

**Table 1.** Run times for Genehunter (version 1.3) and Allegro.

Family	Founder couple reduction	Allegro #bits	Geneh. #bits	Without haplotyping			With haplotyping		
				Genehunter	Allegro	Factor	Genehunter	Allegro	Factor
F12		13	13	46 sec	2.0 sec	23	100 sec	2.9 sec	34
	x	12			1.1 sec	42		2.2 sec	45
F18		19	19	44 min	2.4 min	19	137 min	4.4 min	31
	x	18			1.2 min	37		2.9 min	47
FLoop		19	19	67 min	2.7 min	25	159 min	4.9 min	32
	x	17			0.7 min	99		1.5 min	104
F24		25	25	NA	373 min	NA	NA	777 min	NA
	x	24			241 min			487 min	

**Table 2.** Breakdown of run time for Allegro and Genehunter.

Component of calculation	Pedigree F18		Pedigree FLoop	
	Allegro	Genehunter	Allegro	Genehunter
Single locus calculation	9.6% (7s)	64.5% (1702s)	7.4% (3s)	56.6% (2277s)
Score ( $S_{pairs}$ )	10.1% (7s)	1.6% (41s)	5.1% (2s)	1.3% (51s)
Parametric score (peeling)	8.0% (6s)	5.7% (151s)	12.0% (5s)	17.6% (709s)
HMM (multipoint) step	72.0% (52s)	25.1% (663s)	75.2% (32s)	19.9% (802s)
Other	0.2% (0s)	3.1% (83s)	0.3% (0s)	4.5% (181s)
<b>Total</b>	<b>100.0% (72s)</b>	<b>100.0% (2640s)</b>	<b>100.0% (42s)</b>	<b>100.0% (4020s)</b>