

Table 1: Resultados comparativos do Algoritmo Genético (Heurística 1) e da Otimização por Colônia de Formigas (ACO) com 5 formigas e 10 iterações aplicados ao conjunto representativo.

Graph Name	$V(G)$	$E(G)$	δ	Δ	Lower Bound	Upper Bound	Fitness Value (GA)	Fitness Value (ACO)	Elapsed Time GA (seconds)	Elapsed Time ACO (seconds)
can62	62	78	1	6	35	108	103	80	0.203576	0.026177
can256	256	1330	3	82	12	384	237	101	1.009270	0.215027
cycle17	17	17	2	2	-1	25	27	24	0.052312	0.003923
hns511	511	1425	0	12	157	904	753	555	2.217400	6.473470
cycle16	16	16	2	2	-1	24	24	23	0.052269	0.003347
cycle13	13	13	2	2	-1	19	21	19	0.041128	0.002509
can445	445	1682	3	12	136	667	399	271	1.977640	0.661825
can187	187	652	4	9	74	280	180	88	0.661254	0.042105
can715	715	2975	1	104	27	1251	707	328	3.935260	2.004450
can292	292	1124	3	34	33	438	344	152	1.130930	0.201506
cycle18	18	18	2	2	-1	27	27	24	0.057854	0.003988
cycle15	15	15	2	2	-1	22	24	20	0.051879	0.003079
can96	96	336	5	8	42	144	94	48	0.330738	0.017115
cycle20	20	20	2	2	-1	30	30	28	0.063161	0.004588
cycle11	11	11	2	2	-1	16	18	16	0.035488	0.002360
can24	24	68	3	8	10	36	25	16	0.079596	0.003397
sherman4	1104	1341	0	6	630	2493	2378	2201	5.790230	269.358000
can268	268	1407	3	36	28	402	249	117	1.093380	0.169508
can73	73	152	2	8	32	109	115	63	0.237287	0.013716
685bus	685	1282	1	12	210	1198	1006	741	3.538760	7.940550
can161	161	608	5	16	37	241	145	76	0.562762	0.042884
cycle12	12	12	2	2	-1	18	18	16	0.041120	0.002485
cycle19	19	19	2	2	-1	28	31	27	0.057566	0.004031
662 _{us}	662	906	1	9	264	1158	1122	806	3.016410	7.676610
can61	61	248	4	24	9	91	60	40	0.207218	0.011880
can144	144	576	5	14	38	216	153	74	0.517338	0.041737
can229	229	774	2	12	70	343	242	147	0.832575	0.121295
cycle10	10	10	2	2	-1	15	15	14	0.029939	0.001877
can838	838	4586	5	31	104	1257	766	514	6.454180	12.889900
cycle14	14	14	2	2	-1	21	21	20	0.046476	0.003074
shl200	663	1720	2	439	6	994	901	459	3.511350	6.246690