Table S1. List of two sets of wheat differentials used to differentiate *Pst* pathotypes in China

	Yr single gene differentials		Chinese differentials		
No.	Name	*Yr* gene	Code	Name	*Yr* gene
1	Lemhi	*Yr21*	1	Trigo Eureka	*Yr6*
2	Tyee	*Yr76*	2	Fulhard	Unknown
3	CH223	*Yr50*	3	Lutescens 128	Unknown
4	Vasu	*Yr40*	4	Mentana	Unknown
5	CN19	*Yr41*	5	Virgilio	*YrVir1*, *YrVir2*
6	PI181434	*Yr45*	6	Abbondanza	Unknown
7	Suwon 11	*YrSu*	7	Early Premium	Unknown
8	Avs/ID0377s NIL	*Yr43*	8	Funo	*YrA*,+
9	Vocet R	*YrA*	9	Danish 1	*Yr3*
10	TP1295	*Yr25*	10	Jubilejina 2	*YrJu1*, *YrJu2*, *YrJu3*, and *YrJu4*
11	AvSYr1 NIL	*Yr1*	11	Fengchan 3	*Yr1*
12	AvSYr5 NIL	*Yr5*	12	Lovrin 13	*Yr9*,+
13	AvSYr6 NIL	*Yr6*	13	Kangyin 655	*Yr1*, *YrKy1*, and *YrKy2*
14	Minister	*Yr3c*	14	Suwon 11	*YrSu*
15	AvSYr7 NIL	*Yr7*	15	Zhong 4	Unknown
16	AvSYr8 NIL	*Yr8*	16	Lovrin 10	*Yr9*
17	AvSYr9 NIL	*Yr9*	17	Hybrid 46	*Yr3b* and *YrH46*
18	AvSY24NIL	*Yr24*	18	*T.spelta* album	*Yr5*
19	AvSYr32NIL	*Yr32*	19	Guinong 22	*Yr10* and *Yr26*
20	PI331260	*Yr64*			
21	AvSYr10NIL	*Yr10*			
22	AvSYr15NIL	*Yr15*			
23	AvSYr17NIL	*Yr17*			
24	AvstZak NIL	*Yr44*			
25	AvSYrSPNIL	*YrSp*			
26	AvSYrTreslNIL	*YrTr1*			
27	AvSY26 NIL	*Yr26*			
28	AvSY29NIL	*Yr29*			
29	YrJu4 NIL	*YrJu4*			
30	YrKy2 NIL	*YrKy2*			
31	YrRes NIL	*YrRes*			

