

Additional file 4 – The details of SQUAT runtime and resource consumption and the results of the wheat dataset

Table S1. SQUAT runtime and resource consumption of the D1 dataset

D1: #sampled_reads	1M	2M	5M
User time (seconds)	1146.66	2256.12	5381.74
System time (seconds)	68.36	125.46	375.08
Percent of CPU this job got	160%	152%	179%
Elapsed (wall clock) time (h:mm:ss or m:ss)	12:38.2	25:56.9	53:19.8
Maximum resident set size (kbytes)	2,194,768	4,263,856	10,759,928
File system inputs	3,204,496	6,420,536	16,442,864
File system outputs	4,763,120	9,460,984	23,554,192

Table S2. SQUAT runtime and resource consumption of the D2 dataset

D2: #sampled_reads	1M	2M	5M
User time (seconds)	733.51	727.5	761.75
System time (seconds)	79.58	80.66	57.85
Percent of CPU this job got	61%	58%	59%
Elapsed (wall clock) time (h:mm:ss or m:ss)	22:03.5	23:05.3	22:53.7
Maximum resident set size (kbytes)	2,324,264	2,324,528	2,324,984
File system inputs	3,587,720	4,358,944	5,951,296
File system outputs	4,231,776	4,232,880	4,235,496

Table S3. SQUAT runtime and resource consumption of the wheat dataset

Wheat library	SRR5815659_1	SRR5815659_2
Read length (bp)	150	150
#read	394,218,444	394,218,444
#sampled_read	1,000,000	1,000,000
Machine	CPU: Intel Xeon E7-4830 v3 2.1GHz, 48 cores (96 hyperthreads); 1.5TB RAM	Vmware VM, 8 cores, 128G RAM (Machine: Intel Xeon E7-4820 2GHz, 32 cores (64 hyperthreads), 128GB RAM)
Peak CPU usage (hyperthreads)	32	8
Elapsed (wall clock) time (h:mm:ss)	09:52:48	20:33:56
Peak memory usage (KB)	14,269,024	11,401,808
KB read per second	117,621.87	63,005.16
KB write per second	135,184.93	93,534.40

