Table 2 Comparison of agronomic characters of Koshihikari and Hikarishinseiki in 2007

Experimental locations	Cultivars	Heading date (m.d)	Maturity date (m.d)	Culm length (cm)	Panicle length (cm)	No. of Panicles (No./ m^2)	Grain yield (kg/a)	1000-grain weight (g)	(1) Grain Quality	(2) Lodging degree	(3) Leaf blast score	(4) Panicle blast score	(5) Value of taste	(6) Eating quality	(7) Amylose content (%)	Protein content of brown rice (%)
Miyagi	Koshihikari	8.19	10.03	95.0	17.5	413	58.0	22.6	2.8	2.3	1.3	2.3		0.00		
	Hikarishinseiki	8.18	10.01	71.6	16.9	444	55.7	22.5	2.3	0.0	1.3	1.9		−0.43		
Ibaraki	Koshihikari	8.01	9.09	81.0	19.7	493	59.4	21.1	5.0	2.3	0.0	0.0		0.00		6.3
	Hikarishinseiki	7.31	9.09	65.2	18.9	520	57.3	21.1	5.0	0.0	0.0	0.0		0.12		6.7
Kanagawa	Koshihikari	8.12	9.20	89.6	17.2	334	36.1	20.6	5.5	4.0		0.0	68.0	0.00		
	Hikarishinseiki	8.11	9.20	76.7	17.2	379	44.3	21.9	3.5	1.0		0.0	69.0	0.07		
Nagano	Kosdhihikari	8.10	9.20	102.0	19.0	574	67.1	20.2	5.0	5.0	3.0	0.0		0.00		
	Hikarishinseiki	8.10	9.23	75.0	18.6	578	72.8	20.1	5.0	1.0	1.5	0.0		−0.20		
Mie	Koshihikari	7.23	8.25	85.3	19.8	420	58.3	21.5	5.0	1.9	0.2	0.3		0.00		6.2
	Hikarishinseiki	7.22	8.26	65.1	18.6	473	54.1	21.8	5.5	0.0	0.0	0.3		0.10		6.3
Toyama	Koshihikari	8.12	9.19	84.6	18.9	348	54.4	23.5	2.6	2.2	0.0	0.0	79.0	0.00		4.9
	Hikarishinseiki	8.12	9.18	65.2	17.4	405	51.4	22.2	3.9	0.0	0.5	0.0	77.8	0.00		5.1
Ishikawa	Koshihikari	8.09	9.14	99.5	18.6	413	51.8	21.5	3.0	3.8	0.0	0.0	75.0	0.00	17.2	6.5
	Hikarishinseiki	8.07	9.12	73.8	17.8	485	64.0	20.9	4.5	0.0	0.0	0.0	72.0	−0.59	16.5	7.0
Wakayama	Koshihikari	8.13	9.13	84.8	18.2	317	53.8	22.1	3.0	0.0	0.0	0.0				
	Hikarishinseiki	8.13	9.14	67.8	18.3	313	56.2	22.0	3.0	0.0	0.0	0.0				
Hyogo	Koshihikari	8.11	9.13	95.2	18.9	396	58.0	21.3	5.5	0.8	1.0	0.0		0.00		
	Hikarishinseiki	8.09	9.10	76.0	18.4	355	58.3	21.5	6.5	0.0	1.3	0.0		−0.21		
Okayama	Koshihiksri	8.11	9.12	95.9	18.5	309	55.7	21.6	5.0	1.5	0.0	0.0				5.6
	Hikarishinseiki	8.12	9.14	76.6	18.9	306	48.3	22.2	4.0	0.0	0.0	0.0				5.8
Tokushima	Koshihikari	7.15	8.19	87.0	17.5	443	53.0	20.4	4.5	3.5	0.0	0.0				
	Hikarishinseiki	7.15	8.18	67.9	17.1	479	49.1	21.4	5.0	0.0	0.0	0.0				
Ehime	Koshihikari	7.16	8.18	88.0	18.9	352	48.7	22.0	5.3	2.5						
	Hikarishinseiki	7.15	8.18	65.0	17.6	401	54.0	22.1	5.3	0.0						
Oita	Koshihikari	7.30	9.08	79.0	18.6	414	62.2	21.3	3.0	1.0	0.0	0.0	88.0	0.00		6.9
	Hikarishinseiki	7.30	9.11	58.0	18.0	438	61.9	21.5	2.5	0.0	0.0	0.0	85.0	−0.22		7.2
Average	Koshihikari	8.05	9.10	89.8	18.6	402	55.1	21.5	4.3	2.4	0.5	0.2	77.5	0.00	17.2	6.1
	Hikarishinseiki	8.04	9.10	69.5	18.0	429	56.0	21.6	4.3	0.2	0.4	0.2	76.0	−0.15	16.5	6.4
Average for 2 years	Koshihikari	8.03	9.09	91.1	18.9	399	56.2	21.8	4.3	2.5	0.3	0.3	76.5	0.00	17.9	6.5
	Hikarishinseiki	8.03	9.09	71.2	18.3	431	57.4	22.0	4.6	0.4	0.2	0.2	75.3	−0.07	17.6	6.7

Note: (1) Grain quality was classified into nine grade; 1: excellent good to 9: especially bad low quality; (2) Lodging degree was determined based on the inclination angle of plant; 0: standing, 1: almost 70, 2: almost 50, 3: almost 30, 4: almost 10, 5: lodged; (3) Leaf blast score was determined based on the percentage of infected leaf area; 0:0%, 1:1%, 2: 2%, 3: 5%, 4: 10%, 5: 20%, 6: 40%, 7: 60%, 8: 80%, 9: 90%, 100%; (4) Panicle blast score was determined based on the percentage of infected kernels; 0:0%, 1:1%, 2: 2%, 3: 5%, 4: 10%, 5: 20%, 6: 40%, 7: 60%, 8: 80%, 9: 90%, 100%; (5) Value of taste was determined using a Taste-meter MA-90B (Tokyo Rice-producing Machine Factory, Japan); (6) Eating quality show the aggregate evaluation and classified into eleven degree; 5: excellent good to -5: especially bad.; (7) Amylose and protein content was measured by Near Infrared Spectrometer AN800 (Kett Electric Laboratory, Japan)