Table S2. Distribution of *Pst* pathotypes in western provinces of China

No.	Pathotype [a]	Yunnan	Guizhou	Sichuan	Gansu	Isolates/Mean	Frequency (%)
1	*V2*, *4*, *8*, *14*	(2)	1 (2)[b]	1 (1)		7	5.0
2	*V2*, *4*, *8*, *12*, *14*, *16*			5	(1)	6	4.2
3	*V2*, *8*, *14*	1 (1)	1	1 (1)		5	3.5
4	*V0*	(1)	(2)		(2)	5	3.5
5	*V4*, *14*, *16*		1	3		4	2.8
6	*V2*,*14*	(2)	(1)	(1)		4	2.8
7	*V2*, *8*, *14*, *19*	(1)	(1)	(2)		4	2.8
8	*V2*, *4*, *8*, *10*, *14*, *19*	2	(1)	(1)		4	2.8
9	*V2*, *V8*			(2)	(2)	4	2.8
10	*V2*, *4*, *14*, *16*			3		3	2.1
11	*V2*, *3*, *4*, *6*, *7*, *8*, *10*, *11*, *12*, *14*, *16*, *19*	1		1		2	1.4
12	*V2*, *10*	1		1		2	1.4
13	*V3*, *7*, *10*, *19*		1	(1)		2	1.4
14	*V2*, *4*, *8*, *11*, *14*,*16*	1	1			2	1.4
15	*V2*, *8*, *14*, *16*	2				2	1.4
16	*V2*, *8*, *19*			(2)		2	1.4
17	*V2*, *7*, *8*, *14*, *19*	(1)			(1)	2	1.4
18	*V2*, *4*, *7*, *8*, *14*	(1)	1			2	1.4
19	*V2*		(1)		(1)	2	1.4
20	*V19*			(1)		1	0.70
21	*V12*		1			1	0.70
22	*V14*			(1)		1	0.70
23	*V8*			(1)		1	0.70
24	*V2*, *4*				(1)	1	0.70
25	*V2*, *3*			1		1	0.70
26	*V7*, *14*				(1)	1	0.70
27	*V8*, *19*	(1)				1	0.70
28	*V2*, *8*, *17*		(1)			1	0.70
29	*V7*, *8*, *10*				(1)	1	0.70
30	*V2*, *3*, *14*				(1)	1	0.70
31	*V2*, *14*, *16*				(1)	1	0.70
32	*V8*, *10*, *14*	1				1	0.70
33	*V2*, *4*, *5*, *14*		1			1	0.70
34	*V4*, *7*, *8*, *12*	(1)				1	0.70
35	*V6*, *7*, *8*, *14*				(1)	1	0.70
36	*V2*, *3*, *7*, *10*				(1)	1	0.70
37	*V2*, *4*, *8*, *16*	(1)				1	0.70
38	*V2*, *8*, *10*, *14*	(1)				1	0.70
39	*V2*, *8*, *10*, *19*			(1)		1	0.70
40	*V2*, *4*, *14*, *19*			(1)		1	0.70
41	*V2*, *7*, *8*, *14*	(1)				1	0.70
42	*V2*, *5*, *7*, *19*			(1)		1	0.70
43	*V2*, *3*, *7*, *13*, *16*				(1)	1	0.70
44	*V2*, *7*, *8*, *13*, *19*		(1)			1	0.70
45	*V2*, *4*, *6*, *8*, *14*	(1)				1	0.70
46	*V2*, *6*, *10*, *14*, *19*				(1)	1	0.70
47	*V2*, *4*, *8*, *10*, *14*			1		1	0.70
48	*V2*, *4*, *8*, *10*, *11*	(1)				1	0.70
49	*V2*, *6*, *8*, *16*, *19*			(1)		1	0.70
50	*V2*, *7*, *11*, *14*, *19*	(1)				1	0.70
51	*V2*, *3*, *4*, *8*, *16*				(1)	1	0.70
52	*V2*, *4*, *11*, *12*, *14*	(1)				1	0.70
53	*V2*, *8*, *12*, *14*, *19*			(1)		1	0.70
54	*V2*, *3*, *4*, *10*, *11*, *12*			(1)		1	0.70
55	*V2*, *3*, *4*, *8*, *10*, *14*				(1)	1	0.70