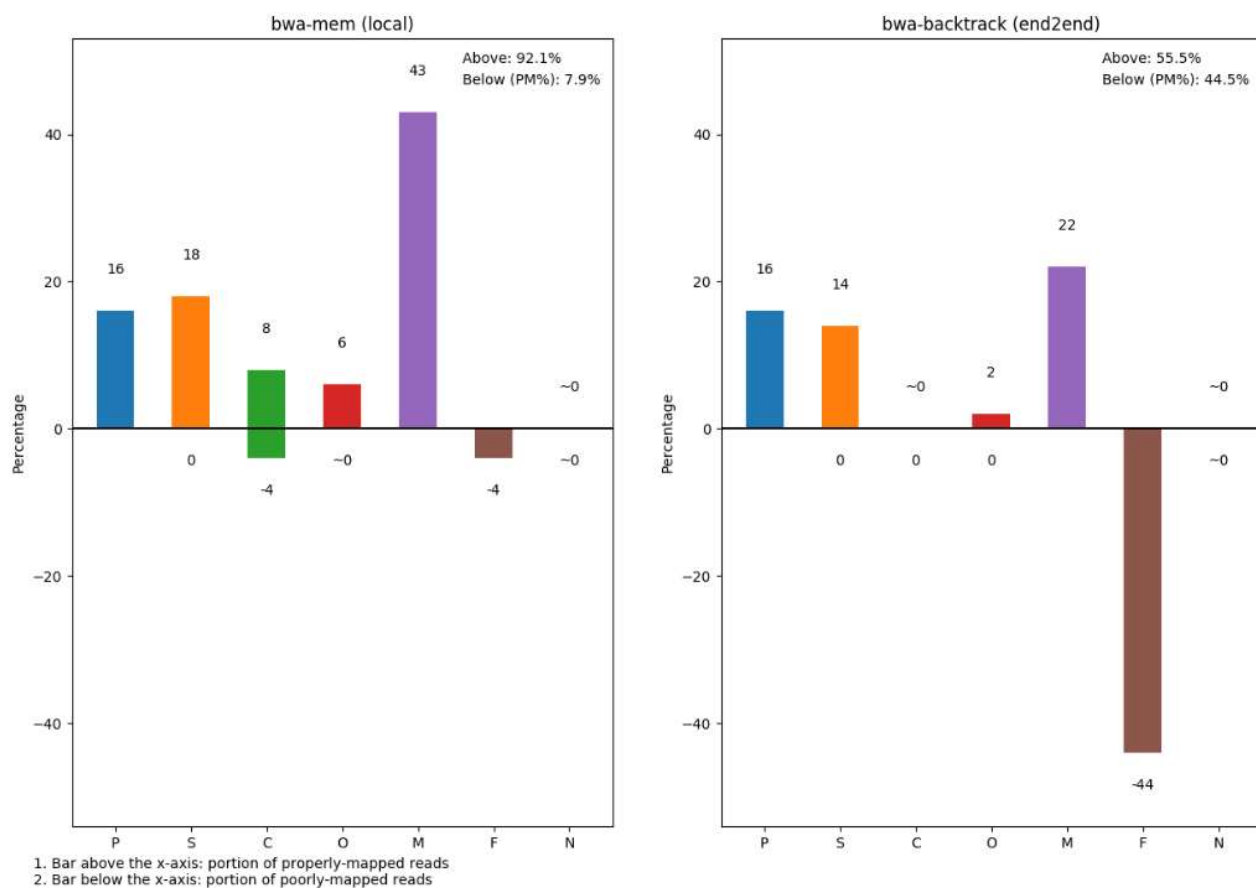


Figure S1. Post-assembly label distribution barchart of the wheat SRR5815659_1 dataset

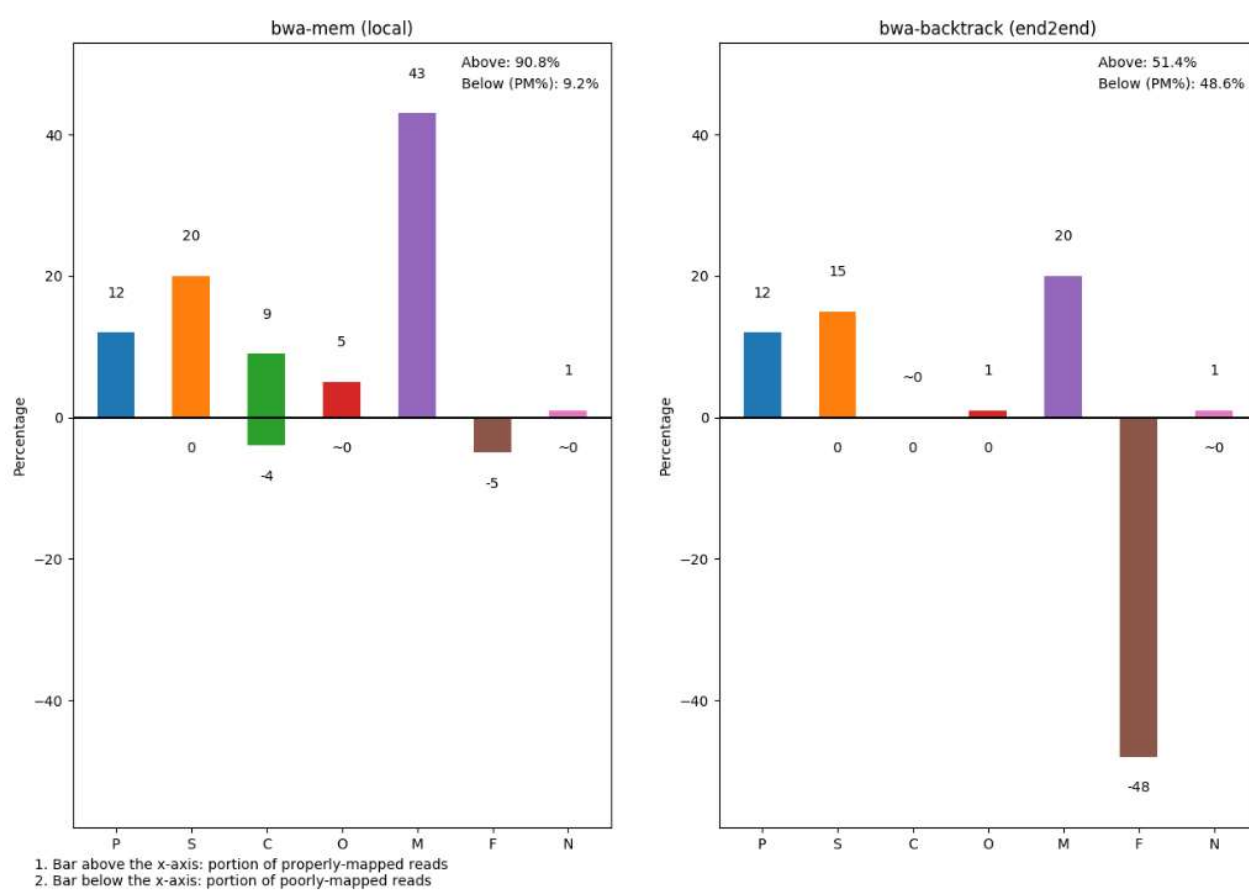


Figure S2. Post-assembly label distribution barchart of the wheat SRR5815659_2 dataset