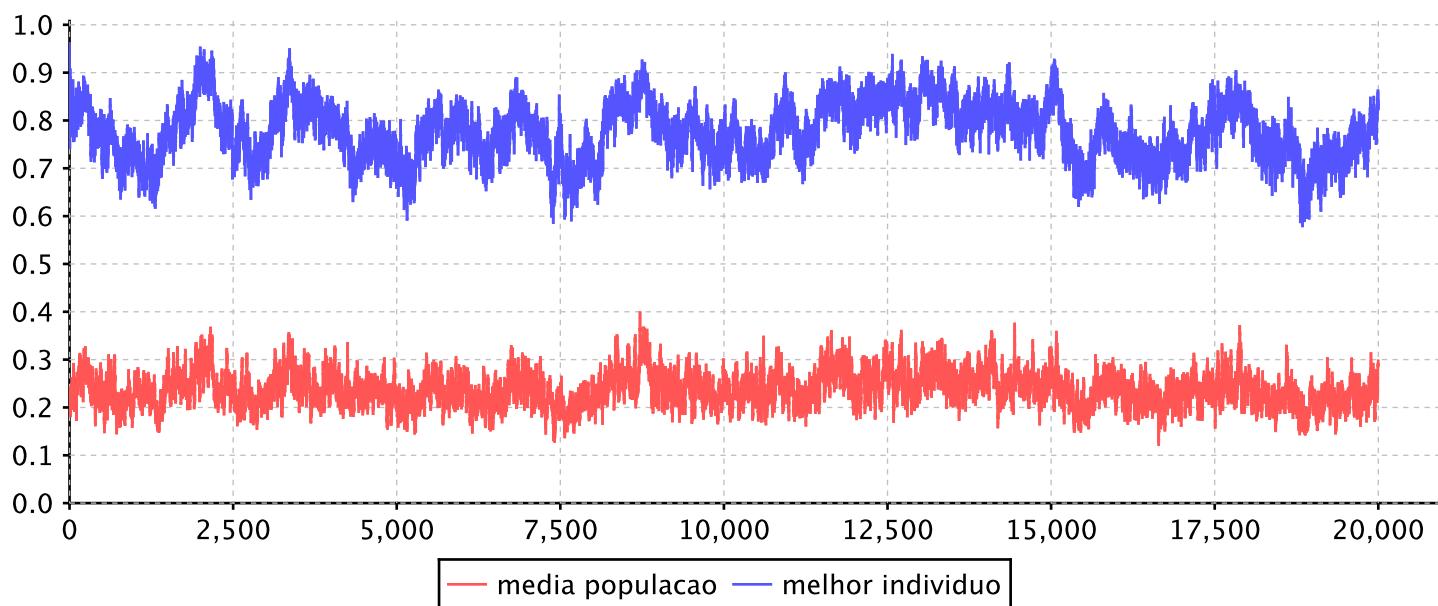


Genetic Algorithm		Function Griewank			6.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
1966	1.754244	0	568858475000	1.784243	0.983187
1021	1.749070	0	568770809000	1.804547	0.969257
15623	1.948098	0	568610929000	2.010688	0.968871
19147	1.562222	0	565199097000	1.833683	0.851959
10806	1.603828	0	567834435000	1.765113	0.908626
6916	1.875626	0	565626450000	1.912005	0.980973
3692	1.801816	0	564065786000	1.751349	1.028816
13606	0.970762	0	557078472000	0.983825	0.986721
7409	1.973271	0	565232435000	1.850138	1.066553
2093	1.832848	0	568480575000	1.849574	0.990957
6010.313410	0.275671		1187771176	0.2669	0.0587
8227.900000	1.707178	0.0	565975746300	1.7545	0.9717



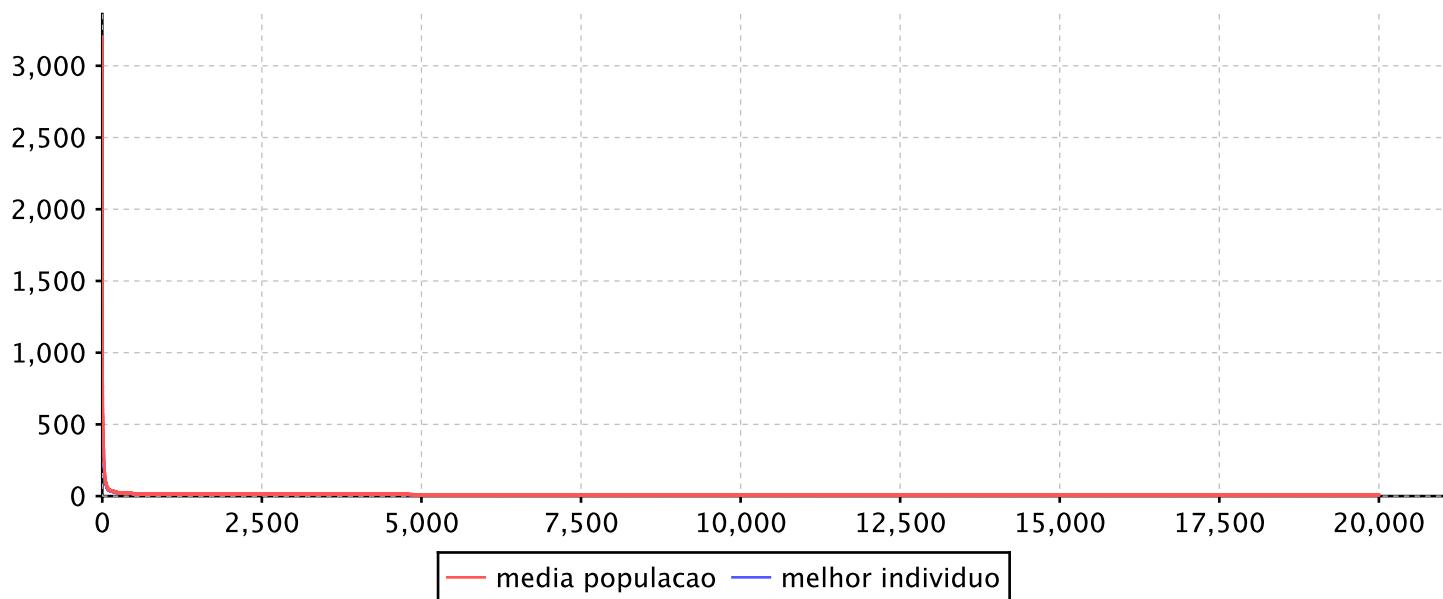


Genetic Algorithm		Function Unid			10.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
9403	1.000000	1	252182000000	0.354152	2.823643
10319	1.000000	1	248833197000	0.164252	6.088212
19582	1.000000	1	248364873000	0.290228	3.445570
2836	1.000000	1	249373793000	0.298175	3.353732
17717	1.000000	1	247989330000	0.174549	5.729050
5682	1.000000	1	250326736000	0.090326	11.070978
16297	1.000000	1	250083944000	0.573204	1.744581
7708	1.000000	1	248688687000	0.222810	4.488126
15713	1.000000	1	252027155000	0.462594	2.161721
17229	1.000000	1	249229967000	0.345679	2.892861
5486.649856	0.000000		218825749	0.1379	2.6975
12248.600000	1.000000	100.0	249709968200	0.2976	4.5451



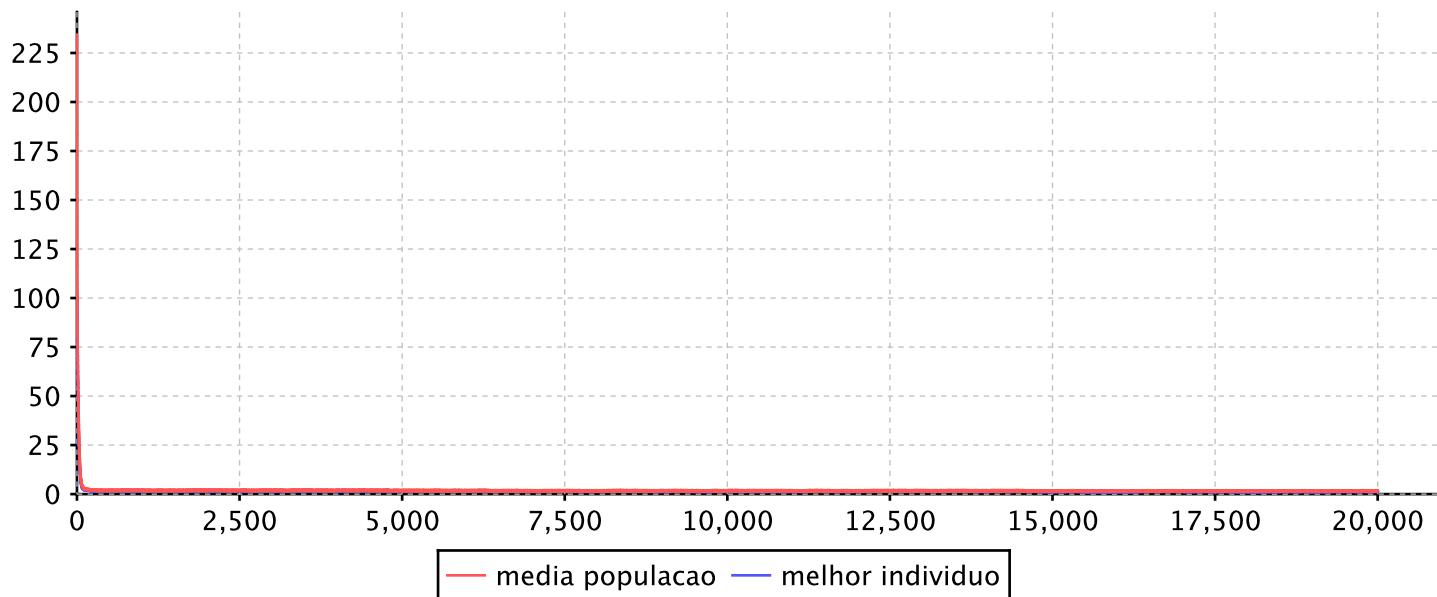


Genetic Algorithm		Function Rosenbrock			11.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
16689	37.180703	0	251667560000	8.118770	4.579598
19847	9.262329	0	242474293000	8.519456	1.087197
4131	5.789159	0	243289566000	6.426741	0.900792
19676	6.199309	0	243321055000	7.067072	0.877210
18247	7.955336	0	245808498000	8.679268	0.916591
16852	5.863231	0	240720981000	6.369346	0.920539
16661	8.013250	0	240501440000	8.466636	0.946450
17458	7.904945	0	240860625000	8.553084	0.924222
15913	8.101152	0	240931337000	8.431629	0.960805
18079	3.690217	0	249164860000	5.461844	0.675636
4255.176778	9.189994	0		1.1125	1.1447
16355.300000	9.995963	0.0	243874021500	7.6094	1.3459



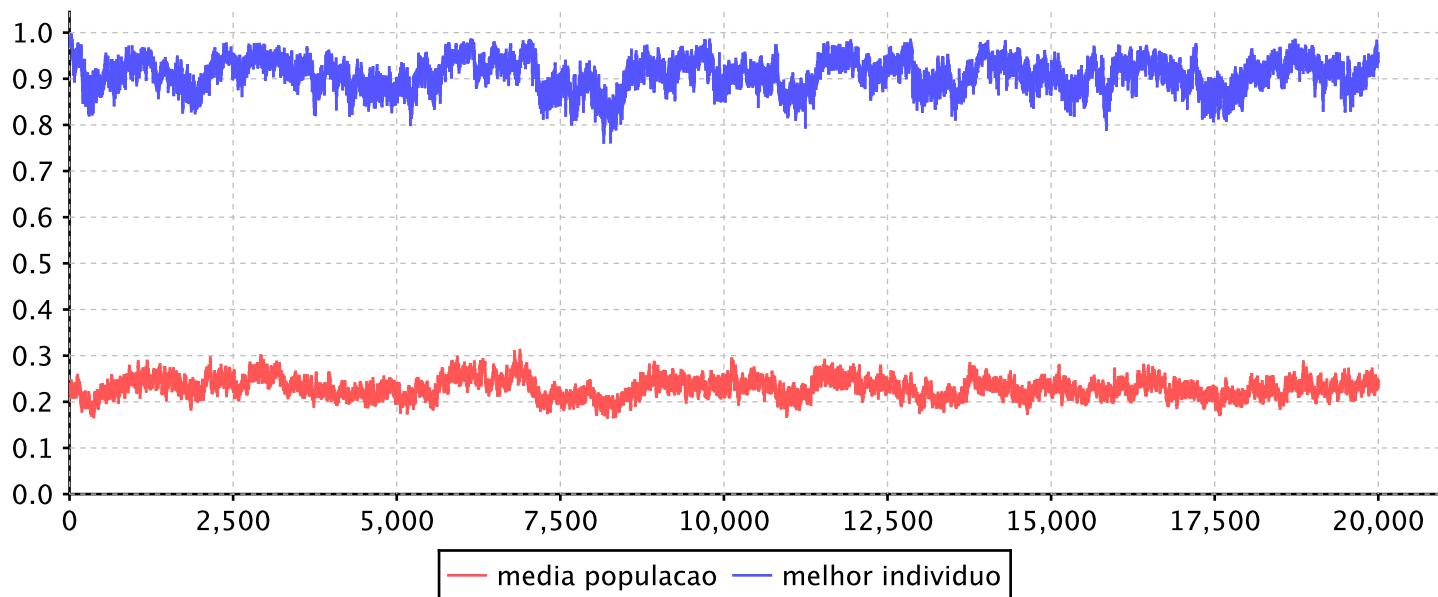


Genetic Algorithm		Function Griewank			12.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19306	0.889956	0	890916991000	1.108675	0.802720
10128	1.405382	0	892483170000	1.765536	0.796009
15648	1.979674	0	894837977000	2.062886	0.959663
13585	1.872662	0	890550638000	1.860265	1.006664
17890	0.808886	0	875980277000	0.972286	0.831942
10679	2.722818	0	894336398000	2.081120	1.308343
17400	1.948692	0	893603182000	2.029878	0.960004
5410	2.070474	0	866141581000	1.231251	1.681603
2449	1.817900	0	892164269000	1.956367	0.929222
10600	2.571472	0	892175376000	2.033512	1.264547
5234.033707	0.595428	0	0	0.4112	0.2725
12309.500000	1.808792	0.0	888318985900	1.7102	1.0307



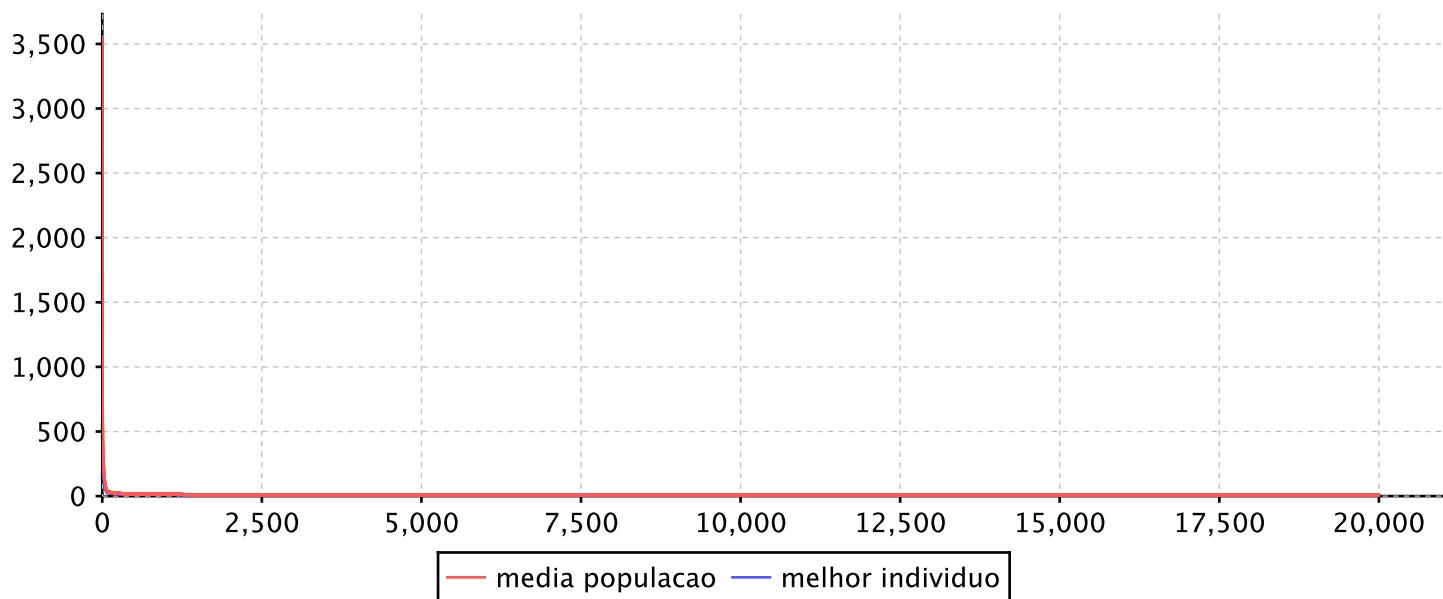


Genetic Algorithm		Function Unid		16.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
11645	1.000000	1	1282387782000	0.166107	6.020204
19676	1.000000	1	1280040271000	0.326206	3.065544
9338	1.000000	1	1276179359000	0.172082	5.811174
16388	1.000000	1	1279445861000	0.250890	3.985808
19870	1.000000	1	1271673798000	0.122700	8.149961
16438	1.000000	1	1278117284000	0.207439	4.820683
5514	1.000000	1	1272994290000	0.246214	4.061501
19735	1.000000	1	1280101842000	0.365807	2.733683
10355	1.000000	1	1297702231000	0.162128	6.167968
8837	1.000000	1	1270173116000	0.276612	3.615174
4999.597848	0.000000		995413647	0.0739	1.6262
13779.600000	1.000000	100.0	1278881583400	0.2296	4.9796



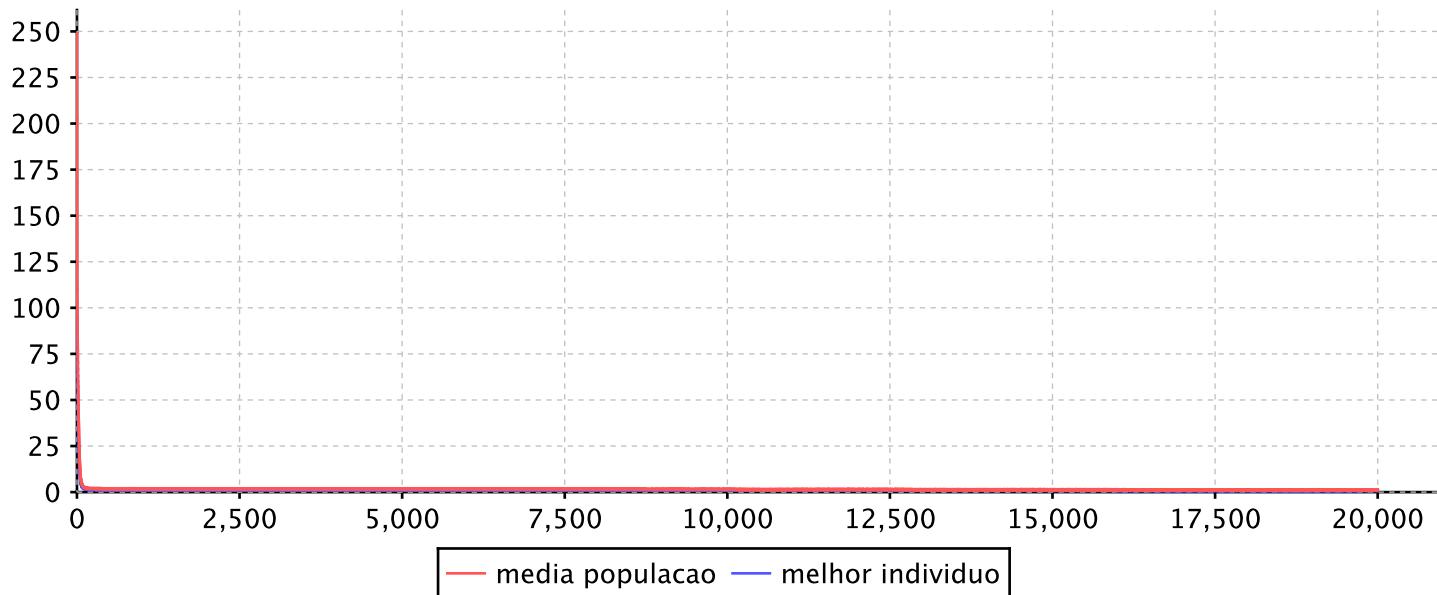


Genetic Algorithm		Function Rosenbrock			17.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
17431	8.128848	0	1399123751000	8.838914	0.919666
5153	8.844234	0	1443134235000	11.235785	0.787149
18500	3.957654	0	1489074838000	5.886013	0.672383
13813	10.300000	0	1435510965000	10.317968	0.998259
3819	11.897648	0	1420517520000	11.332923	1.049830
19888	4.887539	0	1494667544000	7.871416	0.620922
19085	19.128757	0	1431879066000	7.114454	2.688717
14205	6.831578	0	1427005943000	8.148240	0.838411
15415	7.491401	0	1395837574000	8.712367	0.859858
19747	7.668345	0	1395538817000	8.157674	0.940016
5519.041714	4.055557	0		1.6637	0.5946
14705.600000	8.913600	0.0	1433229025300	8.7616	1.0484



