

**Supplementary Table 1. Variation of the mesocotyl and coleoptile length for 57 rice accessions from RDRS collection**

No.	Name	WRC No. <sup>a</sup>	Origin	Variety group	Mesocotyl length (mm)		Coleoptile length (mm)	
					Mean	S.D	Mean	S.D
1	NIPPONBARE	WRC 01	JAPAN	<i>Japonica</i>	3.2 ± 2.5		43.0 ± 5.6	
2	KASALATH	WRC 02	INDIA	<i>Indica I</i>	36.3 ± 3.2		18.9 ± 4.1	
3	BEI KHE	WRC 03	CAMBODIA	<i>Indica II</i>	4.8 ± 3.9		32.2 ± 4.9	
4	JENA 035	WRC 04	NEPAL	<i>Indica I</i>	26.5 ± 6.6		18.2 ± 3.5	
5	NABA	WRC 05	INDIA	<i>Indica II</i>	12.9 ± 4.5		29.8 ± 5.0	
6	PULUIK ARANG	WRC 06	INDONESIA	<i>Indica II</i>	7.7 ± 4.0		26.8 ± 6.6	
7	DAVAO 1	WRC 07	PHILIPPINES	<i>Indica II</i>	1.2 ± 0.5		23.3 ± 5.2	
8	RYOU SUISAN KOUMAI	WRC 09	CHINA	-	9.4 ± 4.4		38.8 ± 3.8	
9	SHUUSOUSHU	WRC 10	CHINA	-	21.5 ± 9.0		26.9 ± 7.2	
10	JINGUOYIN	WRC 11	CHINA	<i>Indica II</i>	2.4 ± 1.0		34.2 ± 7.1	
11	ASU	WRC 13	BHUTAN	-	3.9 ± 1.6		39.3 ± 2.1	
12	IR 58	WRC 14	PHILIPPINES	<i>Indica II</i>	6.6 ± 2.2		29.1 ± 5.5	
13	CO 13	WRC 15	INDIA	<i>Indica II</i>	1.5 ± 0.6		37.2 ± 3.0	
14	KEIBOBA	WRC 17	CHINA	<i>Indica II</i>	4.9 ± 2.8		37.4 ± 5.1	
15	QINGYU(SEIYU)	WRC 18	TAIWAN	<i>Indica II</i>	9.0 ± 2.7		35.5 ± 3.8	
16	DENG PAO ZHAI	WRC 19	CHINA	<i>Indica II</i>	15.9 ± 2.2		34.8 ± 2.7	
17	TADUKAN	WRC 20	PHILIPPINES	<i>Indica II</i>	0.3 ± 0.4		35.5 ± 7.9	
18	SHWE NANG GYI	WRC 21	MYANMAR(BURM	<i>Indica II</i>	5.3 ± 3.2		37.1 ± 6.0	
19	CALOTOC	WRC 22	PHILIPPINES	<i>Indica I</i>	10.6 ± 8.0		37.4 ± 6.8	
20	LEBED	WRC 23	PHILIPPINES	-	18.1 ± 8.2		30.3 ± 6.2	
21	PINULUPOT 1	WRC 24	PHILIPPINES	-	2.3 ± 0.4		38.9 ± 4.3	
22	MUHA	WRC 25	INDIA	<i>Indica I</i>	33.6 ± 7.9		23.3 ± 4.6	
23	JHONA 2	WRC 26	INDIA	<i>Indica I</i>	18.8 ± 7.9		32.4 ± 6.4	
24	NEPAL 8	WRC 27	NEPAL	<i>Indica I</i>	33.8 ± 5.0		20.8 ± 2.6	
25	JARJAN	WRC 28	BHUTAN	<i>Indica I</i>	37.0 ± 2.8		19.9 ± 1.6	
26	KALO DHAN	WRC 29	NEPAL	<i>Indica I</i>	31.5 ± 5.0		17.3 ± 3.0	
27	ANJANA DHAN	WRC 30	NEPAL	<i>Indica I</i>	25.5 ± 14.4		22.8 ± 8.4	
28	SHONI	WRC 31	BANGLADESH	<i>Indica I</i>	19.8 ± 7.7		28.7 ± 4.2	
29	TUPA 121-3	WRC 32	BANGLADESH	<i>Indica I</i>	31.6 ± 5.9		21.3 ± 2.9	
