

Table S1 Chromosome arm-specific molecular markers for *Haynaldia villosa*

Marker	EST ID	Chr. arm	Primer sequence (5'-3')	An. Temp (°C)
X _{CINAU27-620}	BE443531	1VS	Forward: TTGTTGCTGCCTGTGAAAAC Reverse: ACCAGTTAGCGTTGCCAGAT	55
X _{CINAU32-300}	BE403644	1VL	Forward: GCCCACATACAAACATCC Reverse: GCAAATGCCTTCCTTGAG	55
X _{CINAU186-600}		2VS	Forward: CATGGAGCTGTTCCCGCAGAG Reverse: CCAGCACCTTCCCGCCATAGA	55
X _{CINAU34-510}	BE426764	2VL	Forward: CATGATGCTGTAGGGCTGAA Reverse: TCGCTGACAAGGCATTACAC	55
X _{CINAU38-250}	BJ216564	3VS	Forward: CGACGACGTAGATCCAGATG Reverse: TGCTCATGATCGTCATCTCC	55
X _{HVM64-200}		3VL	Forward: GATGTGAAGGCTGCCCTG Reverse: ACACGCCCTATTACCCAGTG	50
X _{CINAU39-950}	CK158455	4VS	Forward: AATGCATGTTGAACTCGTGT Reverse: TCAAGGAGATCGATGAGCATT	58
X _{CINAU80-760}	BE443565	4VL	Forward: CTGCAACCTTGGCTGGTATT Reverse: ATGACCCAGTGCTCATCTCC	60
X _{CINAU41-745}	BQ162207	5VS	Forward: CTCCAAGAGCCCAGATAG Reverse: AGGGTGGGGAGAAAAGTTA	55
X _{CINAU42-1050}	CK207363	5VL	Forward: CTCCTCGGAAGGTCTCAAGAT Reverse: TACAACGCTTGGTTGGGTATC	58
X _{CINAU92-381}	BG263579	6VS	Forward: CCAGTCGGAGAGGATCTCAA Reverse: TGGGCCTCTTGATCTTGACT	55
X _{CINAU93-358}	BE471191	6VL	Forward: TGGCTGATGATTCTGCTTCA Reverse: CCACAGGTTTCAGCCAAGTT	55
X _{CINAU45-495}	CK161204	7VS	Forward: GCAATATGCGGTGCCTATACT Reverse: CCCAGCCAGTCTCTCACATAAT	58
X _{CINAU262-220}	BE445506	7VL	Forward: ATGAAGAGCAAGTCCAAGTC Reverse: GTGGTGGTGGTCTACCTTFA	55