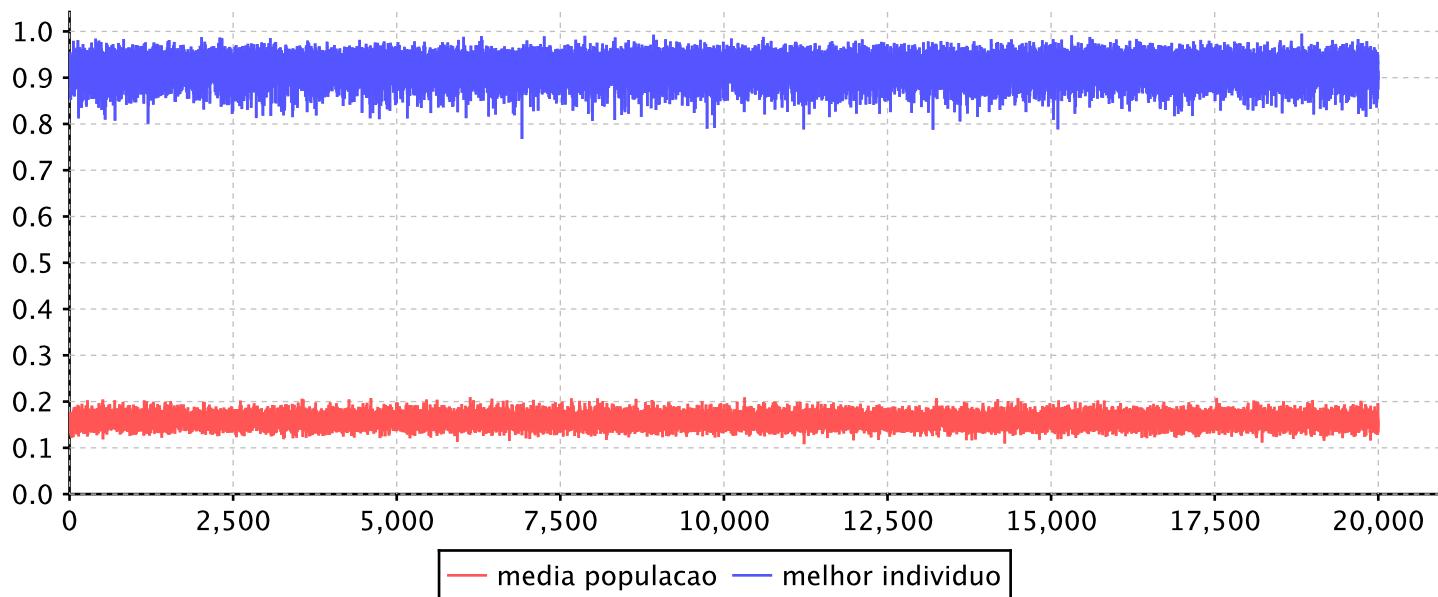


Genetic Algorithm		Function Griewank		18.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19829	0.939565	0	5811164575000	1.003864	0.935949
6532	0.976801	0	5687716141000	1.101282	0.886967
18747	1.875851	0	5827329468000	1.953635	0.960185
15406	1.926046	0	5800397476000	1.156710	1.665106
18480	0.985814	0	5656243803000	1.161629	0.848647
17720	2.166991	0	5785912097000	0.912072	2.375898
12107	0.916962	0	5824855398000	1.018943	0.899915
18094	0.925945	0	5804167292000	1.087500	0.851444
8169	1.378765	0	5910994650000	1.756624	0.784895
19313	4.857783	0	5826898818000	1.116001	4.352847
4582.721507	1.148838		615615913	0.3252	0.5047
15439.700000	1.695052	0.0	5793567971800	1.2268	1.1343



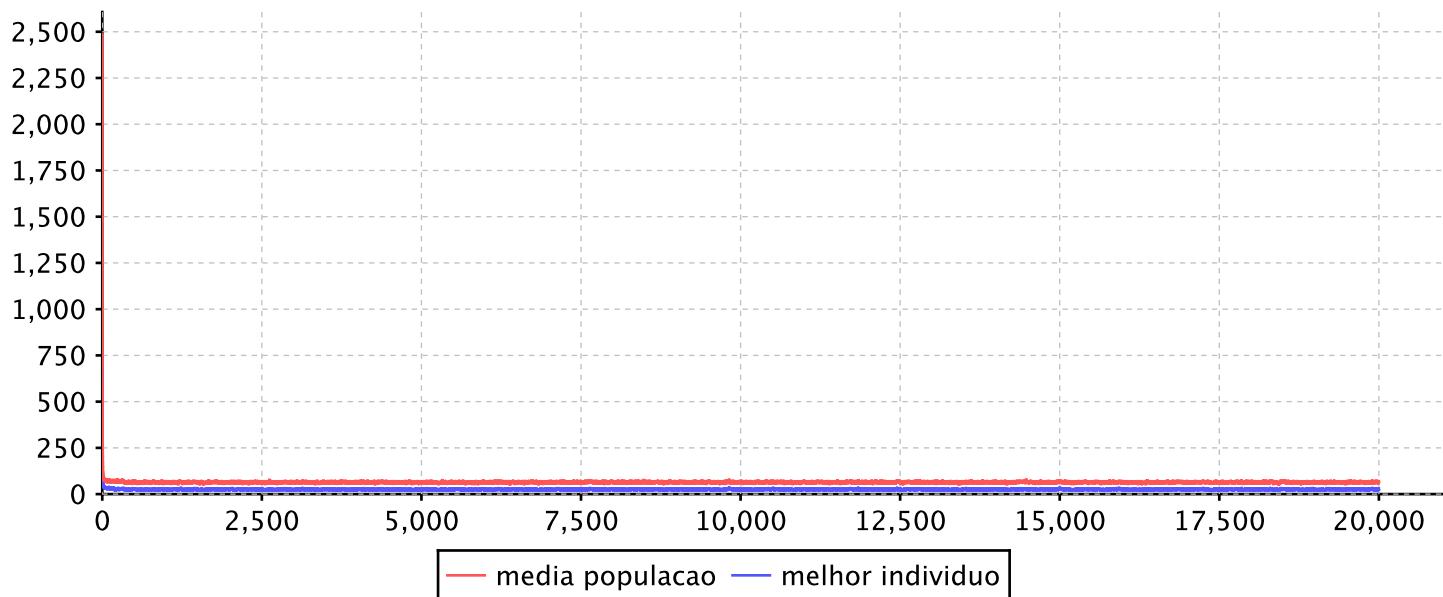


Genetic Algorithm		Function Unid		25.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
13254	1.000000	1	159045658000	0.092285	10.835996
7914	1.000000	1	157684671000	0.096621	10.349742
1050	1.000000	1	159301271000	0.160969	6.212367
11256	1.000000	1	160622888000	0.099693	10.030841
16726	1.000000	1	160856011000	0.150026	6.665508
5798	1.000000	1	161114713000	0.139274	7.180111
6320	1.000000	1	159689260000	0.199810	5.004748
3391	1.000000	1	159278562000	0.218919	4.567902
5929	1.000000	1	160711529000	0.204815	4.882461
19104	1.000000	1	160648955000	0.199313	5.017234
5546.367366	0.000000	0		0.0461	2.3438
9074.200000	1.000000	100.0	159895351800	0.1562	7.3033



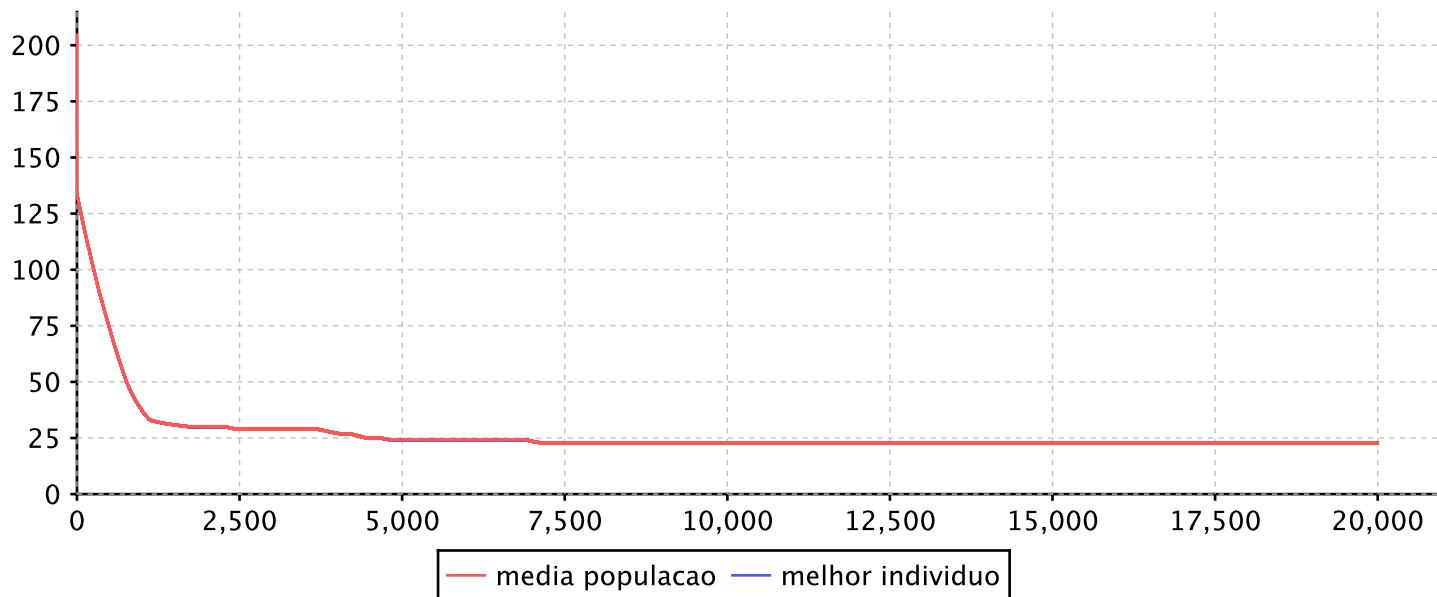


Genetic Algorithm		Function Rosenbrock			26.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
2859	27.355645	0	138682488000	59.101387	0.462860
462	19.252477	0	138869520000	69.557928	0.276783
4037	22.596796	0	138158970000	71.242401	0.317182
12915	19.767032	0	137587898000	58.247570	0.339362
219	20.684242	0	137481477000	67.234833	0.307642
12363	30.361881	0	137216780000	81.854711	0.370924
15406	18.071788	0	137398231000	68.026599	0.265658
6283	32.518472	0	137176154000	61.873996	0.525560
1078	16.144217	0	137254615000	50.795991	0.317825
12145	18.137781	0	137668050000	50.590846	0.358519
5573.338803	5.348934		581203919	9.1889	0.0819
6776.700000	22.489033	0.0	137749418300	63.8526	0.3538



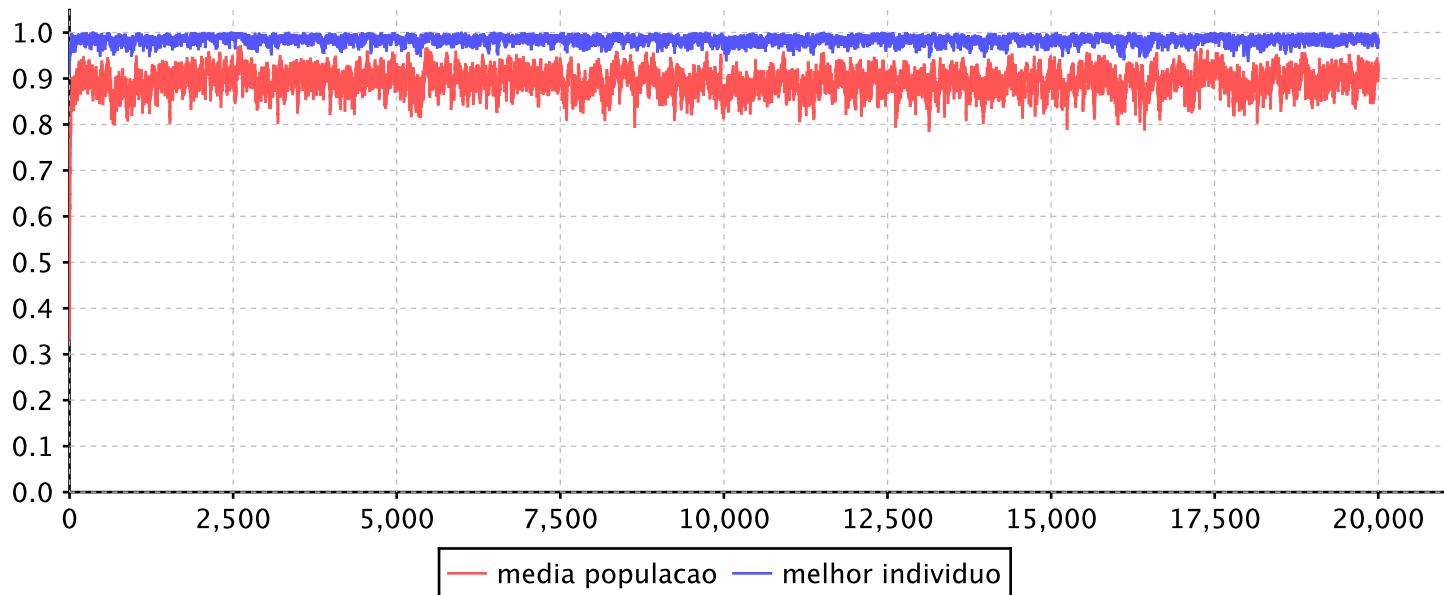


Genetic Algorithm		Function Griewank			27.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
10566	24.553163	0	555432555000	24.619987	0.997286
4114	31.329406	0	557320662000	31.383481	0.998277
6444	23.040959	0	558740334000	23.089264	0.997908
7138	34.034066	0	553420374000	34.084373	0.998524
12496	18.634363	0	557291255000	18.697989	0.996597
17953	22.192395	0	555603234000	22.267644	0.996621
15881	7.346582	0	550879470000	7.412497	0.991108
10806	18.936074	0	556420595000	18.977265	0.997829
13349	18.586827	0	555279202000	18.655140	0.996338
8262	28.564687	0	557075647000	28.653829	0.996889
4121.181759	7.242015		742743784	7.2412	0.0021
10700.900000	22.721852	0.0	555746332800	22.7841	0.9967



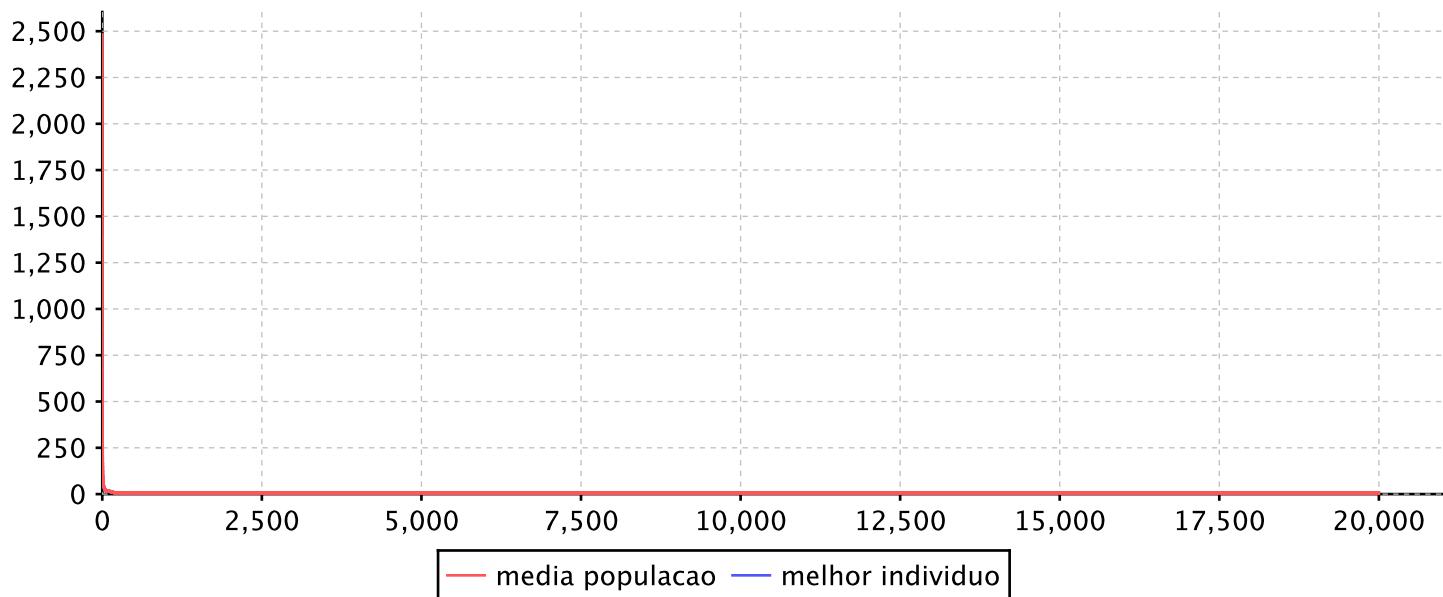


Genetic Algorithm		Function Unid			19.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
404	1.000000	1	115236150000	0.912422	1.095984
9990	1.000000	1	114313019000	0.930304	1.074918
11788	1.000000	1	114212640000	0.902104	1.108520
10981	1.000000	1	114633836000	0.843760	1.185171
12516	1.000000	1	114159515000	0.974438	1.026232
9195	1.000000	1	114285162000	0.977596	1.022917
12666	1.000000	1	114330911000	0.845585	1.182613
5262	1.000000	1	113960079000	0.956409	1.045578
9282	1.000000	1	114380840000	0.876349	1.141098
10141	1.000000	1	113983441000	0.834973	1.197643
3567.456300	0.000000		348463197	0.0514	0.0585
9222.500000	1.000000	100.0	114349559300	0.9054	1.0981



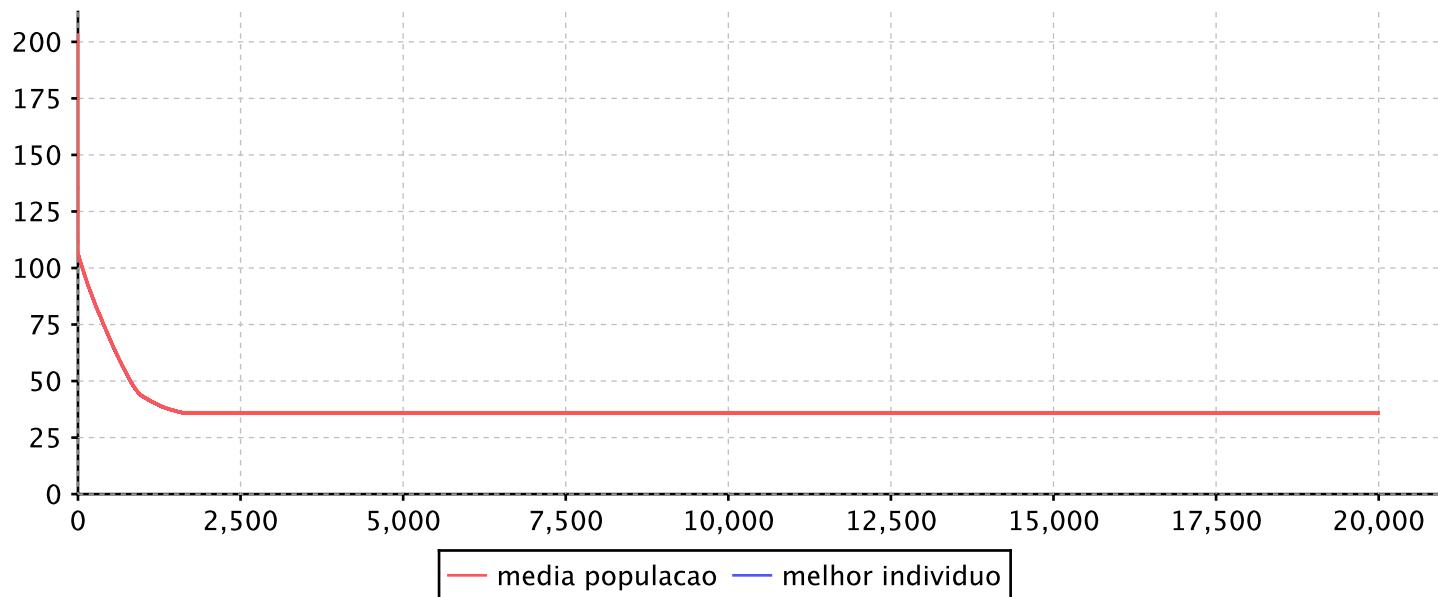


Genetic Algorithm		Function Rosenbrock			20.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
17072	4.808643	0	137700973000	4.815791	0.998516
19283	6.344003	0	136618776000	6.673108	0.950682
19335	7.089779	0	138191216000	7.110828	0.997040
19836	6.431908	0	138983704000	6.887709	0.933824
19550	6.333493	0	137986343000	6.480380	0.977333
18536	0.162006	0	146716504000	0.182249	0.888926
19513	6.792704	0	138500825000	6.894931	0.985174
19432	6.205788	0	138583499000	6.234341	0.995420
19747	6.740450	0	138036780000	6.745014	0.999323
18799	5.788275	0	137747516000	5.815520	0.995315
777.993066	1.930754		707650997	1.9731	0.0359
19110.300000	5.669705	0.0	138906613600	5.7840	0.9696



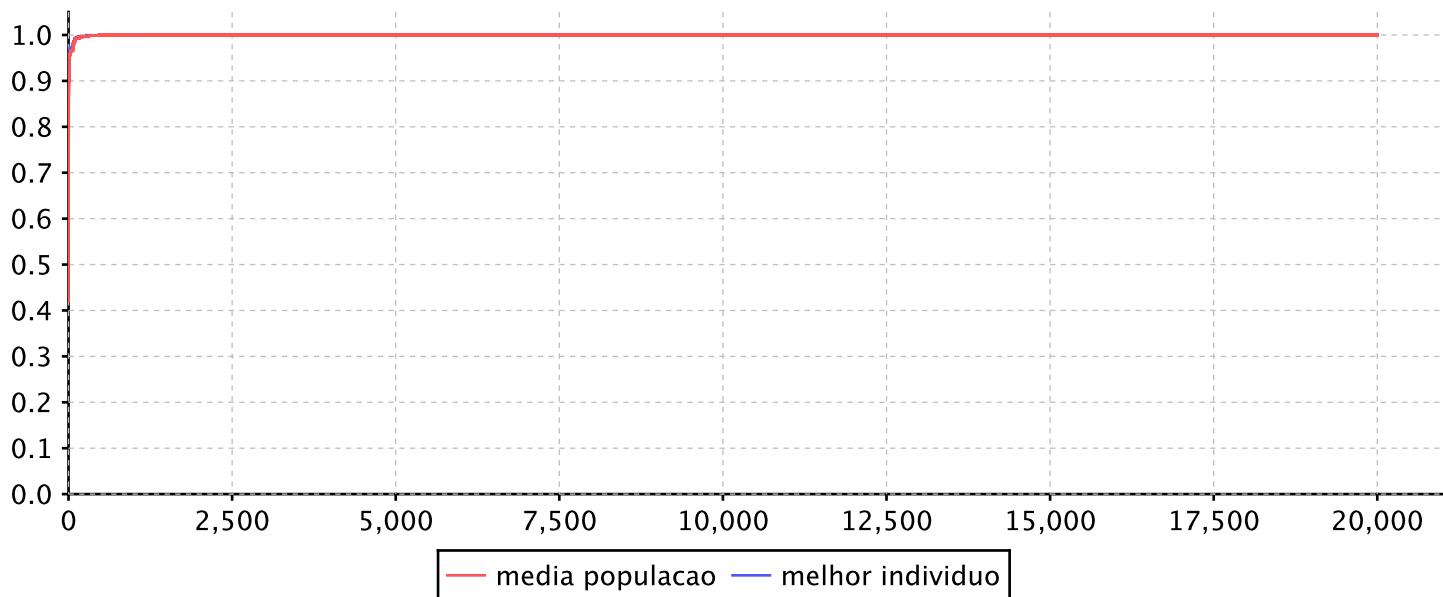


Genetic Algorithm		Function Griewank		21.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
10176	16.863523	0	523782515000	16.863581	0.999997
19822	73.564604	0	519651876000	73.564666	0.999999
13714	16.601446	0	526669199000	16.601481	0.999998
15661	21.285605	0	523858504000	21.286308	0.999967
4820	45.496442	0	521966424000	45.496545	0.999998
8103	19.615009	0	524797623000	19.615104	0.999995
11325	44.909589	0	520733947000	44.909883	0.999993
12994	24.692524	0	522183165000	24.692570	0.999998
7430	56.266610	0	518228288000	56.266617	1.000000
3083	39.229331	0	521617695000	39.229359	0.999999
4825.588022	18.322003		902360926	18.3220	0.0000
10712.800000	35.852469	0.0	522348923600	35.8526	1.0000



