

Supplementary data

Supplemental Table 1. Number of reads obtained in each library Fert_3, Fert_5, Ster_4 and Ster_9. For each mapping strategy (BW: BarWheat; OB: OnlyBarley) and mapping conditions (MM: allowed mismatches from 0 to 3) the number of mapped reads and the number of reads with multiple alignments (Multi) are shown. Data were exported from Tophat stats files.

		Libraries			
		Fert_3	Fert_5	Ster_4	Ster_9
Number of reads		20144291	20433822	20140434	19381340
Mapping					
BW_MM0	Mapped	14271051	14078678	14379682	13480950
	Multi	2786416	2853642	2825898	2925489
BW_MM1	Mapped	16912108	17077500	16965078	17724181
	Multi	3199631	3301325	3240195	3381181
BW_MM2	Mapped	17682475	17931663	17724181	17091978
	Multi	3344058	3434207	3381181	3495523
OB_MM0	Mapped	677590	752582	649914	728614
	Multi	260884	344437	235056	290913
OB_MM1	Mapped	1814250	1912827	1792817	1965722
	Multi	446919	566307	416586	501660
OB_MM2	Mapped	3244504	3336480	3233140	3520411
	Multi	648841	776676	618557	721819
OB_MM3	Mapped	4737897	4821695	4737841	5098053
	Multi	889465	1012596	858243	966930

Supplemental Table 5. Primer pairs designed for specific amplification of *H. chilense* genes. For primer pair names, ‘HORVU’ form barley orthologue ID was changed for ‘Hc’ from *H. chilense*.

Tagged gene	Forward	Reverse
Hc6Hr1G001670	AAAGGGCTACAAGACCCGTG	GACACTGGTCAAGCACTTACA
Hc6Hr1G002130	GGGAGATTATCGTCCGCGTT	CATCGACTTCGTCTACCGGG
Hc6Hr1G002890	AGTTGGCAGCACACCCATT	GAAATGTTGGGTCGTGGCATC
Hc6Hr1G003170	TGACCTAGAAGGAAATGTCTGT	TGTTACACGACGGTTCCAGA
Hc6Hr1G003470	ATGAACAGGTGGGTTGCTGT	ACCAAGGATTTGCTAGCGGT
Hc6Hr1G003770	TTCTTGATGTGGTGGCAGGT	GCAAGGTCTTTCTCAAGTAGTGC
Hc6Hr1G003890	ATGCATCCTTCTGGGCAACA	TCGACCCCTCAGATCTTTAGCA
Hc6Hr1G003900	TTTGGCGCATTGTTACGTT	CGAGGGTGTCTTTGTCCGAA
Hc6Hr1G004120	CCTACGTCCTCAACCACCTG	GGTGATGGAGTCCCTGTCTG
Hc6Hr1G004350	CAGGCAATGATCTCCCCCAG	GGATTGTAGCCCTGTCAGCA
Hc6Hr1G005240	CTAGCTGCCCTTTGCGAGAA	GGTTGTTGTGGACATCACAAATCT
Hc6Hr1G005370	AAGCTTGCTTTCTCTCCCCA	GGGAAGATCAATGTTACTCCGC
Hc6Hr1G005380	AGAGGAACGTCGTCACATGG	TACGTACCGTCCTATGATGCAA
Hc6Hr1G005390	TGGCTCAGTGCTAACTTGGT	GTTCTGGGGGCAGCCT
Hc6Hr1G005730	GGAGCTGGCAAGCTTAAACG	CGACTGTACATCCCCAAAGG
Hc6Hr1G006050	CTCACCATACTAGCCGATGAC	GCAGGCGTACATGCAGTTTC
Hc6Hr1G006560	TGGCAGAAGAAAGCCTCTGG	ATTGTCAACGAAGCCGCTAA
Hc6Hr1G006880	GAAACTCAAGGTGGGTCCACTCC	TACATCGCGGCGTAAAACGA
Hc6Hr1G007030	ATGGGTGGCTGTAGTTGGC	CCAAGGGACTGGTCAAGCAT
Hc6Hr1G011020	TTCGACTGGACGGAGCAAG	ACATCCAGGGCATCACCAAG
Hc0Hr1G014960	G TTCATTCTCTCTGTTTGGTGGAC	GTGCTGGAACA ACTGACCTA
Hc0Hr1G000390	GGTTCGTCATGGAAATTTGAAACC	TGCAAGATAAGGGACAGAGGATG

Supplemental Table 6. Preliminary characterization of the minichromosomes ($H^{ch}mi1$ and $H^{ch}mi2$) with molecular markers previously described for the acrocentric chromosome ($H^{ch}ac$).

Markers	chr	H1	T21	T26	$H^{ch}ac$	$H^{ch}ac$	$H^{ch}mi2$	$H^{ch}mi1$
					T749	T528	T854	T527
Bmac316	6H	+	-	-	+	+	+	+
K03302	6H	+	-	-	+	+	+	-
MGW620	6H	+	-	-	+	+	+	-
Bawu343	1H	+	-	-	+	+	-	-
K00856	1H	+	-	-	+	+	-	-
Bawu842	1H	+	-	-	+	+	-	-
K08237	1H	+	-	-	+	+	-	-