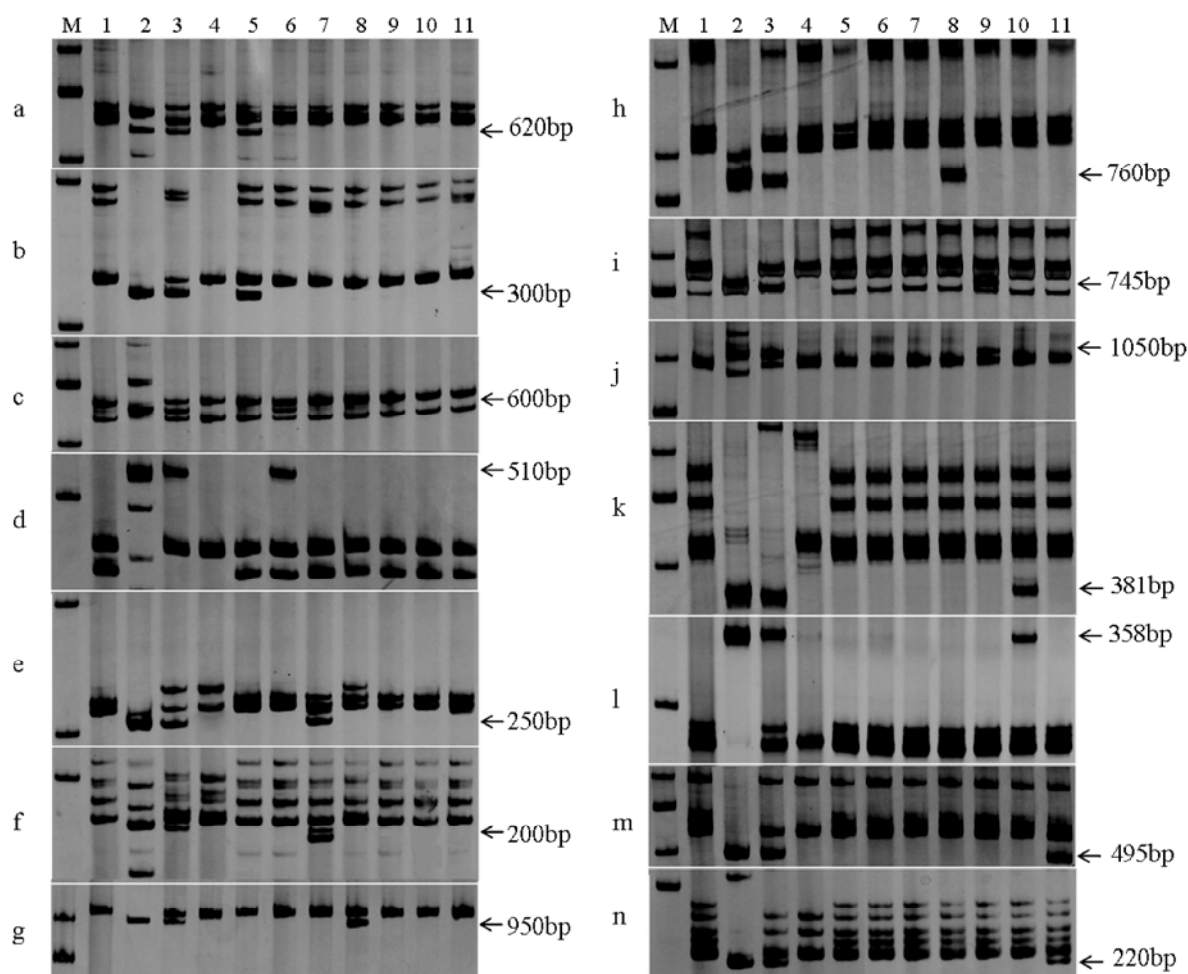


Figure S1 Amplification of specific primer on DNA of parents and wheat-*H. villosa* addition lines. M: Marker (DL2000); 1: Chinese Spring; 2: *H. villosa*; 3: *T. durum*-*H. villosa* amphiploid; 4: *T. durum*; 5: AD1V; 6: AD2V; 7: AD3V; 8: AD4V; 9: AD5V; 10: AD6V; 11: AD7V. a: PCR analysis with primer CINAU27 (1VS); b: PCR analysis with primer CINAU32 (1VL); c: PCR analysis with primer CINAU186 (2VS); d: PCR analysis with primer CINAU34 (2VL); e: PCR analysis with primer CINAU38 (3VS); f: PCR analysis with primer HVM64 (3VL); g: PCR analysis with primer CINAU39 (4VS); h: PCR analysis with primer CINAU80 (4VL); i: PCR analysis with primer CINAU41 (5VS); j: PCR analysis with primer CINAU42 (5VL); k: PCR analysis with primer CINAU92 (6VS); l: PCR analysis with primer CINAU93 (6VL); m: PCR analysis with primer CINAU45 (7VS); n: PCR analysis with primer CINAU262 (7VL). (Arrows indicate a specific band in *H. villosa*, *T. durum*-*H. villosa* amphiploid and addition lines)

Table S2 Specific molecular markers used for the identification chromosome 1V and 5V of *H. villosa*

Marker	EST ID	Chr. arm	Primer sequence (5'-3')	An. Temp (°C)
<i>X</i> _{CINAU27-620}	BE443531	1VS	Forward: TTGTTGCTGCCTGTGAAAAC Reverse: ACCAGTTAGCGTTGCCAGAT	55
<i>X</i> _{CINAU23-1700}	BE446312	1VL	Forward: AAGCCAGGAAATTTGTGGTG Reverse: CAAGGGATATTGCGAGGAAA	55
<i>X</i> _{CINAU24-1050}	BE498376	1VL	Forward: CTCCTCCTCCTCTCCCACTT Reverse: TGAATTGAATGTCCATTTTGATG	55
<i>X</i> _{CINAU25-1650}	BE494376	1VL	Forward: GAAGAAGATGTTTCGGCTTCG Reverse: GGGAACAAGAAACTGCAGGA	55
<i>X</i> _{CINAU26-500}	BE499607	1VL	Forward: ACACTGCAATTCGTCAAGCA Reverse: TGGCAAATCCAAAGACACAG	55
<i>X</i> _{CINAU32-300}	BE403644	1VL	Forward: GCCCACATACAAACATCC Reverse: GCAAATGCCTTCCTTGAG	55
<i>X</i> _{CINAU210-700}		5VS	Forward: CACTCCAACGTGTGGAAGCTC Reverse: CACATCAGCCCGTACTTCCT	55
<i>X</i> _{CINAU211-700}		5VS	Forward: GTTTATCAGGCGGTGCCATA Reverse: GGACTTCTTGCTCCCTTTC	55
<i>X</i> _{CINAU42-1050}	CK207363	5VL	Forward: CTCCAAGAGCCCAGATAG Reverse: AGGGTGGGGAGAAAGTTA	55
<i>X</i> _{CINAU212-1200}		5VL	Forward: CTCCTCGGAAGGTCTCAAGAT Reverse: TACAACGCTTGGTTGGGTATC	55
<i>X</i> _{CINAU213-500}	BF292161	5VL	Forward: GCTGAACCACAAATTCATGT Reverse: GCACTAGTCGGTTTGCTATG	55

Table S3 The result of identification of chromosome specific molecular markers of 1V and 5V

Markers	Materials						
	TV277-7	TV288-4	TV54-4-1	TV49-1-6	TV08-3	TV179-3-3	TV330-6
<i>X</i> _{CINAU27-620}	+	+	+				
<i>X</i> _{CINAU23-1700}							
<i>X</i> _{CINAU24-1050}							
<i>X</i> _{CINAU25-1650}							
<i>X</i> _{CINAU26-500}							
<i>X</i> _{CINAU32-300}							
<i>X</i> _{CINAU210-700}				+	+	+	+
<i>X</i> _{CINAU211-700}				+	+	+	+
<i>X</i> _{CINAU42-1050}							
<i>X</i> _{CINAU212-1200}							
<i>X</i> _{CINAU213-500}							

Note: “+” shows the marker in the column could amplify specific products of the corresponding row; “blank” represents the absence of specific products.