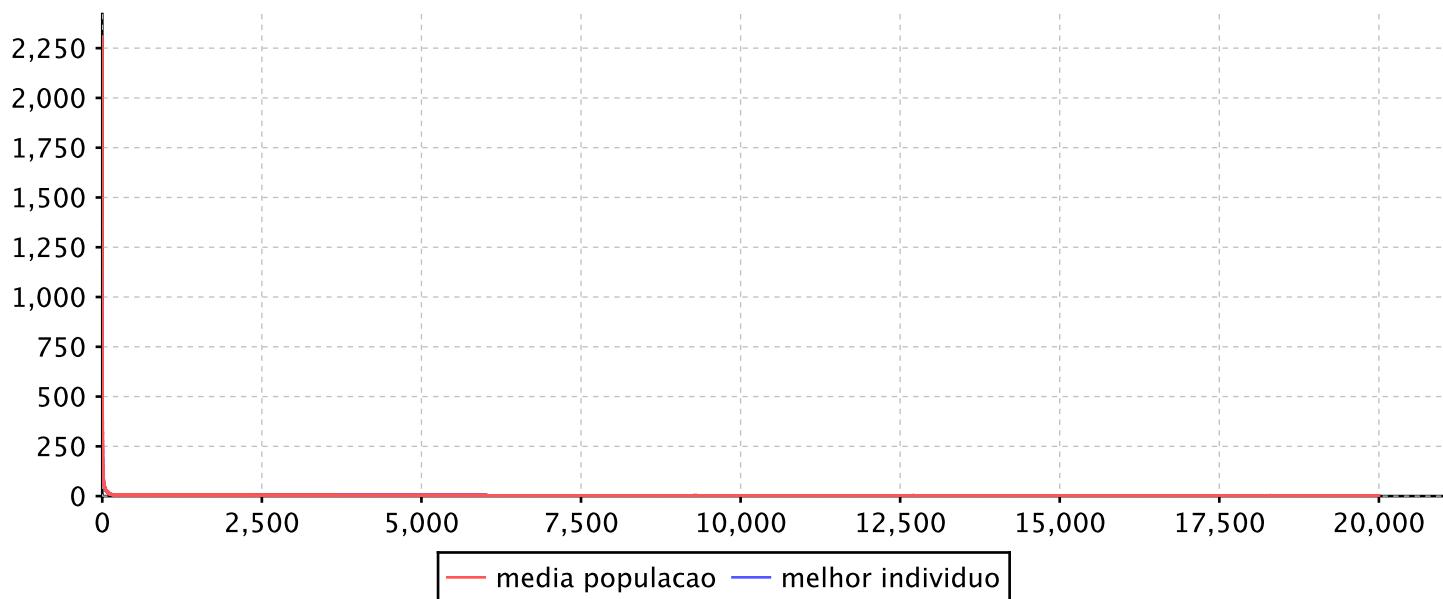


Genetic Algorithm		Function Unid		1.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
17794	1.000000	1	126948859000	0.999999	1.000001
16812	1.000000	1	121779518000	1.000000	1.000000
17657	1.000000	1	121969362000	1.000000	1.000000
18451	1.000000	1	1189068666000	1.000000	1.000000
8076	1.000000	1	121141735000	1.000000	1.000000
18227	1.000000	1	126656043000	0.999998	1.000002
3492	1.000000	1	125492729000	1.000000	1.000000
1223	1.000000	1	125245811000	1.000000	1.000000
10954	1.000000	1	123141308000	1.000000	1.000000
11662	1.000000	1	126471477000	1.000000	1.000000
6102.161728	0.000000		621032568	0.0000	0.0000
12434.800000	1.000000	100.0	123775370800	1.0000	1.0000



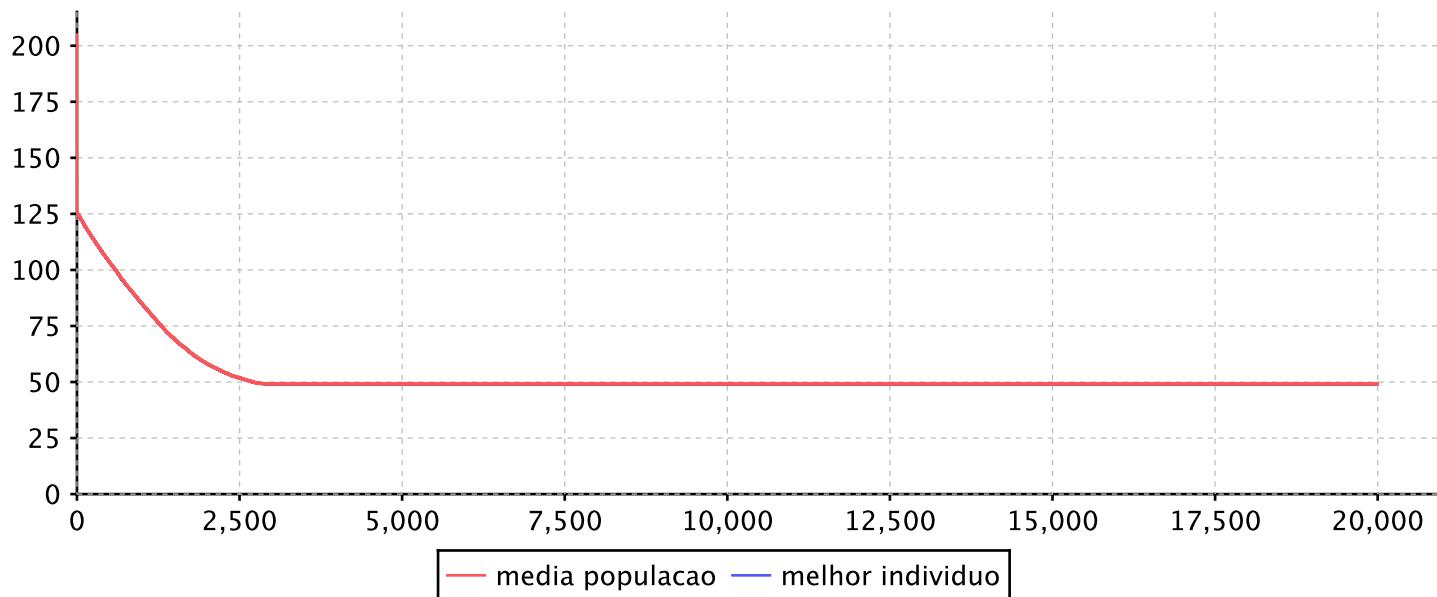


Genetic Algorithm		Function Rosenbrock			2.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19910	6.294389	0	138675387000	6.294389	1.000000
19914	5.122499	0	137917114000	5.122499	1.000000
19762	2.596299	0	142582336000	2.596299	1.000000
19874	1.278930	0	144263466000	1.278930	1.000000
19796	6.359915	0	138179584000	6.359915	1.000000
19975	6.288229	0	139869668000	6.288229	1.000000
19027	0.088803	0	145872497000	0.088803	1.000000
19974	0.589182	0	142845633000	0.589182	1.000000
19375	6.103237	0	137398711000	6.103237	1.000000
19379	0.223152	0	147175506000	0.223152	1.000000
307.491203	2.641357	0		2.6414	0.0000
19698.600000	3.494463	0.0	141477990200	3.4945	1.0000



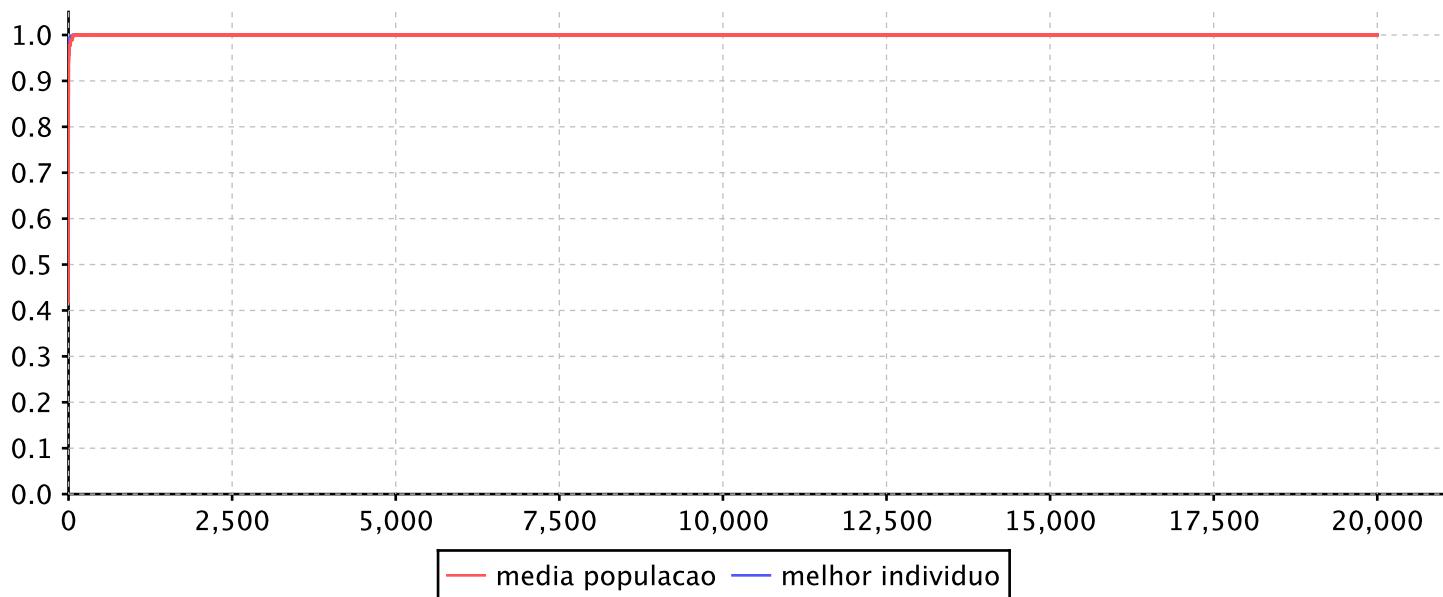


Genetic Algorithm		Function Griewank			3.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
16804	56.599676	0	548809529000	56.599676	1.000000
19090	35.577423	0	551568900000	35.577423	1.000000
18331	61.703549	0	553327754000	61.703549	1.000000
14566	34.537090	0	555107101000	34.537090	1.000000
19363	48.853839	0	547293541000	48.853839	1.000000
19731	69.389492	0	545666649000	69.389492	1.000000
15616	42.598461	0	549592738000	42.598461	1.000000
17098	65.441054	0	546798039000	65.441054	1.000000
19349	42.514917	0	555217849000	42.514917	1.000000
18745	35.211877	0	550413032000	35.211877	1.000000
1675.578232	12.518373		259230831	12.5184	0.0000
17869.300000	49.242738	0.0	550379513200	49.2427	1.0000



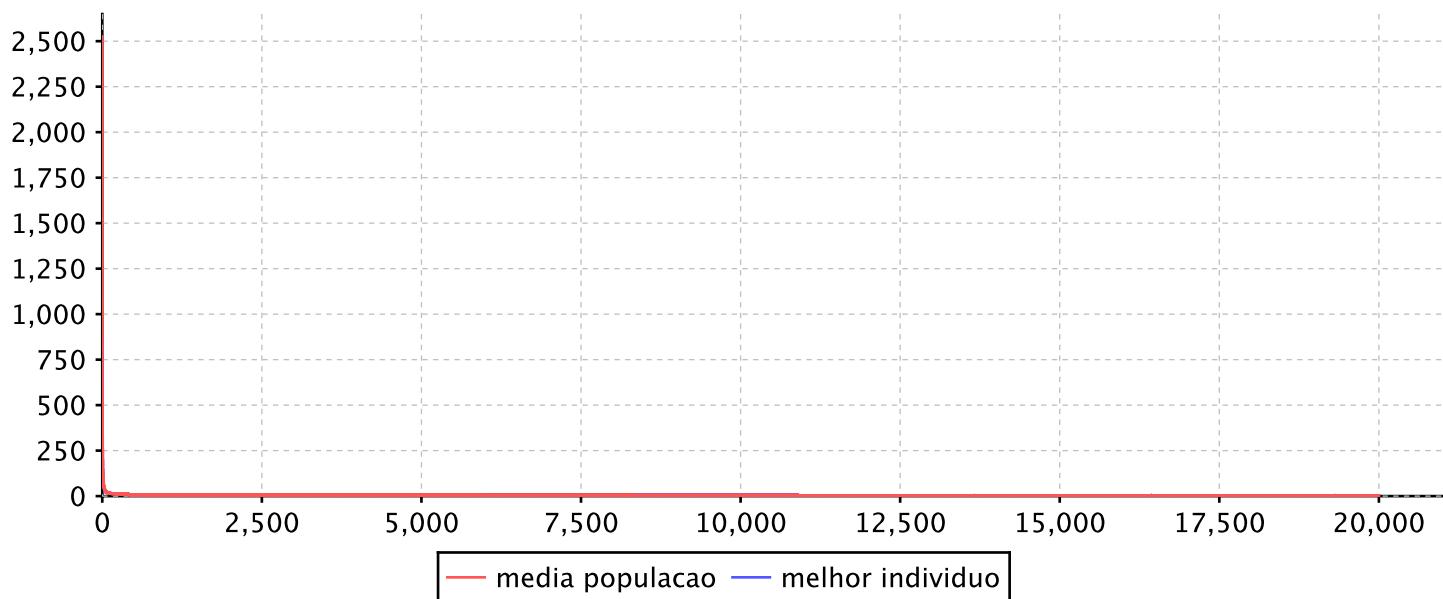


Genetic Algorithm		Function Unid		7.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
1890	1.000000	1	235944527000	1.000000	1.000000
17576	1.000000	1	244674100000	1.000000	1.000000
17947	1.000000	1	246142510000	1.000000	1.000000
7109	1.000000	1	295811949000	1.000000	1.000000
16544	1.000000	1	243527224000	1.000000	1.000000
18255	1.000000	1	237346542000	1.000000	1.000000
13652	1.000000	1	237795935000	1.000000	1.000000
5271	1.000000	1	237677821000	1.000000	1.000000
18559	1.000000	1	231257846000	1.000000	1.000000
8680	1.000000	1	247989466000	1.000000	1.000000
5927.989744	0.000000		308280574	0.0000	0.0000
12548.300000	1.000000	100.0	245816792000	1.0000	1.0000



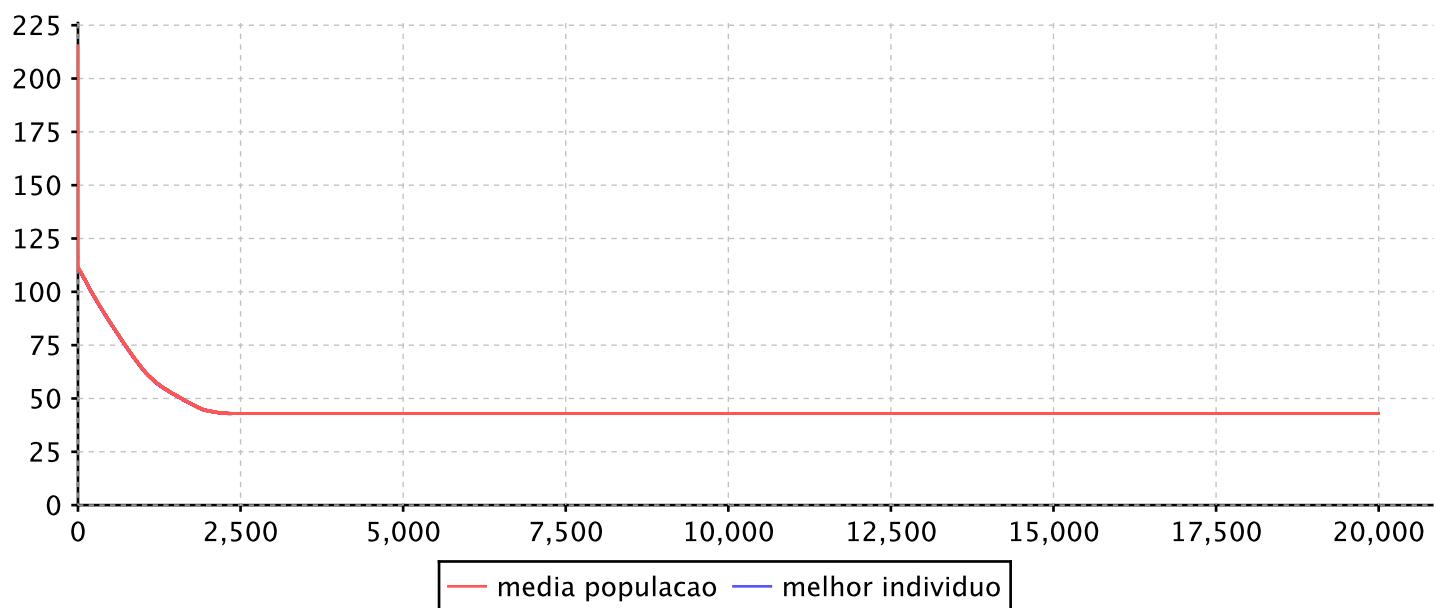


Genetic Algorithm		Function Rosenbrock			8.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19844	5.668185	0	246458172000	5.668185	1.000000
19964	5.635790	0	240879329000	5.635790	1.000000
19762	5.730547	0	243859192000	5.730547	1.000000
19965	4.404477	0	246057627000	4.411927	0.998311
15992	0.149859	0	253759075000	0.149859	1.000000
18278	0.017001	0	262107344000	0.017001	1.000000
19925	3.709430	0	247549537000	3.709430	1.000000
19951	5.766709	0	248109045000	5.766709	1.000000
19975	1.668097	0	249104069000	1.668097	1.000000
19790	5.493721	0	242897582000	5.493721	1.000000
1219.430539	2.233185		641287820	2.2334	0.0005
19344.600000	3.824382	0.0	248078097200	3.8251	0.9998



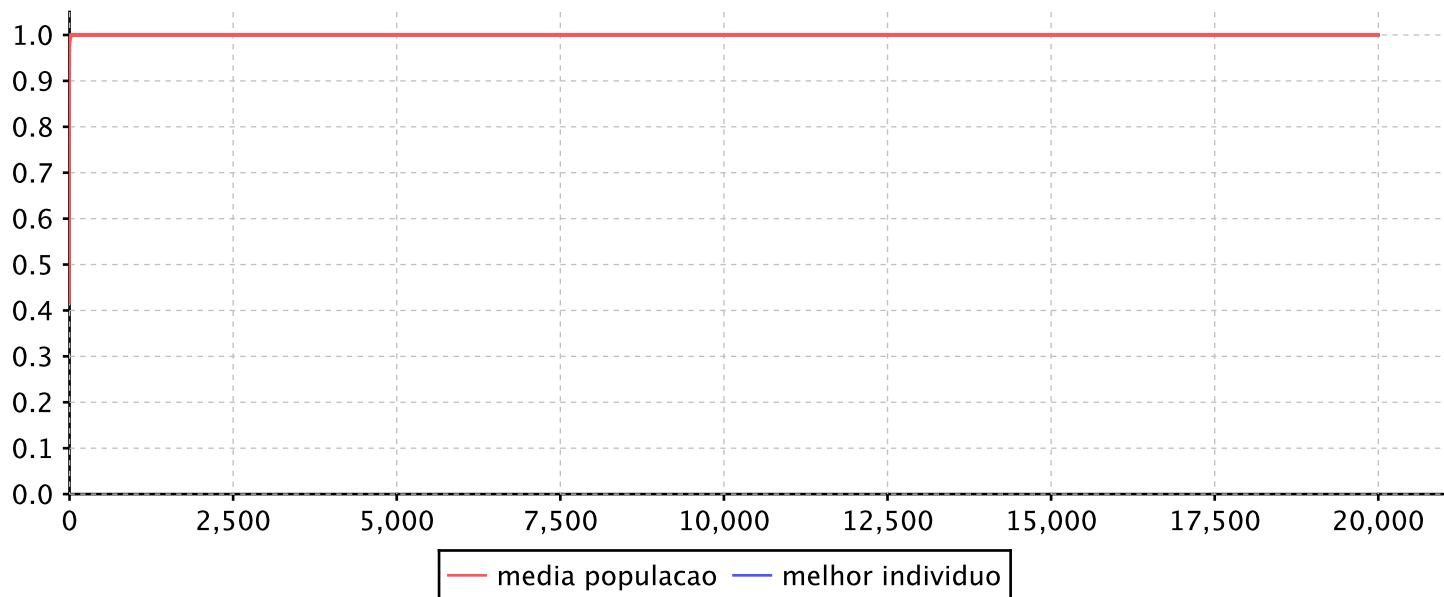


Genetic Algorithm		Function Griewank			9.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19574	24.448686	0	863236531000	24.448686	1.000000
18858	46.972673	0	863696528000	46.972673	1.000000
18506	66.576515	0	844351484000	66.576515	1.000000
17684	20.667527	0	867370020000	20.667527	1.000000
19816	59.618517	0	852040214000	59.618517	1.000000
19049	43.227633	0	876487579000	43.227633	1.000000
19393	62.380202	0	841767292000	62.380202	1.000000
19316	33.364398	0	895971788000	33.364398	1.000000
18535	39.265300	0	856956469000	39.265300	1.000000
18608	32.696837	0	1283378747000	32.696837	1.000000
597.853736	15.097122	0		15.0971	0.0000
18933.900000	42.921829	0.0	904525665200	42.9218	1.0000