30	SURJAMUKHI	WRC 33	INDIA	<i>Indica I</i>	22.8 ± 4.4		25.4 ± 2.6	
31	ARC 7291	WRC 34	INDIA	<i>Indica I</i>	29.1 ± 5.9		22.3 ± 4.3	
32	ARC 5955	WRC 35	INDIA	<i>Indica I</i>	27.0 ± 7.8		25.1 ± 7.6	
33	RATUL	WRC 36	INDIA	<i>Indica I</i>	28.1 ± 8.3		19.1 ± 6.6	
34	ARC 7047	WRC 37	INDIA	<i>Indica I</i>	31.8 ± 5.3		23.2 ± 6.1	
35	ARC 11094	WRC 38	INDIA	-	16.5 ± 6.3		30.0 ± 5.3	
36	BADARI DHAN	WRC 39	NEPAL	<i>Indica I</i>	29.7 ± 4.7		23.3 ± 4.8	
37	NEPAL 555	WRC 40	INDIA	<i>Indica I</i>	31.3 ± 7.2		22.2 ± 6.8	
38	KALUHEENATI	WRC 41	SRILANKA	<i>Indica I</i>	1.3 ± 0.7		24.3 ± 6.8	
39	LOCAL BASMATI	WRC 42	INDIA	<i>Indica I</i>	29.2 ± 11.3		19.5 ± 5.2	
40	DIANYU 1	WRC 43	CHINA	<i>Japonica</i>	2.8 ± 1.6		45.1 ± 3.4	
41	BASILANON	WRC 44	PHILIPPINES	<i>Indica I</i>	35.2 ± 3.7		19.0 ± 3.6	
42	MA SHO	WRC 45	MYANMAR(BURM	<i>Tropical Japonica</i>	25.6 ± 3.2		27.7 ± 3.7	
43	KHAO NOK	WRC 46	LAOS	<i>Tropical Japonica</i>	23.8 ± 5.5		26.6 ± 4.6	
44	JAGUARY	WRC 47	BRAZIL	<i>Tropical Japonica</i>	7.7 ± 4.7		31.4 ± 5.4	
45	KHAU MAC KHO	WRC 48	VIETNAM	<i>Tropical Japonica</i>	24.4 ± 8.0		28.6 ± 7.7	
46	PADI PERAK	WRC 49	INDONESIA	<i>Tropical Japonica</i>	28.9 ± 8.4		21.4 ± 3.6	
47	REXMONT	WRC 50	USA	<i>Tropical Japonica</i>	2.7 ± 0.7		25.0 ± 2.0	
48	URASAN 1	WRC 51	JAPAN	<i>Tropical Japonica</i>	4.5 ± 4.7		27.5 ± 5.1	
49	KHAU TAN CHIEM	WRC 52	VIETNAM	<i>Tropical Japonica</i>	4.4 ± 2.2		32.7 ± 6.1	
50	TIMA	WRC 53	BHUTAN	<i>Tropical Japonica</i>	22.0 ± 4.8		31.6 ± 3.7	
51	TUPA 729	WRC 55	BANGLADESH	<i>Tropical Japonica</i>	8.2 ± 2.3		49.2 ± 2.8	
52	MILYANG 23	WRC 57	REP.KOREA	<i>Indica II</i>	11.3 ± 7.8		32.2 ± 5.5	
53	RADIN GOI SESAT	WRC 61	MALAYSIA	<i>Indica II</i>	4.6 ± 1.6		27.0 ± 2.7	
54	BLEIYO	WRC 63	THAILAND	<i>Indica II</i>	25.1 ± 5.2		22.7 ± 4.8	
55	RAMBHOG	WRC 65	INDONESIA	<i>Indica II</i>	15.7 ± 8.3		32.9 ± 4.2	
56	PHULBA	WRC 67	INDIA	<i>Japonica</i>	5.9 ± 3.5		40.2 ± 4.3	
57	KHAO NAM JEN	WRC 68	LAOS	<i>Japonica</i>	11.8 ± 9.8		39.2 ± 9.1	

<sup>a</sup> World rice collection (WRC) number corresponds to the accession number of RDRS at the NIAS Gene bank (Kojima et al. 2005).