

Table 1: Resultados comparativos do Algoritmo Genético (Heurística 3) 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	86	77	0.459559	0.058137
can256	256	1330	3	82	12	384	86	81	2.275580	0.632457
cycle17	17	17	2	2	-1	25	26	24	0.117537	0.008064
hns511	511	1425	0	12	157	904	608	548	4.547480	35.016400
cycle16	16	16	2	2	-1	24	24	23	0.116800	0.007496
cycle13	13	13	2	2	-1	19	20	19	0.091688	0.005939
can445	445	1682	3	12	136	667	329	269	4.352420	1.849640
can187	187	652	4	9	74	280	142	88	1.529800	0.109518
can715	715	2975	1	104	27	1251	378	317	8.212980	6.167190
can292	292	1124	3	34	33	438	155	147	2.559470	0.601748
cycle18	18	18	2	2	-1	27	27	24	0.130144	0.008739
cycle15	15	15	2	2	-1	22	23	20	0.115502	0.006933
can96	96	336	5	8	42	144	69	48	0.752187	0.043262
cycle20	20	20	2	2	-1	30	31	28	0.142129	0.009617
cycle11	11	11	2	2	-1	16	17	16	0.079290	0.004918
can24	24	68	3	8	10	36	18	16	0.180272	0.009810
sherman4	1104	1341	0	6	630	2493	2381	2197	10.292200	690.269000
can268	268	1407	3	36	28	402	92	104	2.378460	0.550849
can73	73	152	2	8	32	109	83	64	0.549952	0.029022
685bus	685	1282	1	12	210	1198	726	730	6.827490	26.464300
can161	161	608	5	16	37	241	113	76	1.312100	0.112676
cycle12	12	12	2	2	-1	18	18	16	0.091459	0.005341
cycle19	19	19	2	2	-1	28	29	27	0.129274	0.009172
662bus	662	906	1	9	264	1158	813	812	6.282830	24.968800
can61	61	248	4	24	9	91	31	31	0.463026	0.024134
can144	144	576	5	14	38	216	52	74	1.145100	0.083571
can229	229	774	2	12	70	343	185	158	1.892620	0.479810
cycle10	10	10	2	2	-1	15	15	14	0.066570	0.004531
can838	838	4586	5	31	104	1257	439	446	12.009500	64.600400
cycle14	14	14	2	2	-1	21	21	20	0.104255	0.006362
shl200	663	1720	2	439	6	994	494	422	6.350590	13.916100