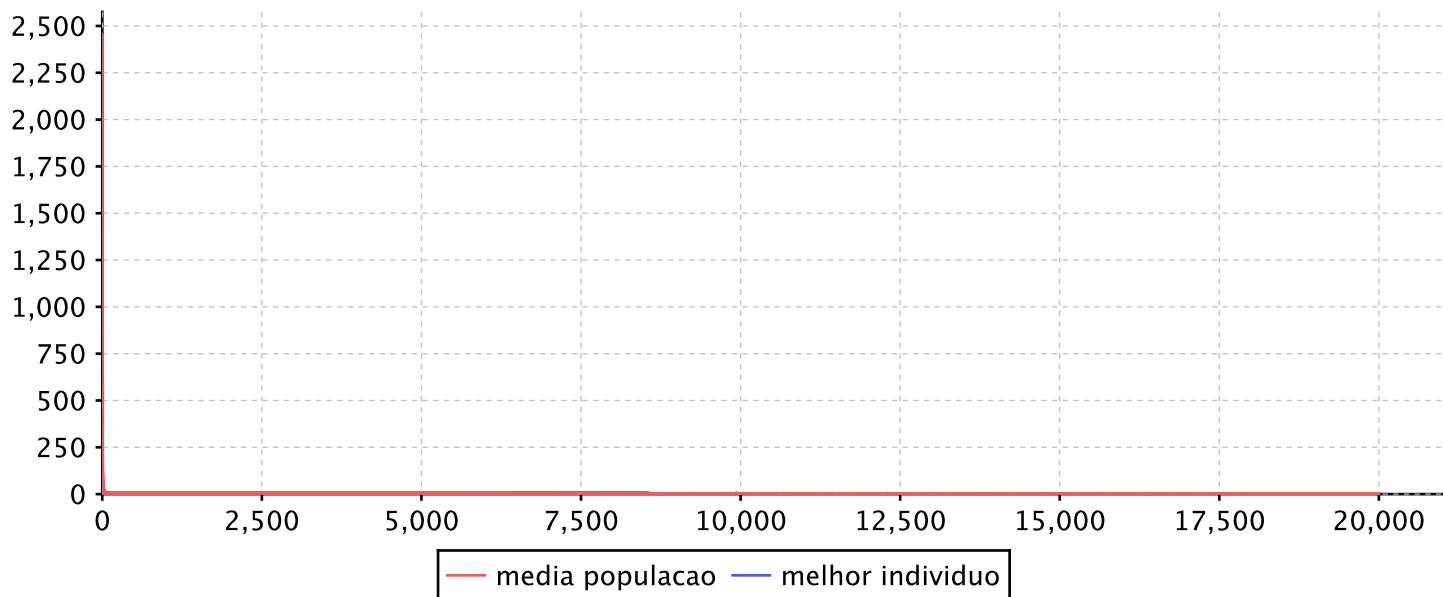


Genetic Algorithm		Function Unid			13.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
2696	1.000000	1	1310296138000	1.000000	1.000000
6952	1.000000	1	1265150277000	1.000000	1.000000
1900	1.000000	1	1184841067000	1.000000	1.000000
10369	1.000000	1	1211977263000	1.000000	1.000000
539	1.000000	1	1179447180000	1.000000	1.000000
16776	1.000000	1	1204225235000	1.000000	1.000000
7804	1.000000	1	1244407965000	1.000000	1.000000
15785	1.000000	1	1200713026000	1.000000	1.000000
735	1.000000	1	1296475417000	1.000000	1.000000
15708	1.000000	1	1217945827000	1.000000	1.000000
6144.278138	0.000000	0		0.0000	0.0000
7926.400000	1.000000	100.0	1231547939500	1.0000	1.0000



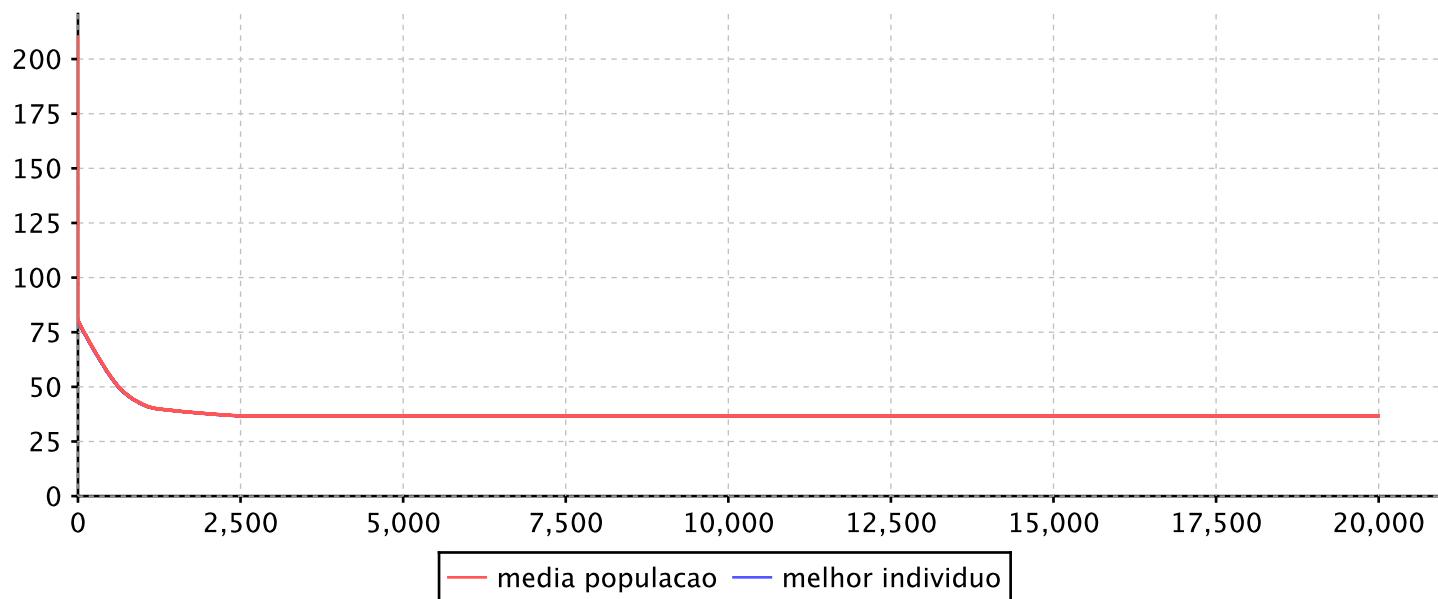


Genetic Algorithm		Function Rosenbrock			14.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19987	2.364704	0	1410736587000	2.364704	1.000000
19933	2.488905	0	1421598443000	2.488905	1.000000
19993	2.754310	0	1399857250000	2.754310	1.000000
19984	2.758778	0	1427840027000	2.758778	1.000000
19979	0.458734	0	1443479081000	0.458734	1.000000
19994	2.587279	0	1424942206000	2.592523	0.997977
19999	2.303067	0	1438990170000	2.315055	0.994822
19997	2.573907	0	1418818274000	2.573907	1.000000
19974	2.564525	0	1412100523000	2.564525	1.000000
19984	0.807144	0	1437785368000	0.807144	1.000000
18.122914	0.782558		618983474	0.7831	0.0017
19982.400000	2.166135	0.0	1423614792900	2.1679	0.9992



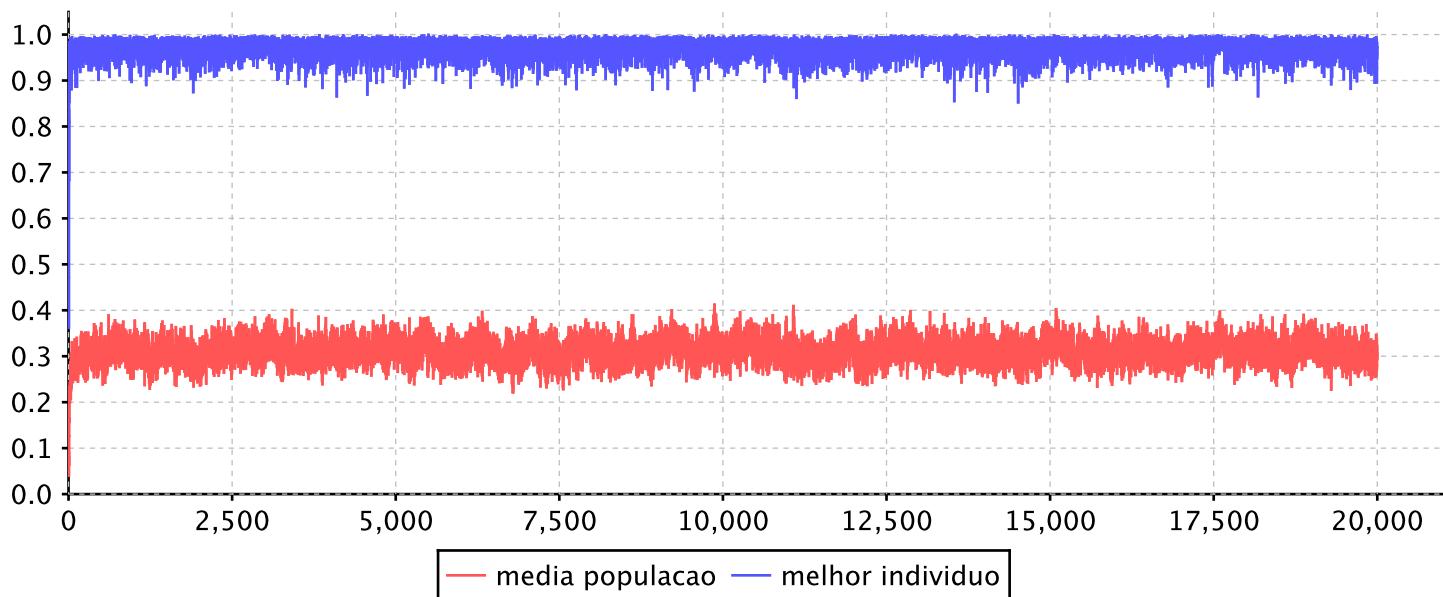


Genetic Algorithm		Function Griewank		15.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
18419	38.758327	0	5521579498000	38.758327	1.000000
17263	26.827274	0	5580773470000	26.827274	1.000000
15654	39.780221	0	5526773064000	39.780221	1.000000
19011	56.265288	0	5532359184000	56.265288	1.000000
19722	53.437305	0	5566416348000	53.437305	1.000000
19475	11.728350	0	5555311740000	11.728350	1.000000
11073	36.920932	0	5569233995000	36.920932	1.000000
18609	44.252034	0	5546660567000	44.252034	1.000000
18076	25.369917	0	5499434783000	25.369917	1.000000
19239	34.294882	0	5528227582000	34.294882	1.000000
2471.520077	12.605211		762641697	12.6052	0.0000
17654.100000	36.763453	0.0	5542677023100	36.7635	1.0000



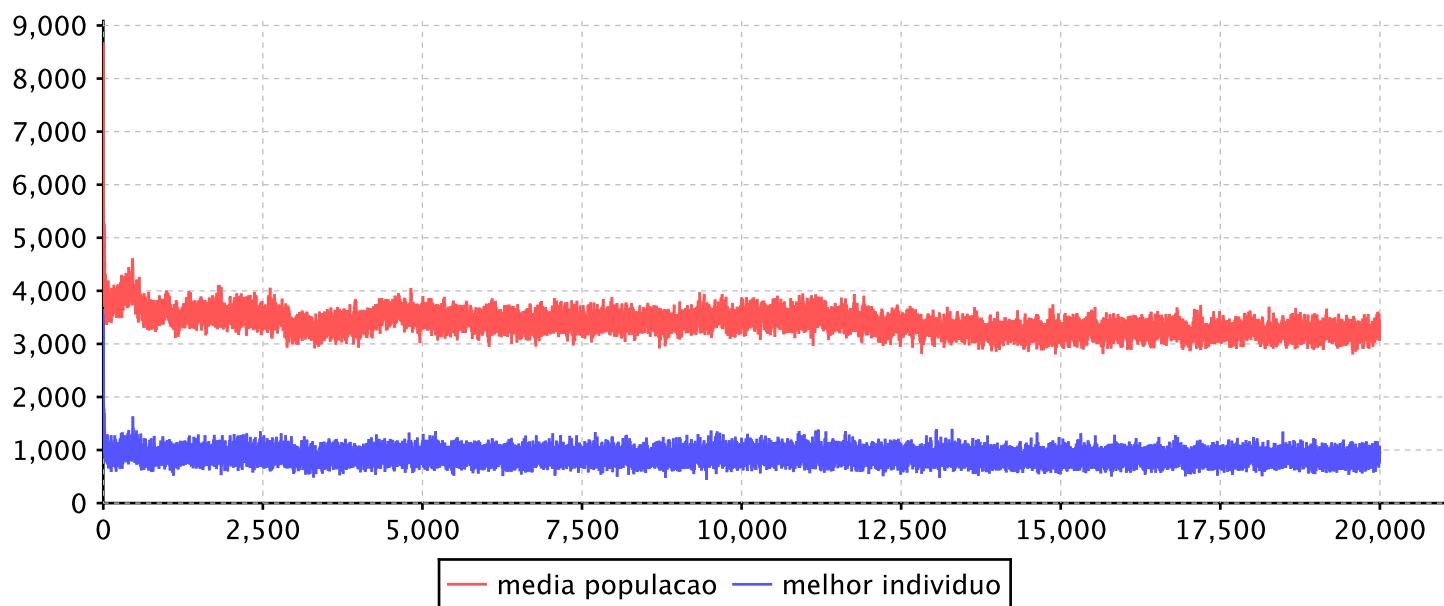


Particle Swarm		Function Unid		18.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
10888	1.000000	1	18153957000	0.187646	5.329189
7454	1.000000	1	18163314000	0.322048	3.105130
16860	1.000000	1	18211773000	0.303376	3.296236
15320	1.000000	1	18269930000	0.310638	3.219178
6733	1.000000	1	18125345000	0.384372	2.601649
4343	1.000000	1	18106958000	0.366329	2.729787
18971	1.000000	1	18135161000	0.150891	6.627282
18904	1.000000	1	18213685000	0.270398	3.698255
3387	1.000000	1	18149448000	0.333368	2.999691
6175	1.000000	1	18230433000	0.439936	2.273058
5790.223886	0.000000		49837787	0.0825	1.2736
10903.500000	1.000000	100.0	18176000400	0.3069	3.7340



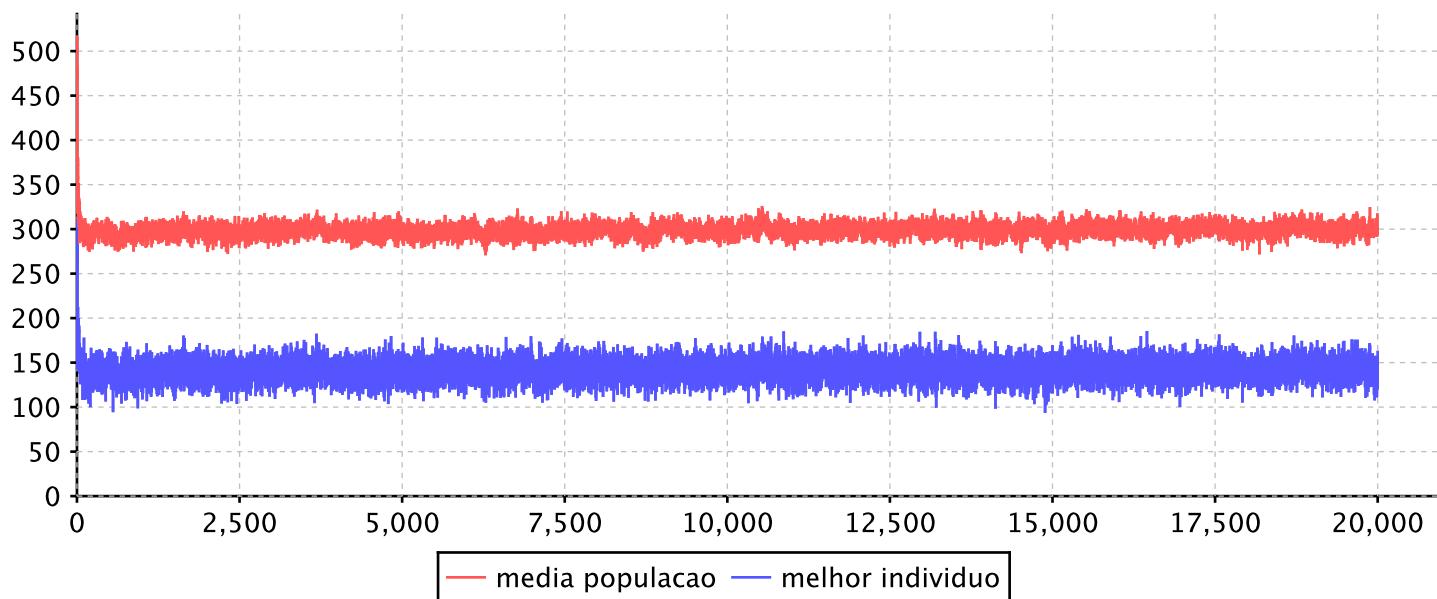


Particle Swarm		Function Rosenbrock			19.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
13621	110.448269	0	30848044000	2511.343610	0.043980
19628	45.759482	0	30834468000	4724.405530	0.009686
12525	523.209226	0	30978391000	2539.996147	0.205988
13827	90.732389	0	31007619000	2498.719152	0.036312
9210	60.436452	0	30879636000	4439.725684	0.013613
13111	60.940801	0	30644648000	4724.185822	0.012900
12006	25.669869	0	31210570000	1880.465596	0.013651
3931	66.764135	0	30737402000	4184.969728	0.015953
12778	81.944847	0	30935133000	2098.806968	0.039044
2626	92.287410	0	30913683000	3265.413567	0.028262
4716.918911	137.784832		146506915	1069.5053	0.0588
11326.300000	115.819288	0.0	30898959400	3286.8032	0.0435



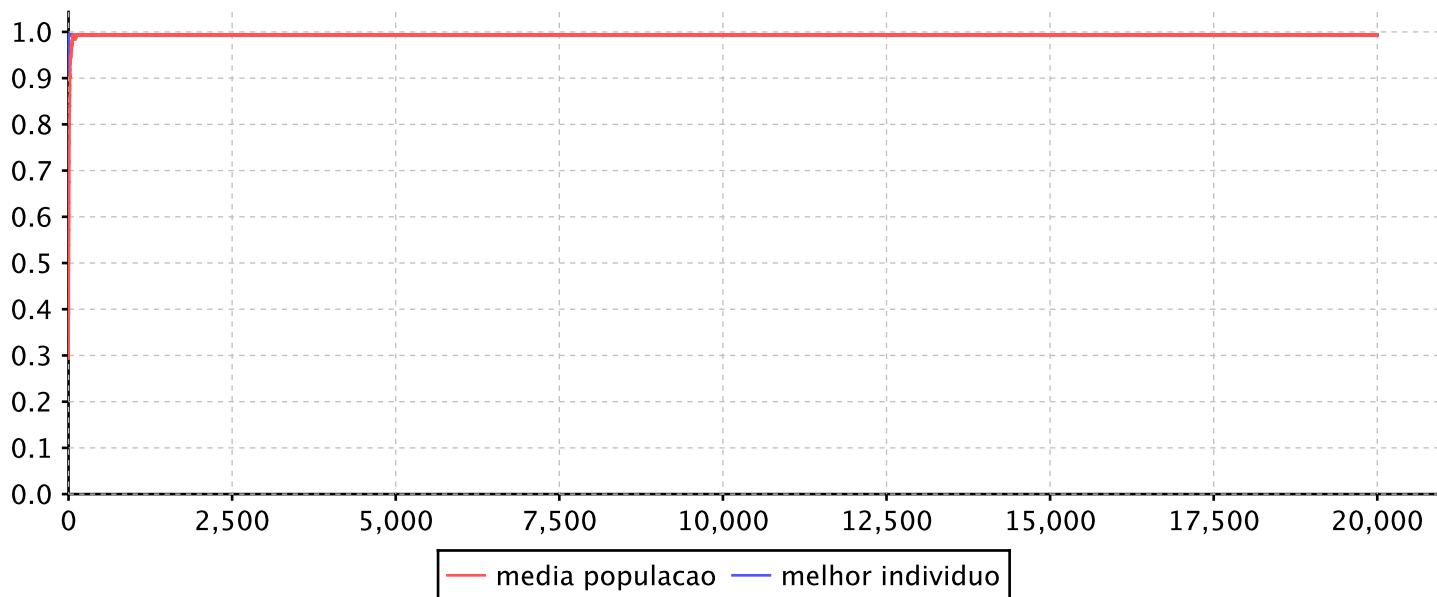


Particle Swarm		Function Griewank		20.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
1015	13.716919	0	87468277000	324.181426	0.042312
2474	9.113557	0	87554411000	274.906124	0.033152
6319	14.602581	0	87493949000	309.768526	0.047140
2418	17.546425	0	87852459000	293.289156	0.059826
18573	16.770398	0	87657520000	310.457893	0.054018
7299	19.483574	0	87697702000	302.538490	0.064400
505	102.439771	0	87512837000	335.709911	0.305144
2880	13.150218	0	87670169000	259.344317	0.050706
14186	14.158128	0	87432777000	307.160459	0.046094
8911	20.325989	0	87598854000	328.212212	0.061929
5685.942472	26.288170		121399823	22.4463	0.0807
6458.000000	24.130756	0.0	87593895500	304.5569	0.0781