Continued Table S2

No.	Pathotype	Yunnan	Guizhou	Sichuan	Gansu	Isolate/Mean	Frequency (%)
56	*V2*, *3*, *4*, *8*, *14*,*19*				(1)	1	0.70
57	*V3*, *4*, *8*, *11*, *14*, *19*	(1)				1	0.70
58	*V2*, *3*, *6*, *7*, *8*, *16*			(1)		1	0.70
59	*V3*, *4*, *7*, *8*, *10*, *14*			(1)		1	0.70
60	*V2*, *4*, *7*, *8*, *12*, *14*				(1)	1	0.70
61	*V2*, *3*, *4*, *7*, *8*, *14*	(1)				1	0.70
62	*V2*, *4*, *7*, *12*, *14*, *17*				(1)	1	0.70
63	*V2*, *8*, *10*, *11*, *17*, *19*				(1)	1	0.70
64	*V2*, *3*, *4*, *11*, *12*, *14*			1		1	0.70
65	*V1*, *2*, *4*, *6*, *8*, *10*, *14*	(1)				1	0.70
66	*V2*, *4*, *6*, *7*, *8*, *10*, 14			1		1	0.70
67	*V2*, *4*, *7*, *8*, *10*, *11*, *14*			1		1	0.70
68	*V1*, *2*, *3*, *4*, *7*, *8*, *16*	(1)				1	0.70
69	*V2*, *4*, *6*, *8*, *12*, *14*, *16*	1				1	0.70
70	*V2*, *4*, *6*, *8*, *11*, *14*, *16*,	1				1	0.70
71	*V2*, *4*, *6*, *7*, *8*, *14*, *16*,				(1)	1	0.70
72	*V2*, *4*, *8*, *11*, *12*, *14*, *16*, *17*		1			1	0.70
73	*V2*, *3*, *6*, *8*, *11*, *14*, *16*, *18*				(1)	1	0.70
74	*V2*, *4*, *6*, *7*, *8*, *12*, *14*, *16*	1				1	0.70
75	*V2*, *3*, *4*, *10*, *11*, *12*, *14*, *16*			1		1	0.70
76	*V2*, *3*, *4*, *8*, *10*, *14*, *16*, *19*			1		1	0.70
77	*V2*, *3*, *4*, *7*, *10*, *13*, *14*, *19*		1			1	0.70
78	*V2*, *4*, *6*, *8*, *9*, *12*, *14*, *16*	(1)				1	0.70
79	*V2*, *4*, *6*, *8*, *11*, *12*, *14*, *16*			1		1	0.70
80	*V2*, *4*, *7*, *8*, *10*, *14*, *16*, *19*				(1)	1	0.70
81	*V2*, *3*, *7*, *10*, *12*, *13*, *14*, *19*	1				1	0.70
82	*V2*, *3*, *4*, *8*, *10*, *16*, *17*, *19*	1				1	0.70
83	*V1*, *6*, *7*, *8*, *9*, *12*, *14*, *16*, *17*	1				1	0.70
84	*V2*, *3*, *4*, *7*, *8*, *9*, *10*, *11*, *14*			1		1	0.70
85	*V2*, *3*, *4*, *6*, *7*, *8*, *10*, *14*, *16*,				(1)	1	0.70
86	*V2*, *4*, *5*, *6*, *8*, *12*, *14*, *16*, *17*				(1)	1	0.70
87	*V2*, *3*, *4*, *8*, *9*, *10*, *13*, *14*, *16*	1				1	0.70
88	*V2*, *3*, *4*, *5*, *7*, *8*, *10*, *14*, *17*, *19*		1			1	0.70
89	*V2*, *4*, *5*, *6*, *7*, *8*, *11*, *12*, *14*, *16*			(1)		1	0.70
90	*V2*, *3*, *7*, *9*, *11*, *13*, *16*, *17*, *18*, *19*	1				1	0.70
91	*V2*, *4*, *5*, *7*, *9*, *11*, *12*, *14*, *16*, *17*			1		1	0.70
92	*V2*, *3*, *4*, *7*, *8*, *10*, *12*, *13*, *14*, *16*				(1)	1	0.70
93	*V2*, *3*, *4*, *6*, *7*, *8*, *9*, *10*, *11*,.*14*,*16*			1		1	0.70
94	*V2*, *3*, *4*, *6*, *7*, *8*, *9*, *10*, *14*, *16*, *19*			1		1	0.70
95	*V2*, *3*, *4*, *6*, *7*, *8*, *9*, *10*, *12*, *13*, *14*, *16*			1		1	0.70
96	*V2*, *3*, *4*, *5*, *7*, *8*, *9*, *10*, *11*, *12*, *14*, *16*			1		1	0.70
97	*V2*, *3*, *4*, *5*, *6*, *7*, *8*, *9*, *11*, *12*, *14*, *16*, *17*, *19*	1				1	0.70
98	*V1*, *2*, *3*, *4*, *5*, *6*, *7*, *8*, *9*, *10*, *11*, *12*, *13*, *14*, *16*, *17*	1				1	0.70
	Total	19 (23)	11 (10)	29 (23)	(28)	143	100
	H [c]	3.6	2.8	3.5	3.6	3.4	

[a] Corresponding virulence (*V1-V19*) to the 19 Chinse differentials: *V0* = avirulent to all differentials; *V1* = Trigo Eureka (*Yr6*); *V2* = Fulhard (unknown); *V3* = Lutescens128 (unknown); *V4* = Mentana (unknown); *V5* = Virgilio (*YrVir1* and *YrVir2*); *V6* = Abbondanza (unknown); *V7* = Early premium (unknown); *V8* = Funo (*YrA,+)*; *V9* = Danish 1 (*Yr3*); *V10* = Jubilejina 2 (*YrJu1, YrJu2, YrJu3* and *YrJu4*); *V11* = Fengchan3 (*Yr1*); *V12* = Lovrin 13 (*Yr9,+*); *V13* = Kangyin 655 (*Yr1, YrKy1* and *YrKy2*); *V14* = Suwon 11 (*YrSu*); *V15* = Zhong 4 (unknown); *V16* = Lovrin 10 (*Yr9*); *V17* = Hybrid 46 (*Yr3b* and *Yr4b*); *V18* = *T. spelta* var album (*Yr5*); and *V19* = Guinong 22 (*Yr26*). [b] old and new isolates are shown inside and outside parentheses, respectively. [c] Shannon-Wiener pathotype diversity index (*H*) for the 143 *Pst* isolates.