

Supplemental Data 1

Thermocycle profile for *Bx17* and *Pinb* gene fragments amplification

	Cycle Step	T (°C)	Time	Cycles
1	Initial Denaturing	98	5min	1
2	Denaturation	98	5s	
3	Annealing	76.4	5s	3
4	Extension	72	15s	
6	Denaturation	98	5s	
7	Annealing	73.4	5s	3
8	Extension	72	15s	
10	Denaturation	98	5s	
11	Annealing	70.4	5s	3
12	Extension	72	15s	
13	Denaturation	98	5s	
14	Annealing	67.4	5s	3
15	Extension	72	15s	
16	Denaturation	98	5s	
17	Annealing	64.4	5s	3
18	Extension	72	15s	
19	Denaturation	98	5s	
20	Annealing	61.4	5s	3
21	Extension	72	15s	
22	Denaturation	98	5s	
23	Annealing	58.4	5s	22
24	Extension	72	15s	
25	Final Extension	72	1min	1
26	Hold	4	∞	

Thermocycle profile for *By18* and *Pinb* gene fragments amplification

	Cycle Step	T (°C)	Time	Cycles
1	Initial Denaturing	98	5min	1
2	Denaturation	98	5s	
3	Annealing	72.5	5s	3
4	Extension	72	15s	
6	Denaturation	98	5s	
7	Annealing	69.5	5s	3
8	Extension	72	15s	
10	Denaturation	98	5s	
11	Annealing	66.5	5s	3
12	Extension	72	15s	
14	Denaturation	98	5s	
15	Annealing	63.5	5s	31
16	Extension	72	15s	
17	Final Extension	72	1min	1
18	Hold	4	∞	