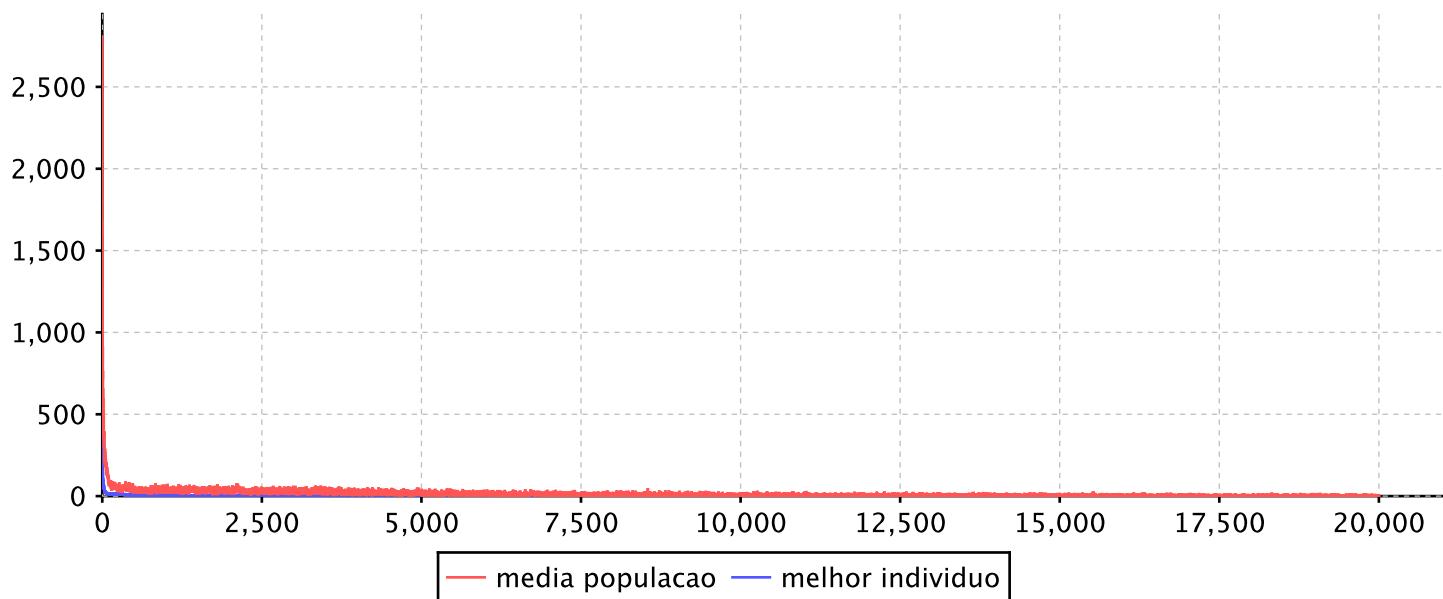


Particle Swarm		Function Unid			24.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
42	1.000000	1	11707968000	1.000000	1.000000
48	1.000000	1	11699654000	1.000000	1.000000
44	0.933979	0	17501117000	0.933979	1.000000
42	1.000000	1	11604030000	1.000000	1.000000
32	1.000000	1	12965835000	1.000000	1.000000
26	1.000000	1	11407725000	1.000000	1.000000
31	1.000000	1	12012445000	1.000000	1.000000
37	1.000000	1	11504411000	1.000000	1.000000
47	1.000000	1	12927435000	1.000000	1.000000
52	1.000000	1	11395739000	1.000000	1.000000
7.942921	0.019806		586963809	0.0198	0.0000
40.100000	0.993398	90.0	12472635900	0.9934	1.0000



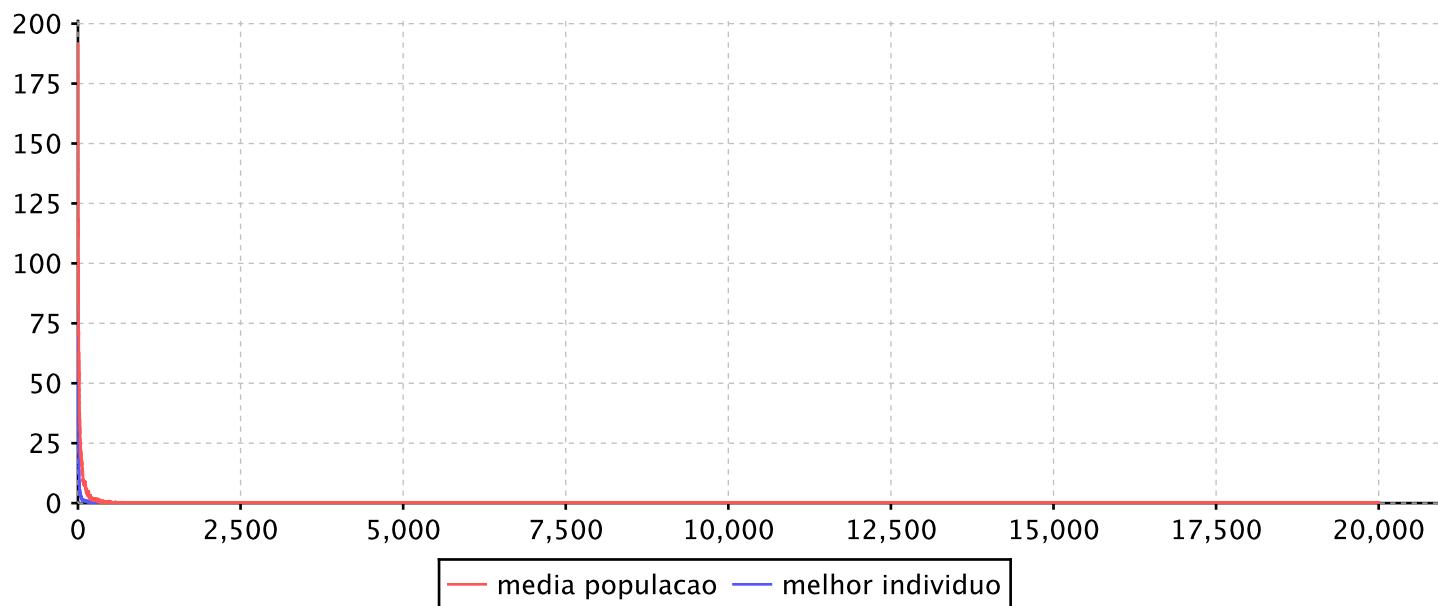


Particle Swarm		Function Rosenbrock			25.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
20000	0.000000	1	33270113000	0.009444	0.000000
19999	0.000000	1	32670897000	0.019928	0.000000
19999	0.000000	1	32978524000	0.003835	0.000000
20000	0.000000	1	33340222000	0.000974	0.000000
19999	0.000000	1	33205207000	0.000098	0.000000
19999	0.000000	1	33129659000	6.815913	0.000000
19999	0.000000	1	33049381000	3.685002	0.000000
20000	3.986598	0	32718317000	3.987962	0.999658
20000	0.000000	1	32911071000	0.002433	0.000000
20000	0.000000	1	33046005000	0.006904	0.000000
0.500000	1.195979		209287041	2.3414	0.3142
19999.500000	0.398660	90.0	33031939600	1.4532	0.1111



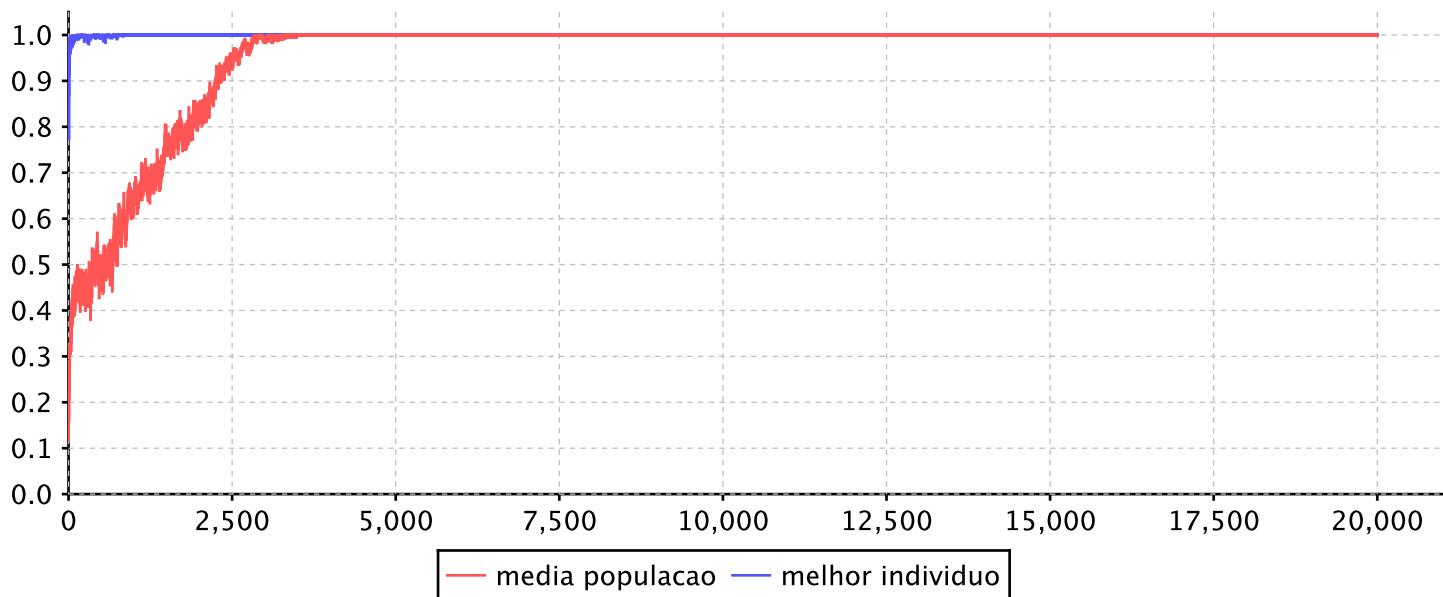


Particle Swarm		Function Griewank			26.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
1038	0.224183	0	62947028000	0.224183	1.000000
1057	0.061531	0	38386804000	0.061531	1.000000
1232	0.063890	0	42544026000	0.063890	1.000000
1054	0.044278	0	42229046000	0.044278	1.000000
923	0.061546	0	42073097000	0.061546	1.000000
1016	0.009857	0	35577301000	0.009857	1.000000
1037	0.189391	0	61942510000	0.189391	1.000000
1139	0.123018	0	53619386000	0.123018	1.000000
1163	0.118081	0	77864314000	0.118081	1.000000
1015	0.091081	0	42967479000	0.091081	1.000000
83.471193	0.063106	0		0.0631	0.0000
1067.400000	0.098686	0.0	50015099100	0.0987	1.0000



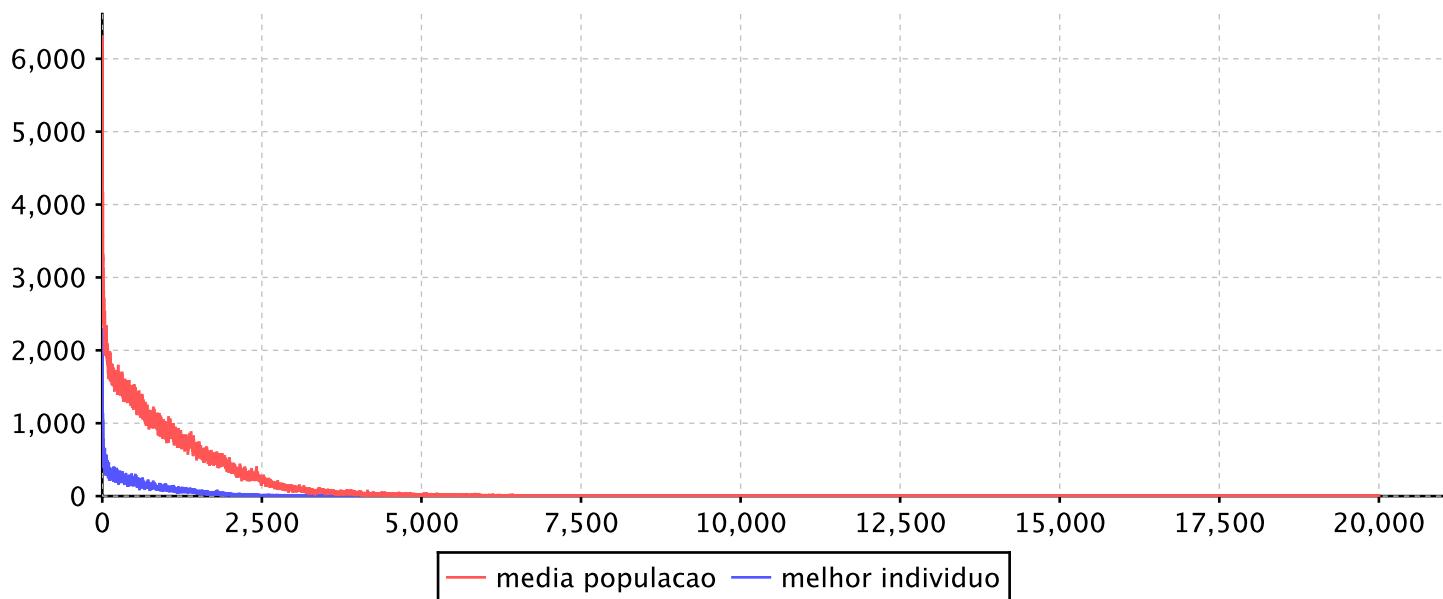


Particle Swarm		Function Unid			27.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
1810	1.000000	1	14367003000	1.000000	1.000000
2133	1.000000	1	12875263000	1.000000	1.000000
1803	1.000000	1	14004584000	1.000000	1.000000
1004	1.000000	1	13728584000	1.000000	1.000000
1291	1.000000	1	14011058000	1.000000	1.000000
1399	1.000000	1	13756658000	1.000000	1.000000
1529	1.000000	1	13885862000	1.000000	1.000000
2030	1.000000	1	13455153000	1.000000	1.000000
1810	1.000000	1	12542847000	1.000000	1.000000
1863	1.000000	1	12808902000	1.000000	1.000000
334.446946	0.000000		574591744	0.0000	0.0000
1667.200000	1.000000	100.0	13543591400	1.0000	1.0000



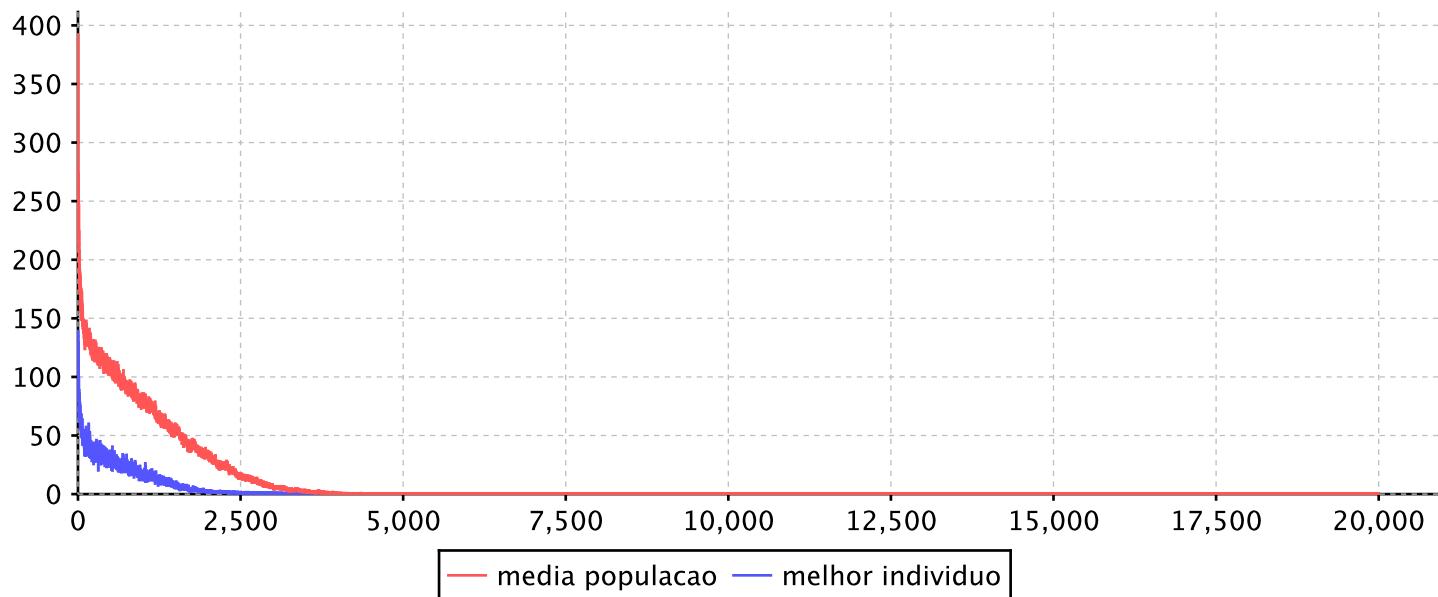


Particle Swarm		Function Rosenbrock			28.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19999	0.000000	1	33638392000	0.000000	0.000000
20000	0.000000	1	33472115000	0.000000	0.000000
20000	0.000000	1	33486367000	0.000000	0.000000
20000	3.986579	0	32673912000	3.986579	1.000000
19999	0.000000	1	33236370000	0.000000	0.000000
19999	0.000000	1	33064113000	0.000000	0.000000
20000	0.000000	1	33026369000	0.000000	0.000000
5269	0.235424	0	32884438000	0.235424	1.000000
5179	0.235424	0	32611073000	0.235424	1.000000
20000	0.000000	1	33200440000	0.000000	0.000000
5910.284278	1.183926		327331249	1.1839	0.4714
17044.500000	0.445743	70.0	33129358900	0.4457	0.3333



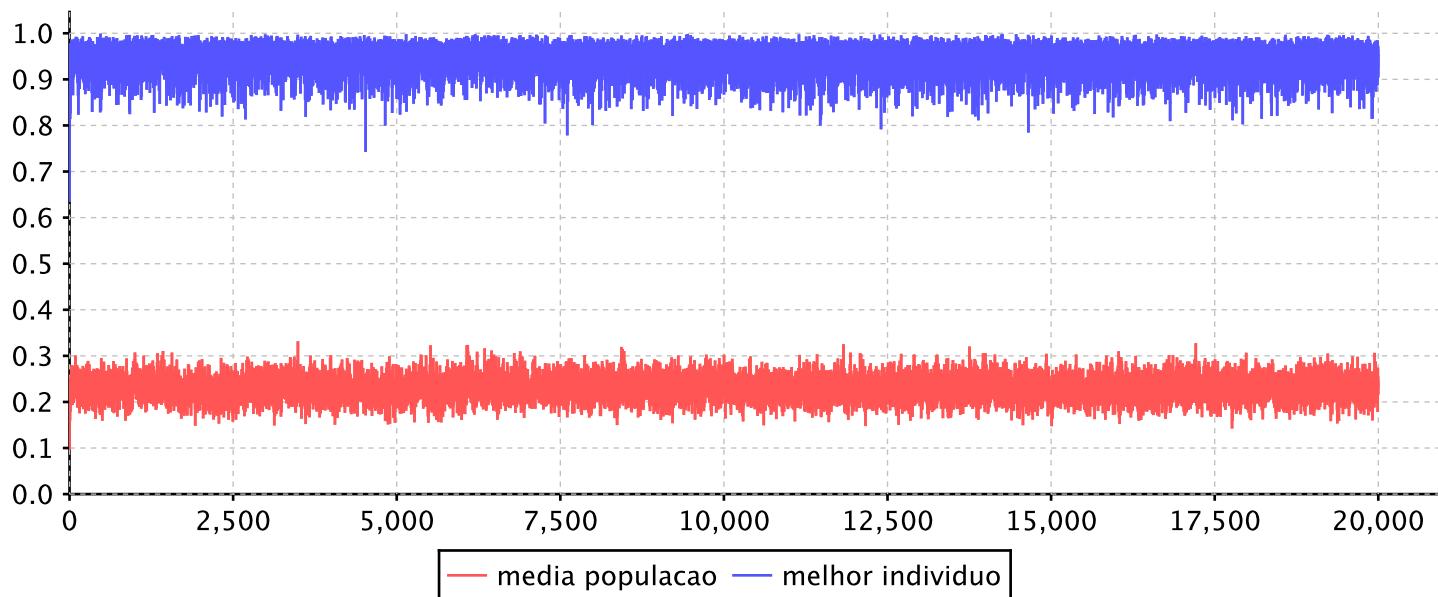


Particle Swarm		Function Griewank			29.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
5753	0.073828	0	56587601000	0.073828	1.000000
5509	0.071295	0	66964224000	0.071295	1.000000
5422	0.078674	0	60362560000	0.078674	1.000000
5580	0.108197	0	76781749000	0.108197	1.000000
5530	0.071349	0	60466779000	0.071349	1.000000
5618	0.056643	0	56421211000	0.056643	1.000000
5489	0.113220	0	62727180000	0.113220	1.000000
5371	0.081202	0	60730667000	0.081202	1.000000
5429	0.039311	0	46468257000	0.039311	1.000000
5735	0.041768	0	47632709000	0.041768	1.000000
122.236001	0.023102	0		0.0231	0.0000
5543.600000	0.073549	0.0	59514293700	0.0735	1.0000



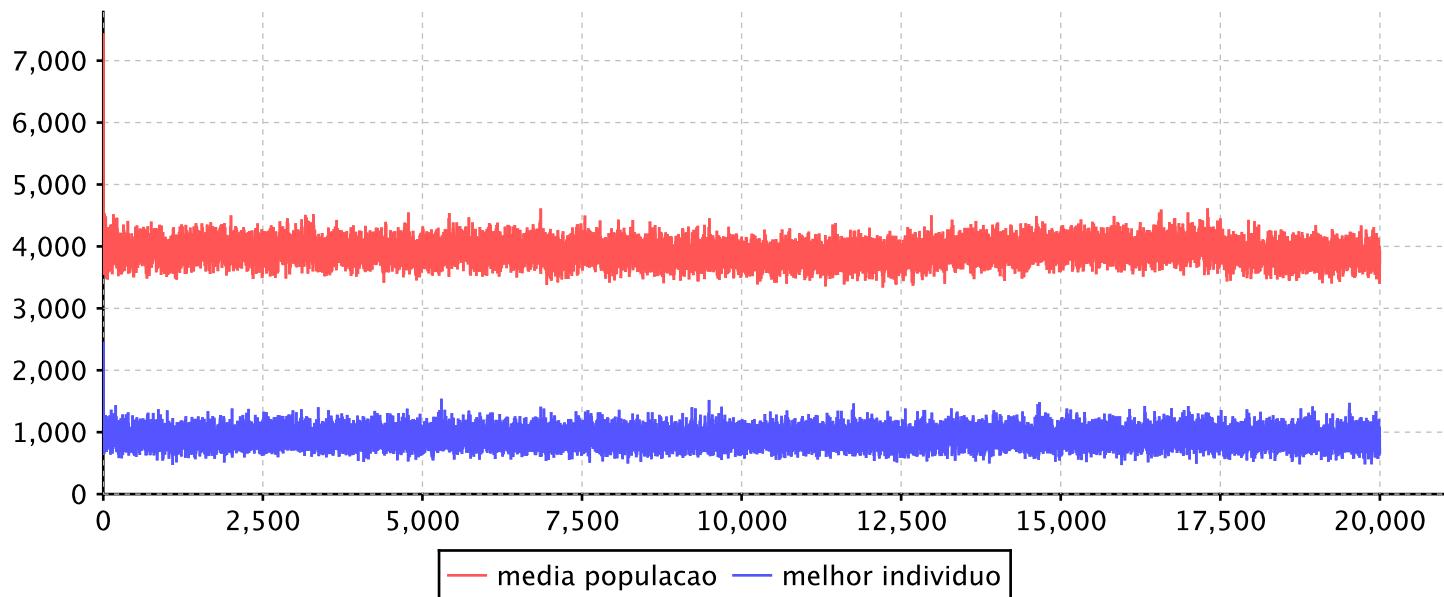


Particle Swarm		Function Unid		15.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
6504	1.000000	1	16849617000	0.232343	4.303990
2807	1.000000	1	16787247000	0.192730	5.188611
1970	1.000000	1	16985009000	0.312473	3.200274
14564	1.000000	1	16914646000	0.450989	2.217350
18748	1.000000	1	16935491000	0.283761	3.524089
8509	1.000000	1	16956551000	0.134438	7.438373
9444	1.000000	1	16969776000	0.258734	3.864978
669	1.000000	1	17022471000	0.169910	5.885467
4304	1.000000	1	16996324000	0.297692	3.359173
14685	1.000000	1	17012768000	0.206680	4.838395
5814.838110	0.000000		71085665	0.0854	1.5043
8220.400000	1.000000	100.0	16942990000	0.2540	4.3314



