

Table S1. β -glucan content of wheat species from selected publications from 1983 to 2020. Quantification was performed using the enzymatic method essentially as described by McCleary and Glennie-Holmes (1985) unless otherwise indicated.

Sample and source	Ploidy	β -glucan (%dw)	Details	Reference
WHOLEMEAL				
<i>T. monococcum</i>	Diploid	0.30		[159]
<i>T. durum</i>	Tetraploid	0.35		[159]
<i>T. dicoccum</i>	Tetraploid	0.35		[159]
<i>T. dicoccum</i>	Tetraploid	0.38	Mean of 5 varieties	[69]
Chinese elite wheat lines	Hexaploid	0.42	Mean value of range (27 lines)	[135]
<i>Triticum</i> spp	Tetraploid	0.42	Mean of 8 subspecies over 2 years	[114]
<i>T. aestivum</i>	Hexaploid	0.48	Mean of 3 varieties; calcoflour method	[171]
<i>Triticum</i> spp	Hexaploid & Tetraploid	0.48		[79]
<i>Triticum</i> spp	Tetraploid	0.48	Mean of all varieties over 2 years of sampling	[94]
<i>Triticum</i> spp	Diploid	0.48	Mean of all varieties over 2 years of sampling	[94]
Tetraploid wheat lines	Tetraploid	0.49	Mean value of range (88 lines)	[135]
<i>Durum wheat</i>	Tetraploid	0.49	cv. Svevo	[88]
<i>T. durum</i>	Tetraploid	0.53	Mean of 5 varieties	[69]
<i>T. aestivum</i>	Hexaploid	0.6		[172]
<i>T. aestivum</i>	Hexaploid	0.6		[89]
<i>T. aestivum</i> subsp. <i>Spelta</i>	Hexaploid	0.64	Mean of 5 varieties, 3 growing seasons, conventional and organic growth systems	[173]
<i>T. spelta</i>	Hexaploid	0.65		[159]
<i>T. aestivum</i> subsp. <i>Spelta</i>	Hexaploid	0.65	Mean of 90 genotypes over 3 years	[174]

Triticale	Hexaploid	0.66	Mean value of range	[135]	
<i>T. aestivum</i>	Hexaploid	0.68	Mean of winter and spring varieties	[159]	
<i>T. aestivum</i>	Hexaploid	0.7	Mean of values at two growth temperatures	[144]	
<i>T. aestivum</i>	Hexaploid	0.7	Mean value of range (338 lines)	[135]	
<i>T. aestivum</i> subsp. <i>aestivum</i>	Hexaploid	0.74	Mean of 5 varieties, 3 growing seasons, conventional and organic growth systems	[173]	
<i>T. aestivum</i>	Hexaploid	0.75	Mean of 29 varieties	[69]	
Wheat-barley addition	7Ds-7HL	0.75	Mean of values at two growth temperatures	[144]	
CIMMYT synthetics	Hexaploid	0.76	Mean value of range (22 lines)	[135]	
<i>T. aestivum</i>	Hexaploid	0.8	Mean of 10 lines	[175]	
<i>Triticum</i> spp	Hexaploid	0.83	Mean of all varieties over 2 years of sampling	[94]	
<i>T. aestivum</i>	Hexaploid	0.84	Mean over 3 years	[146]	
Wheat-barley addition	7Bs-7HL	0.85	Mean of values at two growth temperatures	[144]	
Wheat-barley addition	7As-7HL	0.95	Mean of values at two growth temperatures	[144]	
Wheat-barley addition	7H	0.96	Mean of values at two growth temperatures	[144]	
Wheat-barley addition		1.02	Mean value of range (6 lines)	[135]	
<i>Ae. crassa</i>	Hexaploid	1.04	Mean of all varieties over 2 years of sampling	[94]	
Primitive wheat	Diploid	&	1.06	Mean value of range (35 lines)	[135]
	Tetraploid				
<i>Aegilops</i> spp	Diploid	2.26	Mean of all varieties over 2 years of sampling	[94]	
<i>Ae. biuncialis</i>	Tetraploid	3.67	Mean of 83 accessions over 2 years of sampling	[95]	
<i>Aegilops</i> spp	Tetraploid	4.53	Mean of all varieties over 2 years of sampling	[94]	
ENDOSPERM					
<i>T. aestivum</i>	Hexaploid	0.2	Endosperm flour	[176]	
ALEURONE					
<i>T. aestivum</i>	Hexaploid	4.55	Mean of 2 different preparations	[130]	

BRAN*T. aestivum*

Hexaploid

2.15

Red wheat

[93]

T. aestivum

Hexaploid

2.45

White wheat; mean of "bran 300" and "bran powder 50"

[93]

T. aestivum

Hexaploid

2.9

[130]