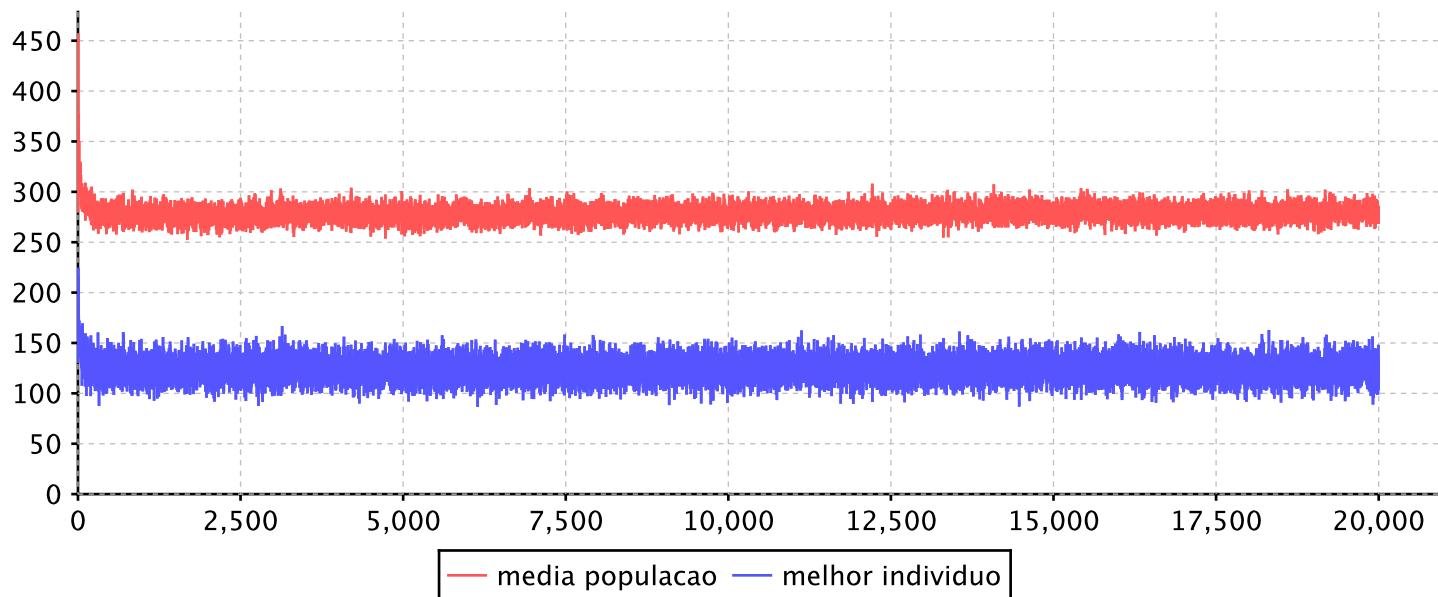


Particle Swarm		Function Rosenbrock			16.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
13444	111.696925	0	31281448000	3320.817266	0.033635
2208	120.268988	0	31126784000	3502.617041	0.034337
5294	40.796260	0	30929912000	4015.331175	0.010160
12841	39.100217	0	30987945000	4754.965388	0.008223
1197	16.549475	0	30970890000	3697.768510	0.004476
17553	125.781186	0	30880973000	2660.525828	0.047277
7797	46.945153	0	30736180000	4286.419195	0.010952
5490	43.540344	0	30782922000	3683.853218	0.011819
14982	214.775965	0	30792254000	4047.753413	0.053061
16538	49.089819	0	30733112000	5267.242825	0.009320
5739.236695	57.872728		169117715	699.7442	0.0174
9734.400000	80.854433	0.0	30922242000	3923.7294	0.0238



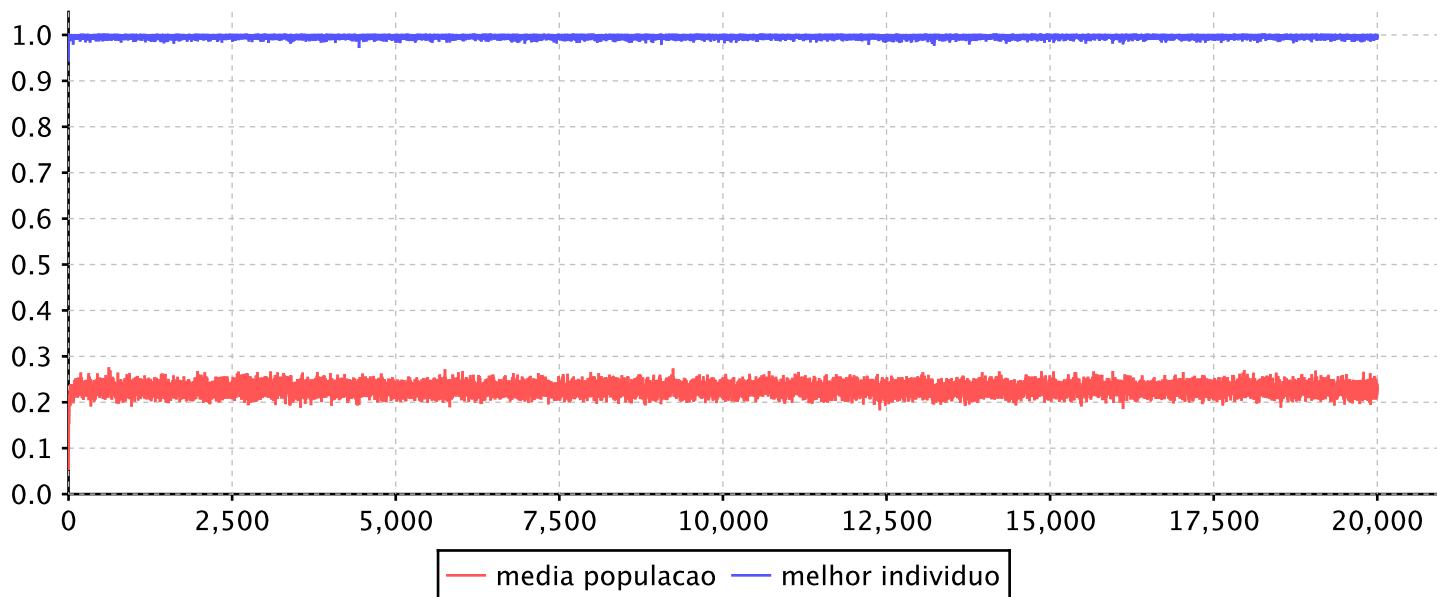


Particle Swarm		Function Griewank		17.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
2980	14.836215	0	83322047000	294.672825	0.050348
7839	10.633859	0	83853729000	236.606064	0.044943
5864	5.554272	0	83405810000	299.050439	0.018573
392	13.381768	0	83772142000	245.259441	0.054562
7598	95.385686	0	83794522000	379.163423	0.251569
12870	9.528781	0	83614394000	233.990625	0.040723
12003	9.873575	0	83517128000	273.769462	0.036065
9439	95.964909	0	84156001000	309.199842	0.310365
13195	3.247407	0	83383610000	289.604943	0.011213
19223	13.224603	0	83753221000	287.920366	0.045931
5192.153966	34.418285		245059900	40.5246	0.1034
9140.300000	27.163108	0.0	83657260400	284.9237	0.0909



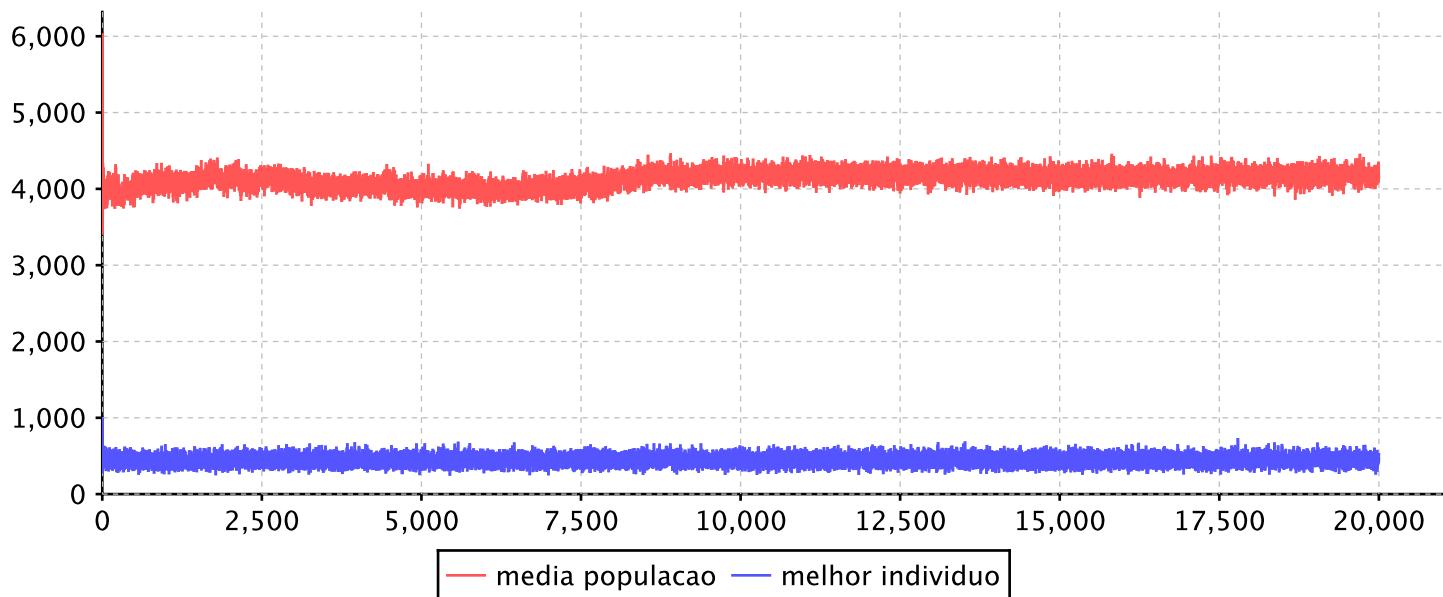


Particle Swarm		Function Unid			21.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
8675	1.000000	1	83820758000	0.207030	4.830209
2275	1.000000	1	83753301000	0.185251	5.398069
701	1.000000	1	84678653000	0.260570	3.837742
8697	1.000000	1	84382048000	0.271720	3.680254
14222	1.000000	1	84687251000	0.211274	4.733180
5548	1.000000	1	83904042000	0.205473	4.866828
7909	1.000000	1	84145763000	0.231933	4.311598
19192	1.000000	1	84686188000	0.150911	6.626413
13574	1.000000	1	84778230000	0.192093	5.205807
11977	1.000000	1	84971701000	0.268843	3.719640
5362.517207	0.000000		421064036	0.0375	0.8351
9277.000000	1.000000	100.0	84380793500	0.2185	4.8322



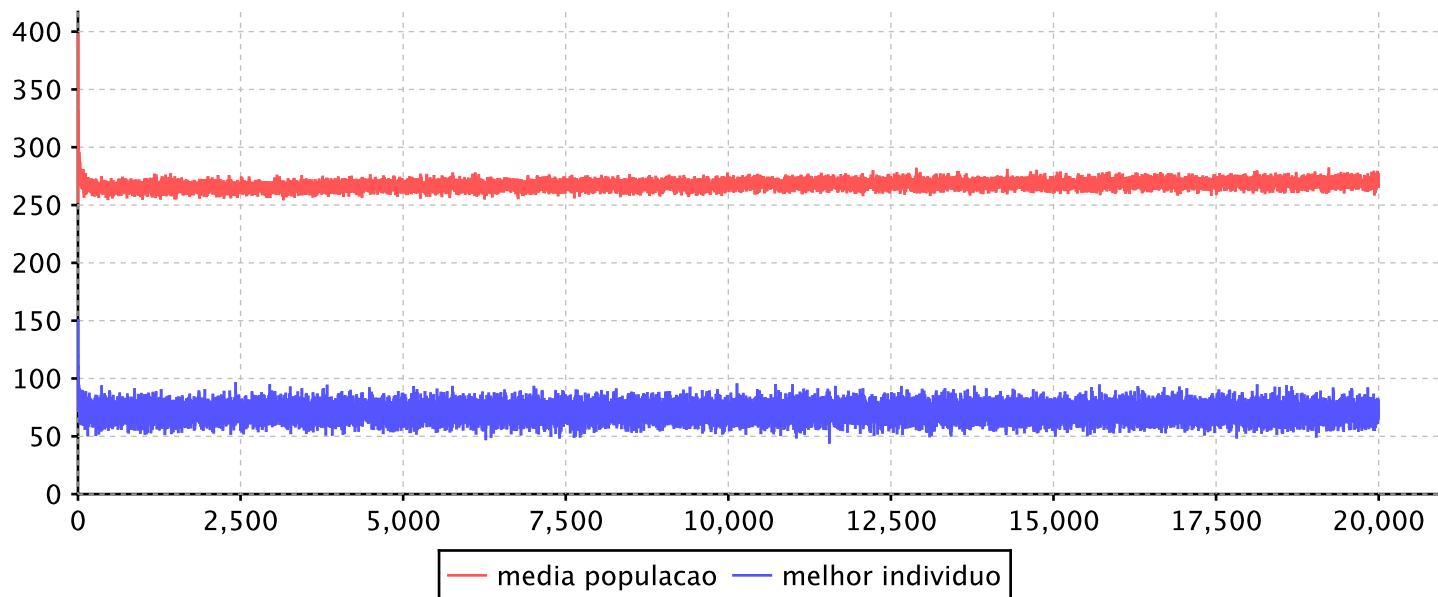


Particle Swarm		Function Rosenbrock			22.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
13691	23.403586	0	153705379000	4191.950416	0.005583
7969	32.023108	0	153605659000	4094.115393	0.007822
13404	31.181818	0	154016186000	4217.435835	0.007394
1797	24.285377	0	154432748000	3834.127360	0.006334
11955	29.847322	0	154264007000	3950.685169	0.007555
8357	32.275422	0	153987474000	4123.672418	0.007827
2452	22.004509	0	154318842000	4529.731174	0.004858
10737	20.966579	0	153647456000	4328.860824	0.004843
6347	14.724493	0	153886768000	4105.598400	0.003586
8378	26.619267	0	153980275000	4139.959309	0.006430
3929.342822	5.432319		271375189	181.0687	0.0015
8508.700000	25.733148	0.0	153984479400	4151.6136	0.0062



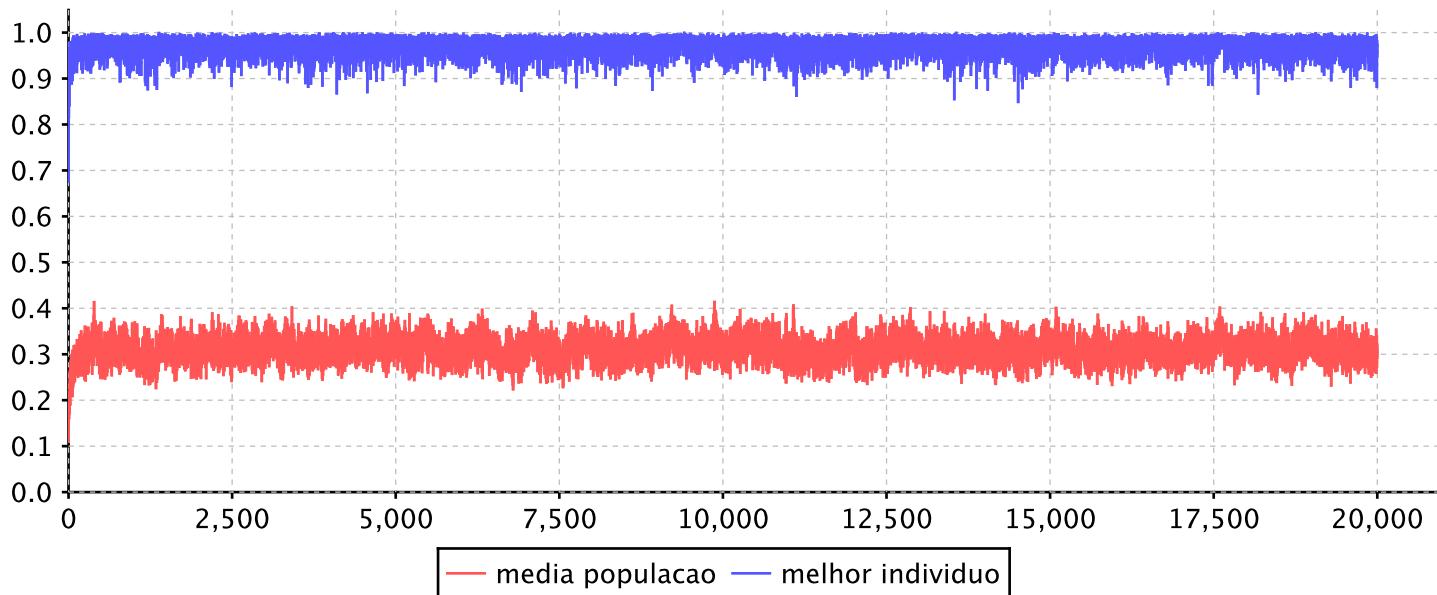


Particle Swarm		Function Griewank			23.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
5115	6.094313	0	418020466000	268.615415	0.022688
9999	3.906735	0	418569452000	274.004647	0.014258
18484	4.229477	0	420419498000	282.838256	0.014954
18594	5.310332	0	420416346000	283.322685	0.018743
12552	7.136114	0	419282253000	286.477883	0.024910
9651	6.574164	0	420405463000	267.444089	0.024581
6087	6.471574	0	420472580000	290.461806	0.022280
10010	7.293895	0	418197893000	274.194803	0.026601
17885	3.811338	0	421809086000	269.205839	0.014158
7187	5.909651	0	421970479000	267.876965	0.022061
4873.467722	1.234993	0		8.1514	0.0046
11556.400000	5.673759	0.0	419956351600	276.4442	0.0204



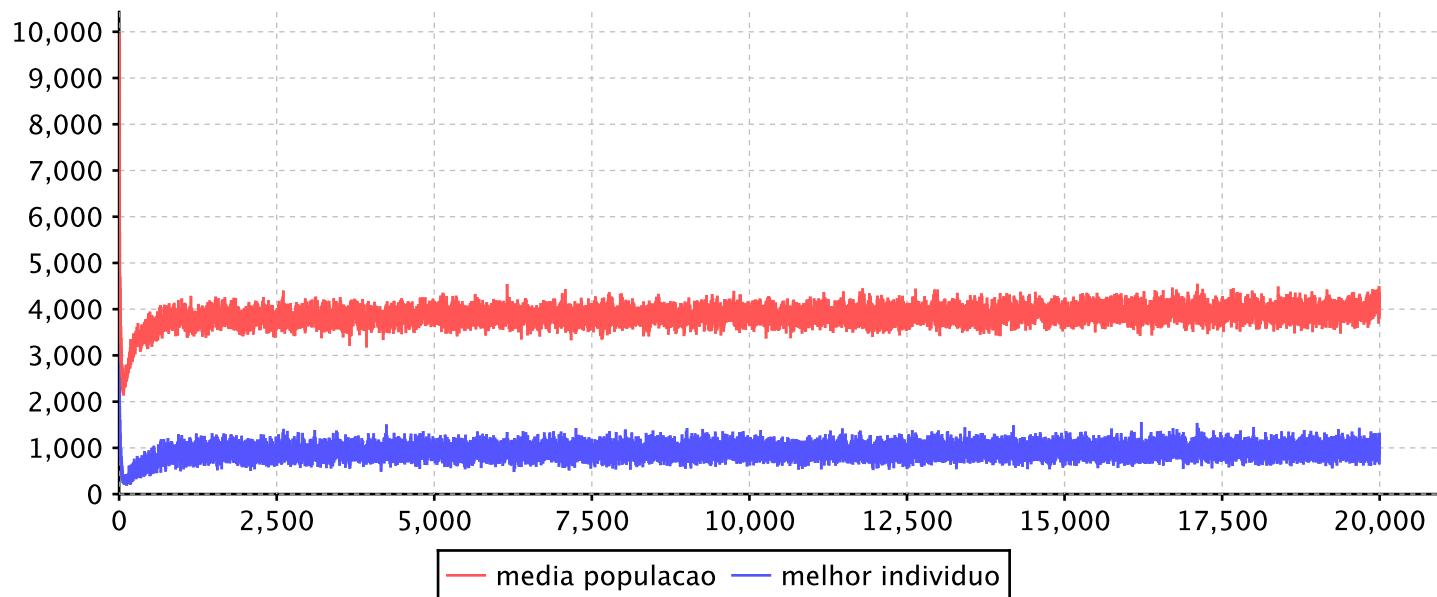


Particle Swarm		Function Unid		3.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
1962	1.000000	1	18447598000	0.187742	5.326468
12267	1.000000	1	18478236000	0.321814	3.107388
4717	1.000000	1	18496236000	0.308019	3.246555
19276	1.000000	1	18509232000	0.311313	3.212203
10750	1.000000	1	18537370000	0.385270	2.595582
12551	1.000000	1	18551935000	0.372249	2.686372
18971	1.000000	1	18680996000	0.150685	6.636371
7439	1.000000	1	18526429000	0.270518	3.696608
2013	1.000000	1	18533091000	0.356367	2.806099
6175	1.000000	1	18527680000	0.439888	2.273306
5955.911273	0.000000		58644116	0.0840	1.2957
9612.100000	1.000000	100.0	18528880300	0.3104	3.7015



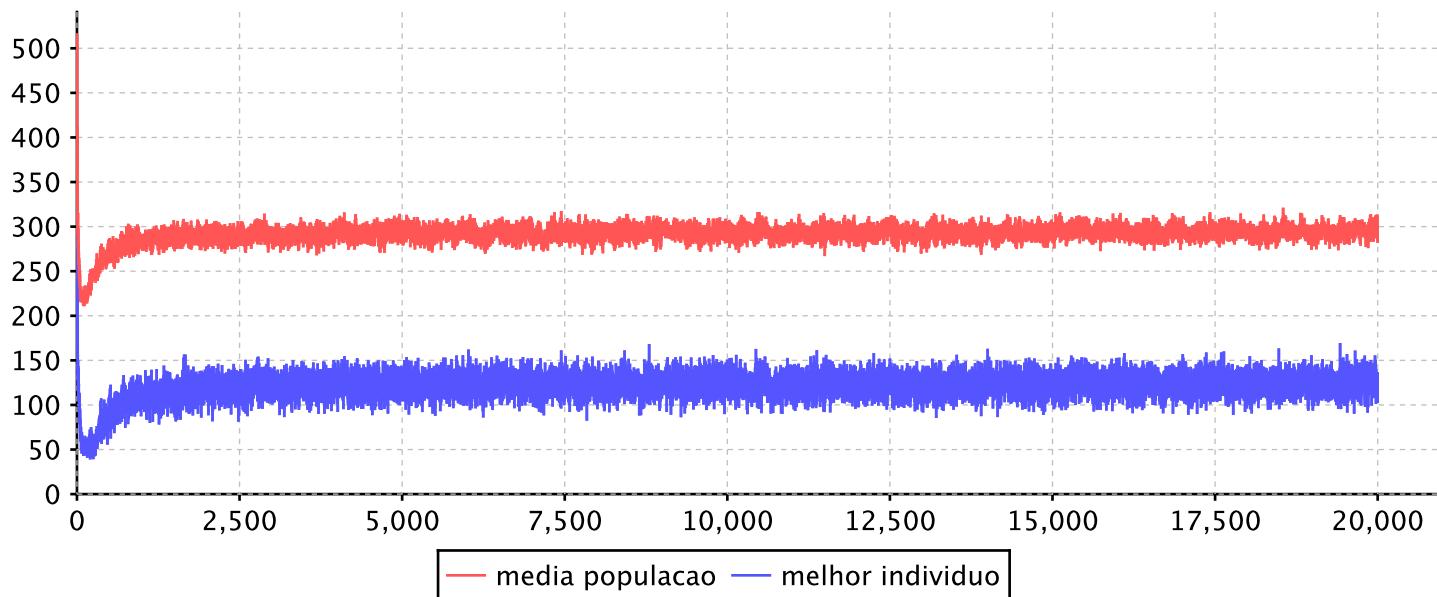


Particle Swarm		Function Rosenbrock			4.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
226	79.786716	0	31308461000	4788.325462	0.016663
10775	70.238007	0	31255333000	4831.141049	0.014539
17139	46.264872	0	31427872000	3911.790758	0.011827
12269	70.191116	0	31118642000	4090.551773	0.017159
152	76.188404	0	31153750000	4598.453440	0.016568
17448	72.686436	0	31195018000	4531.373812	0.016041
387	67.717679	0	31162044000	4238.755989	0.015976
8396	54.686466	0	31261266000	3849.617318	0.014206
6517	55.820889	0	31233276000	4508.959114	0.012380
276	39.105473	0	31210147000	4141.166222	0.009443
6607.541286	12.832997		84453223	333.0496	0.0018
7358.500000	63.268606	0.0	31232580900	4349.0135	0.0150



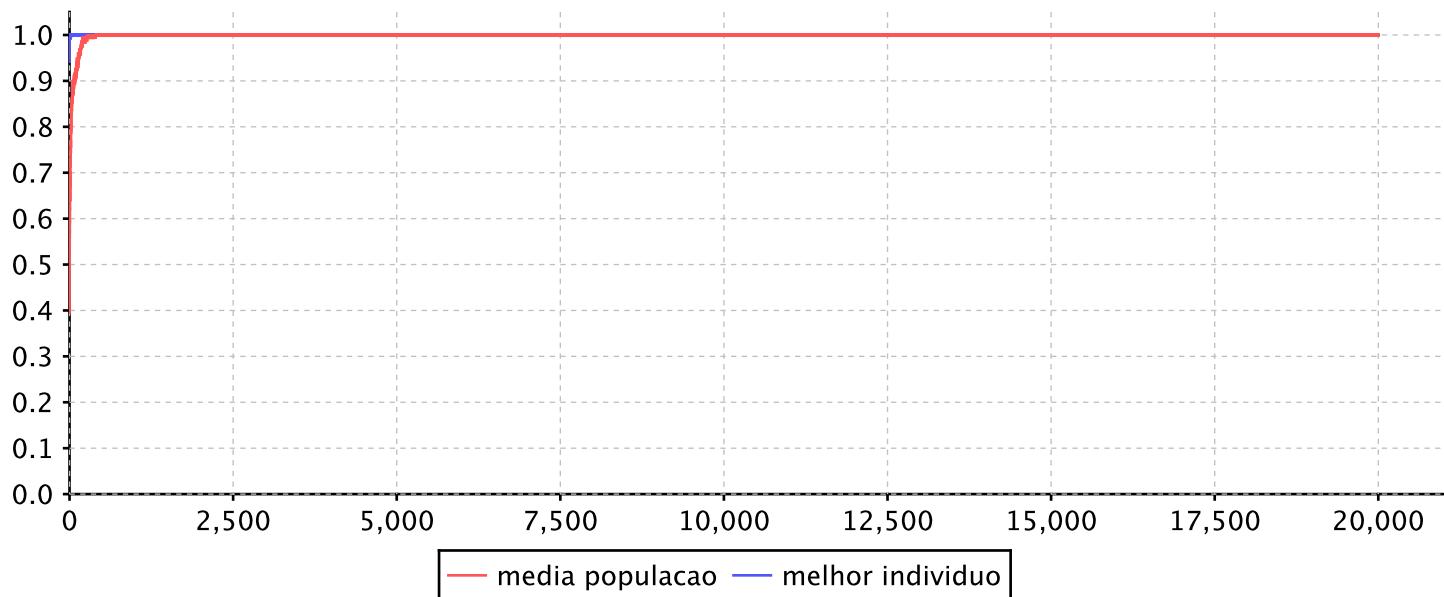


Particle Swarm		Function Griewank		5.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
17141	16.183041	0	88259604000	313.886588	0.051557
14464	11.961069	0	88049200000	299.364264	0.039955
77	12.519968	0	88507322000	312.520116	0.040061
11818	15.408804	0	88174504000	290.700501	0.053006
330	13.052933	0	88505240000	319.830294	0.040812
2042	14.941596	0	88804594000	273.033169	0.054724
121	13.918631	0	87844783000	278.635835	0.049953
576	11.956010	0	87913944000	262.914453	0.045475
220	7.264558	0	87870439000	332.694707	0.021836
12411	18.332182	0	88036143000	326.902224	0.056078
6715.166655	2.849735		303882390	22.7385	0.0096
5920.000000	13.553879	0.0	88196577300	301.0482	0.0442



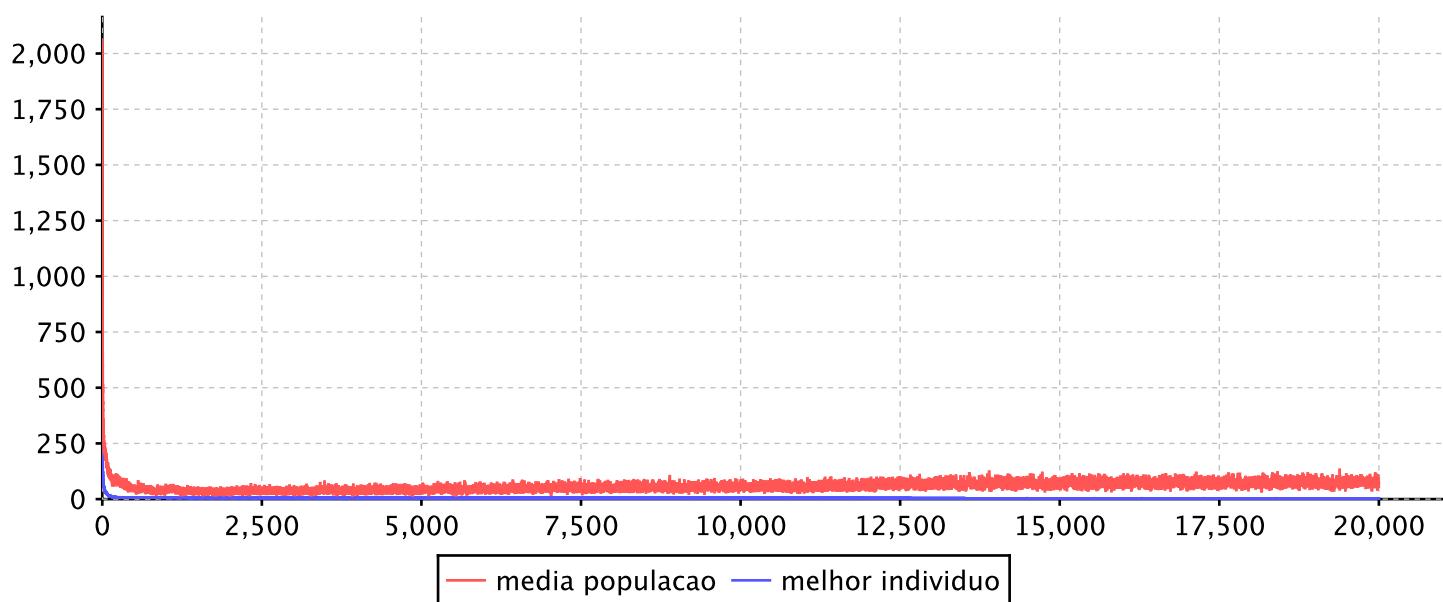


Particle Swarm		Function Unid			9.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
37	1.000000	1	12057984000	1.000000	1.000000
70	1.000000	1	12133006000	1.000000	1.000000
41	1.000000	1	12368508000	1.000000	1.000000
34	1.000000	1	12456550000	1.000000	1.000000
51	1.000000	1	12294453000	1.000000	1.000000
30	1.000000	1	12064209000	1.000000	1.000000
37	1.000000	1	12277336000	1.000000	1.000000
84	1.000000	1	12289597000	1.000000	1.000000
37	1.000000	1	11849231000	1.000000	1.000000
85	1.000000	1	12075925000	1.000000	1.000000
20.055922	0.000000		172307248	0.0000	0.0000
50.600000	1.000000	100.0	12186679900	1.0000	1.0000



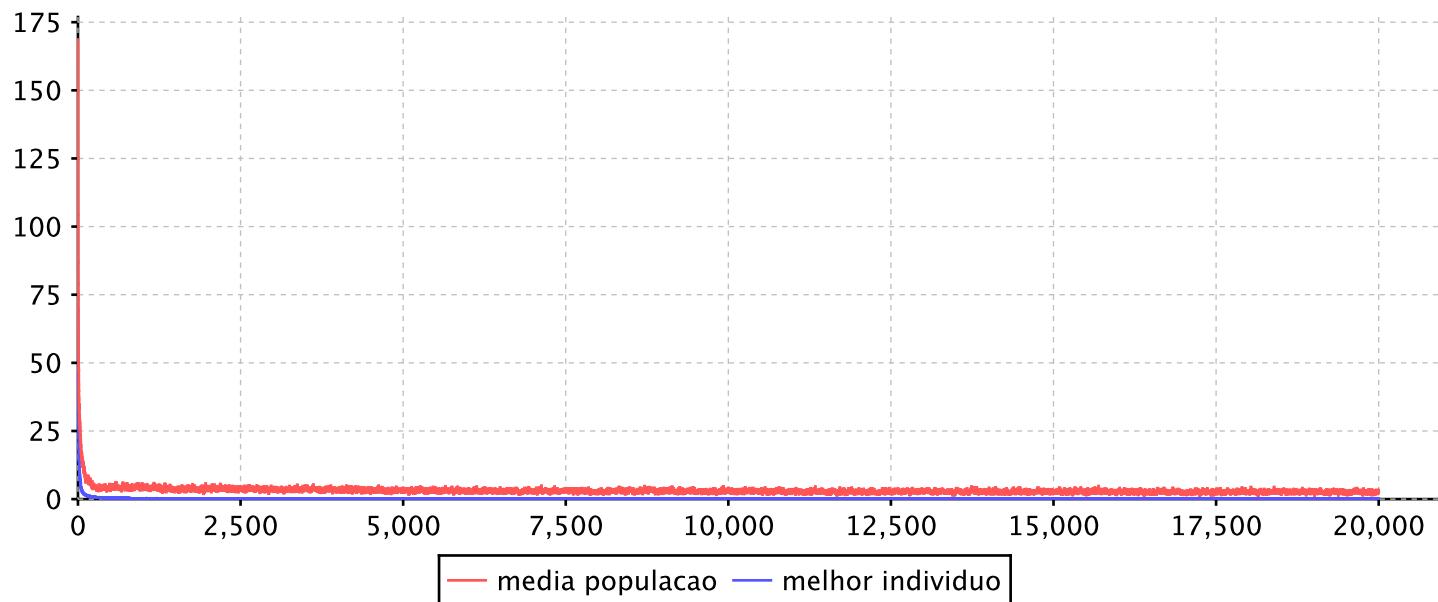


Particle Swarm		Function Rosenbrock			10.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
20000	2.337336	0	31664108000	79.014422	0.029581
19356	2.558207	0	31551947000	94.327483	0.027120
20000	2.285310	0	31853064000	21.611834	0.105743
1228	3.159657	0	31273481000	23.291825	0.135655
19995	2.035982	0	31563100000	33.536189	0.060710
19234	3.458128	0	31709997000	101.063075	0.034218
20000	2.155507	0	31862128000	67.223540	0.032065
20000	3.484768	0	31720190000	31.053441	0.112218
20000	2.483834	0	31805114000	72.670352	0.034179
13005	3.793492	0	31623851000	35.593394	0.106579
5730.911041	0.604050		166440042	28.6861	0.0402
17281.800000	2.775222	0.0	31662698000	55.9386	0.0635



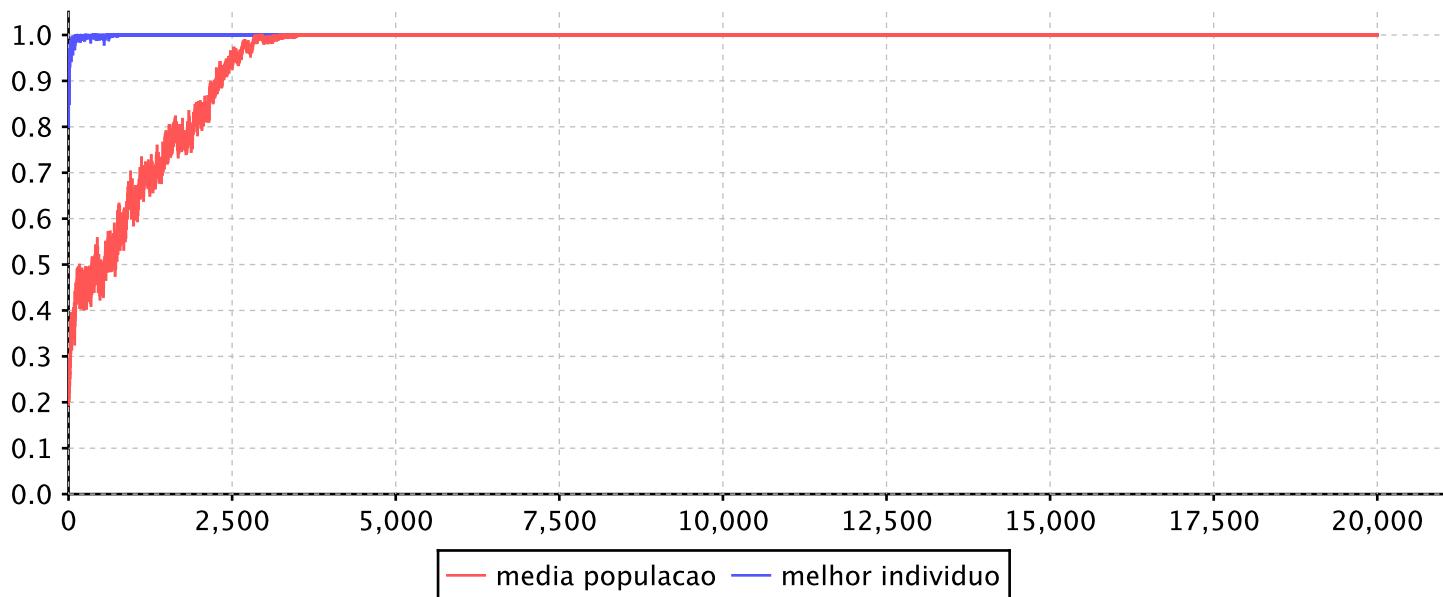


Particle Swarm		Function Griewank			11.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
20000	0.000000	1	68913522000	1.455686	0.000000
11238	0.068794	0	86996523000	2.378000	0.028929
4048	0.084849	0	87451385000	3.516174	0.024131
5009	0.042664	0	87366723000	2.060123	0.020710
17524	0.063885	0	81823276000	2.563492	0.024921
18766	0.021119	0	87646317000	1.679091	0.012578
16525	0.110875	0	87734071000	2.962942	0.037421
5847	0.093519	0	88175467000	2.653657	0.035241
17034	0.017758	0	75130015000	2.217998	0.008007
14827	0.056548	0	85474440000	5.058497	0.011179
5770.160896	0.033868	0		0.9815	0.0117
13081.800000	0.056001	10.0	83671173900	2.6546	0.0213



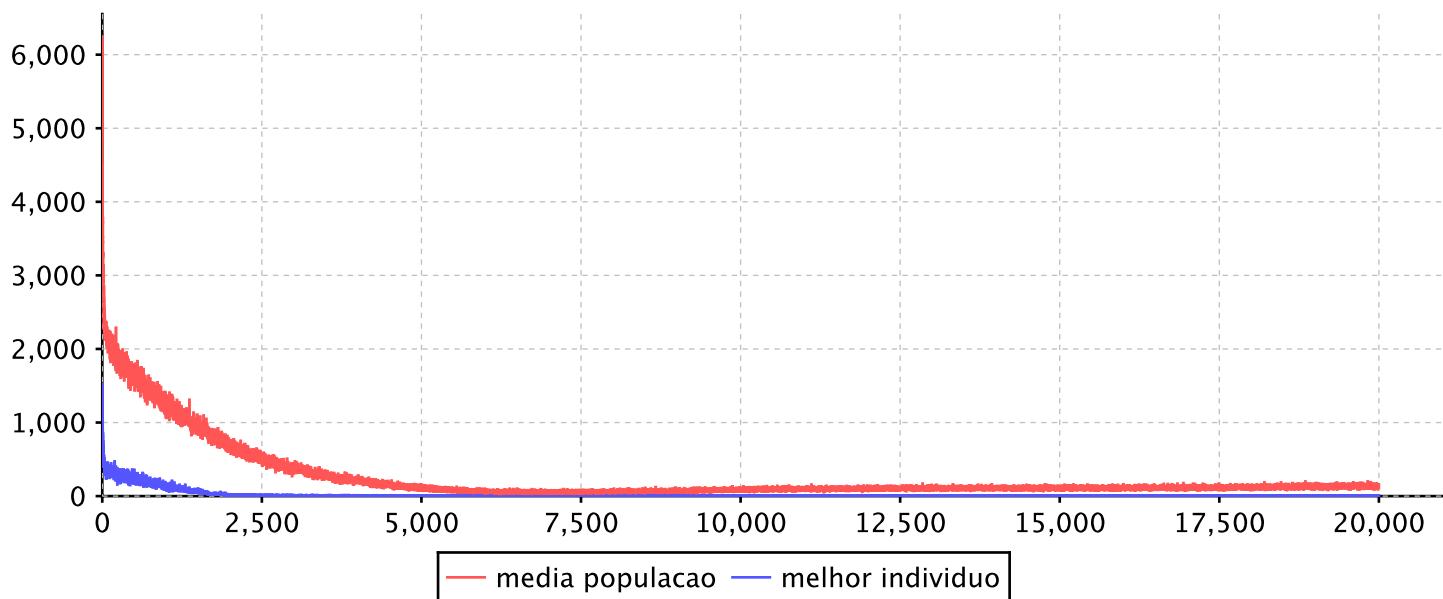


Particle Swarm		Function Unid		12.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
1710	1.000000	1	13547249000	1.000000	1.000000
953	1.000000	1	13317215000	1.000000	1.000000
1829	1.000000	1	13501453000	1.000000	1.000000
1507	1.000000	1	13089589000	1.000000	1.000000
1722	1.000000	1	13123651000	1.000000	1.000000
1472	1.000000	1	12876019000	1.000000	1.000000
1673	1.000000	1	13130500000	1.000000	1.000000
2016	1.000000	1	12902283000	1.000000	1.000000
1786	1.000000	1	13133068000	1.000000	1.000000
1886	1.000000	1	13057900000	1.000000	1.000000
280.562364	0.000000		213543381	0.0000	0.0000
1655.400000	1.000000	100.0	13167892700	1.0000	1.0000



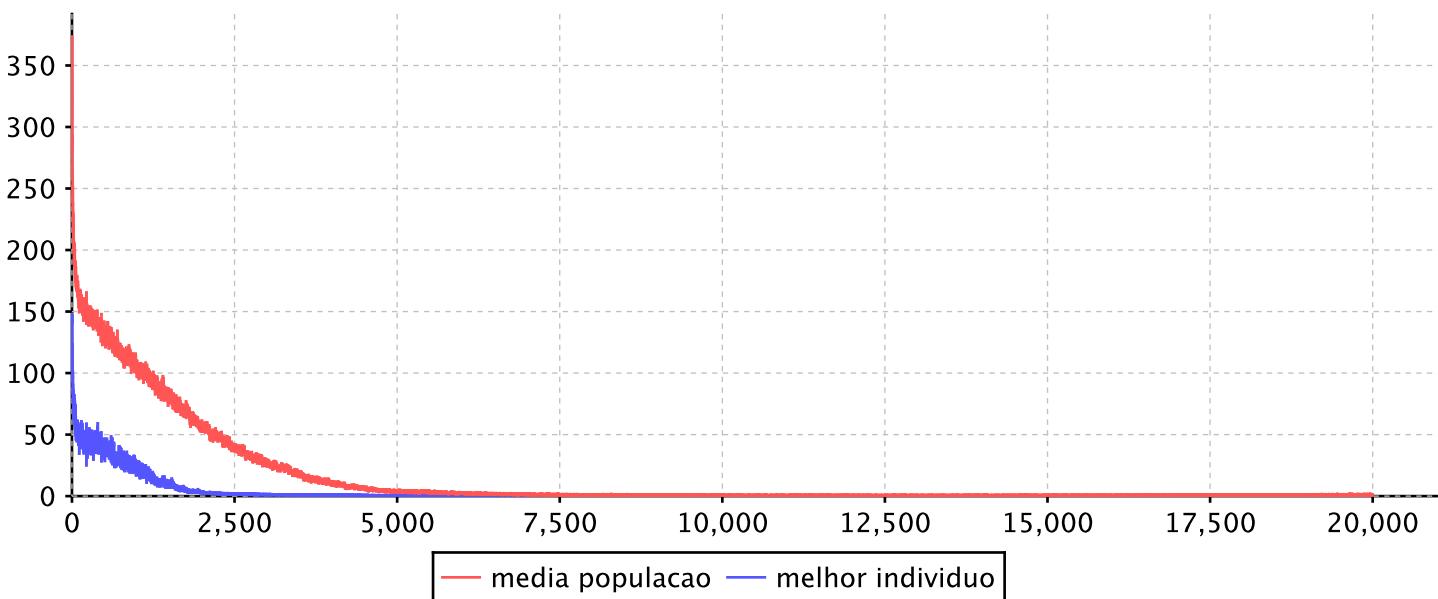


Particle Swarm		Function Rosenbrock			13.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
15608	0.768140	0	32208794000	158.589966	0.004844
12842	2.223896	0	31810699000	126.724796	0.017549
15799	0.501447	0	32012541000	156.375747	0.003207
15100	0.514472	0	31972647000	99.210846	0.005186
15328	0.456499	0	32359506000	98.436029	0.004638
14809	0.546116	0	32184692000	116.575480	0.004685
7756	0.235424	0	32518877000	135.279488	0.001740
12994	2.005666	0	31760821000	92.645444	0.021649
15841	0.787788	0	31549842000	43.069670	0.018291
12311	2.102540	0	31794387000	120.353415	0.017470
2382.704631	0.734298		284967303	32.2312	0.0073
13838.800000	1.014199	0.0	32017280600	114.7261	0.0091



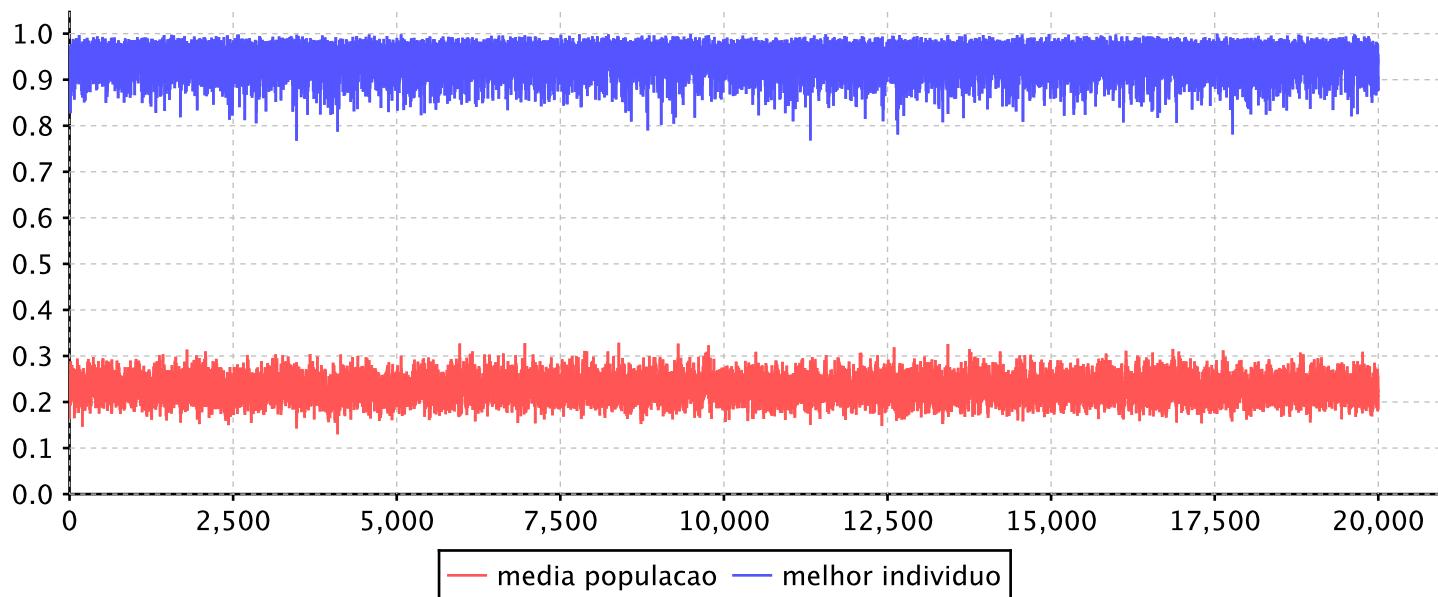


Particle Swarm		Function Griewank		14.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19978	0.044263	0	72269928000	0.817046	0.054175
10520	0.029498	0	75374210000	0.689805	0.042763
17049	0.034448	0	72484951000	0.687868	0.050079
10056	0.110624	0	81260951000	0.904430	0.122313
19772	0.054113	0	78625354000	0.791348	0.068381
17562	0.036902	0	70479923000	0.407138	0.090637
18652	0.054162	0	76908400000	0.428558	0.126382
10102	0.027052	0	68574730000	0.950820	0.028451
16535	0.046728	0	78967652000	0.836601	0.055854
9267	0.076211	0	77719219000	0.414820	0.183719
4187.523924	0.024043		367963628	0.1964	0.0327
14949.300000	0.051400	0.0	75266531800	0.6928	0.0710



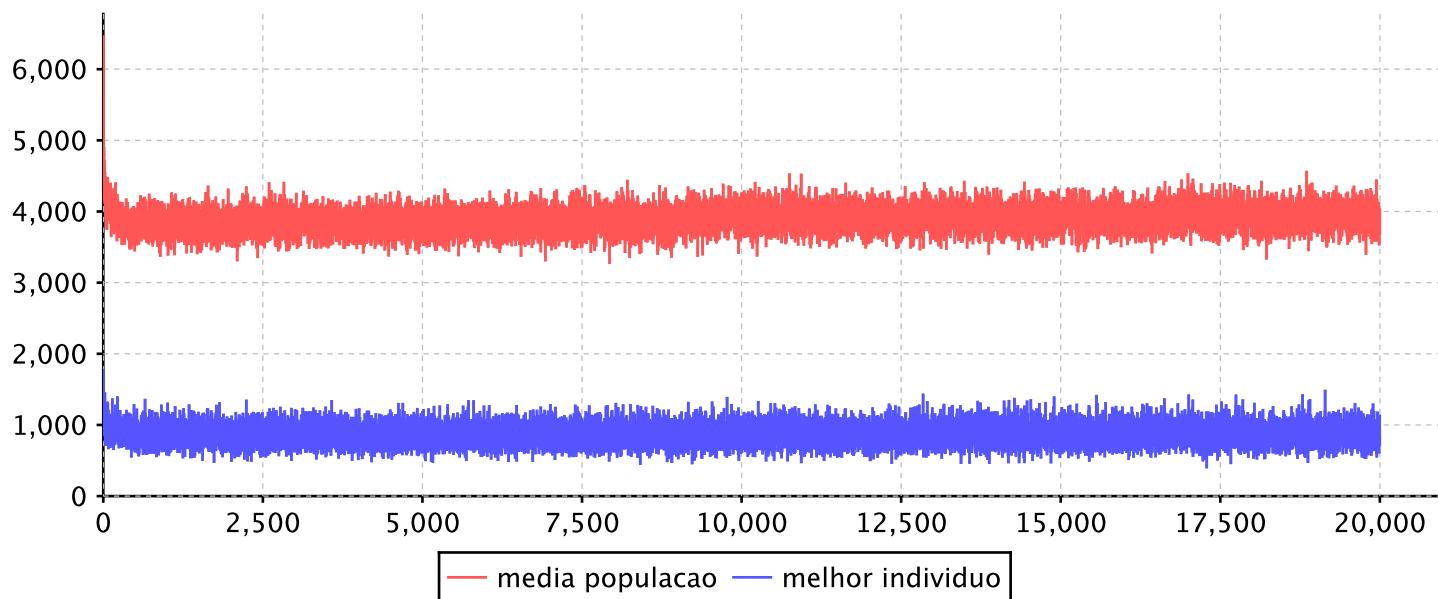


Particle Swarm		Function Unid			0.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
774	1.000000	1	17662902000	0.136655	7.317676
10539	1.000000	1	16699989000	0.108377	9.227031
6171	1.000000	1	16698401000	0.156281	6.398713
11072	1.000000	1	16676409000	0.149759	6.677415
2001	1.000000	1	16714172000	0.327007	3.058038
4352	1.000000	1	16745080000	0.191140	5.231776
2278	1.000000	1	16763899000	0.261227	3.828093
425	1.000000	1	16764295000	0.277900	3.598422
869	1.000000	1	16743650000	0.301197	3.320091
2682	1.000000	1	16762223000	0.226488	4.415247
3730.453915	0.000000	281500503	0.0721	2.0141	
4116.300000	1.000000	100.0	16823102000	0.2136	5.4064



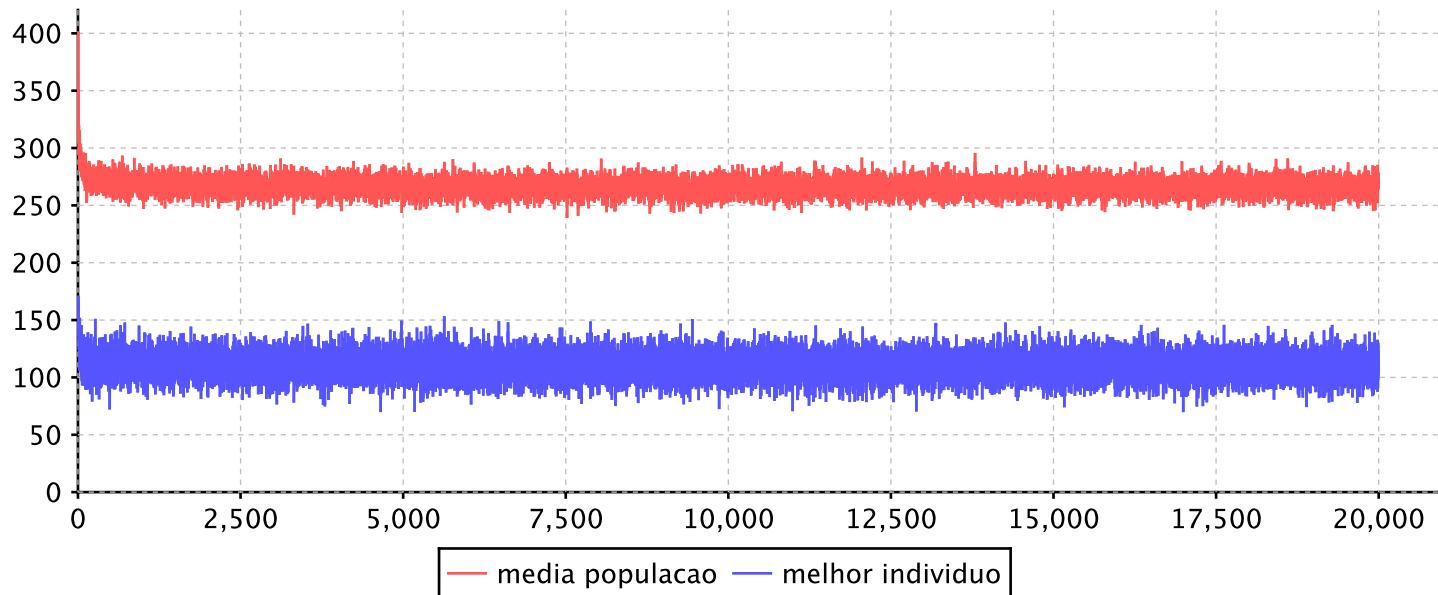


Particle Swarm		Function Rosenbrock			1.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
15644	55.743324	0	30962009000	4334.149621	0.012861
15837	36.893961	0	30882241000	3742.501480	0.009858
3076	34.886784	0	30859173000	3996.209687	0.008730
8961	15.497605	0	30701876000	4070.270474	0.003808
3701	59.552598	0	30698339000	3216.674152	0.018514
19813	33.121412	0	30821429000	4750.374717	0.006972
8844	44.092285	0	31041802000	4318.612948	0.010210
9901	43.532201	0	31172913000	3033.664591	0.014350
2060	35.090080	0	31048016000	3747.197622	0.009364
14977	50.267307	0	30956581000	4927.007685	0.010202
5824.838010	12.103096		144753567	575.8714	0.0040
10281.400000	40.867756	0.0	30914437900	4013.6663	0.0105



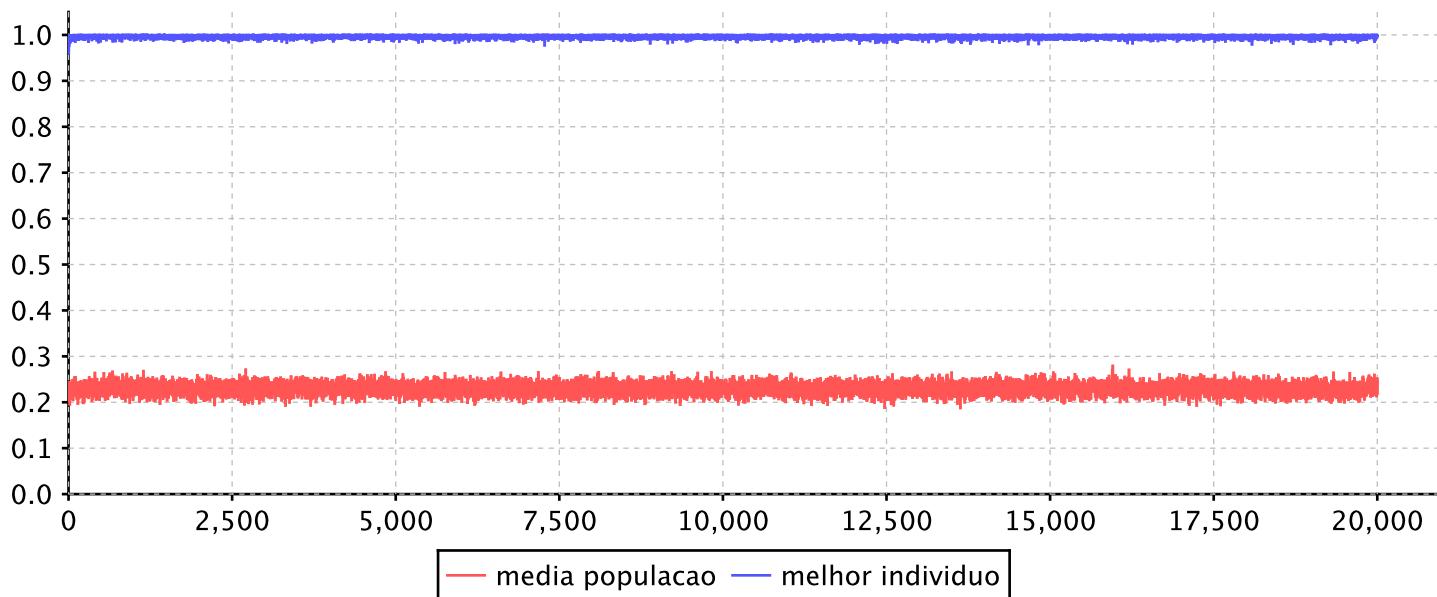


Particle Swarm		Function Griewank			2.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
6522	14.334332	0	84063110000	300.898561	0.047638
7839	8.710558	0	84026961000	256.868041	0.033911
9855	7.030404	0	83960720000	300.366654	0.023406
4817	12.174580	0	84033602000	268.867552	0.045281
10686	6.827493	0	84030844000	287.490997	0.023749
2398	8.521971	0	84375571000	265.783555	0.032064
13935	13.182385	0	84090865000	281.667457	0.046801
9908	10.099735	0	84226616000	244.849352	0.041249
1474	6.158768	0	83881242000	275.152390	0.022383
10880	9.784842	0	84351276000	292.843293	0.033413
3792.669566	2.649087		154327035	17.6975	0.0099
7831.400000	9.682507	0.0	84104080700	277.4788	0.0352



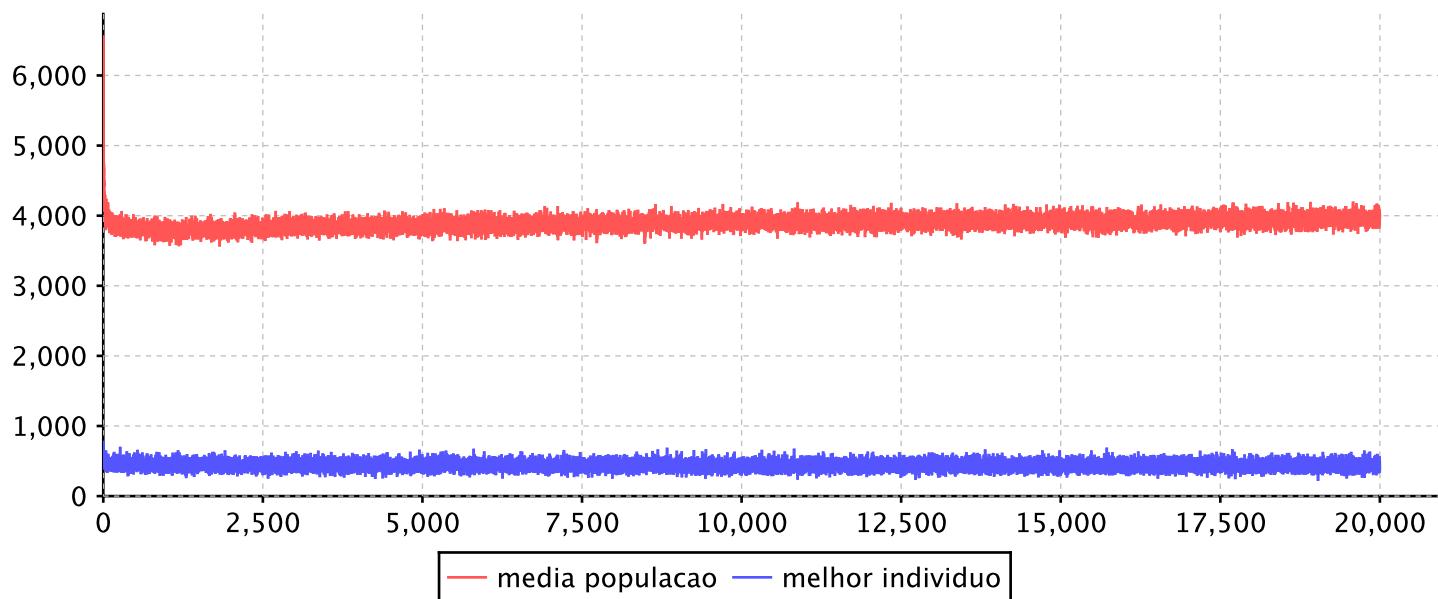


Particle Swarm		Function Unid		6.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
17986	1.000000	1	83945586000	0.222421	4.495985
913	1.000000	1	84312905000	0.184081	5.432386
1180	1.000000	1	84738590000	0.227237	4.400696
3737	1.000000	1	84423373000	0.230220	4.343665
960	1.000000	1	85013784000	0.218208	4.582784
15689	1.000000	1	84941755000	0.200501	4.987494
9891	1.000000	1	84018464000	0.193102	5.178614
7743	1.000000	1	84195162000	0.156931	6.372246
2823	1.000000	1	83998327000	0.229057	4.365731
12001	1.000000	1	83910696000	0.319799	3.126961
6039.507613	0.000000		395303469	0.0407	0.6363
7292.300000	1.000000	100.0	84349864200	0.2182	4.9066





Particle Swarm		Function Rosenbrock			7.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
18444	35.281224	0	155116354000	3951.108528	0.008929
7681	23.403275	0	155279577000	3921.956206	0.005967
7776	30.611970	0	155007537000	4179.453557	0.007324
9544	31.214856	0	156154806000	4137.132239	0.007545
2833	35.562348	0	155675980000	3839.749898	0.009262
11606	32.878970	0	155502655000	3592.521266	0.009152
12246	20.651960	0	155988357000	3870.311591	0.005336
9668	21.692293	0	155008142000	4149.852630	0.005227
16301	31.541079	0	154997900000	3871.829956	0.008146
17078	28.196031	0	154185979000	4156.412322	0.006784
4619.201512	5.162178		540688484	179.0274	0.0015
11317.700000	29.103401	0.0	155291728700	3967.0328	0.0074





Particle Swarm		Function Griewank			8.0
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Razão
19080	6.286128	0	419941083000	263.911002	0.023819
10202	4.251113	0	418592673000	269.075121	0.015799
10902	7.992697	0	420084643000	272.201248	0.029363
18842	9.153184	0	420633351000	260.753130	0.035103
19448	8.415012	0	421101446000	264.271298	0.031842
10977	6.010200	0	421238009000	258.256926	0.023272
16521	5.538851	0	420009240000	288.070770	0.019227
19612	10.167901	0	421676974000	280.540446	0.036244
18766	9.485924	0	419998653000	260.458143	0.036420
17766	6.216143	0	421215258000	261.083951	0.023809
3713.876094	1.854653		860823122	9.2817	0.0072
16211.600000	7.351715	0.0	420449133000	267.8622	0.0279





Simulated Annealing (1000.0, 0.035,		Function Unid		0.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial
54	0.999707	1	80249274	null	null
1189	0.999844	1	295254614	null	null
8	0.999729	1	1729182	null	null
870	0.999648	1	161137118	null	null
16	0.999980	1	4602177	null	null
26	0.999999	1	5528978	null	null
23	0.999997	1	4155398	null	null
1115	0.999977	1	171370811	null	null
2897	0.999558	1	492687177	null	null
316	0.999480	1	49104251	null	null
875.644471	0.000185		152951782	null	null
651.400000	0.999792	100.0	126581898	null	null
Simulated Annealing (1000.0, 0.035,		Function Rosenbrock		1.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial
20098	5.411761	0	2911742825	null	null
20098	4.917231	0	3059368274	null	null
20086	6.812080	0	2565510091	null	null
20094	9.609259	0	2475414473	null	null
20071	7.872056	0	2865106894	null	null
20099	5.127225	0	2690818436	null	null
20095	5.763872	0	2753525455	null	null
20096	5.357566	0	2665457783	null	null
20095	7.023853	0	2534947518	null	null
20094	7.205841	0	3005605388	null	null
7.977468	1.408546		191499648	null	null
20092.600000	6.510074	0.0	2752749713	null	null
Simulated Annealing (1000.0, 0.035,		Function Griewank		2.0	
Primeiro melhor	Melhor Solução	Sim	Tempo (ns)	Popula Final	Pop Inicial

20098	0.528681	0	12531798109	null	null
20089	1.042829	0	14050086937	null	null
20075	1.067687	0	11827728985	null	null
19980	0.383518	0	12880346607	null	null
20030	0.357454	0	11604260225	null	null
20063	0.469648	0	13705293044	null	null
19979	0.577769	0	12116633519	null	null
20076	0.906560	0	12189212852	null	null
20099	1.026304	0	11678409576	null	null
20042	0.593218	0	11090148766	null	null
42.432181	0.269797		893637186	null	null
20053.100000	0.695367	0.0	12367391862	null	null