

# Supplementary Materials (*Agronomy-1289137*)

**Table S1.** Initial moisture content (MC), 100 grain weight (GW), time to 70% germination (T70), germination rate (GR) and final germination percentage (FG) of 46 Sherpa/IRAT109 lines. Experiment 5.

Genotype	MC (%)	GW (g)	T70 (h)	GR (grain/h)	FG (%)
SHIR-602455	12.8	3.42	61.0	3.27	96
SHIR-602476	14.0	2.48	57.1	3.67	95
SHIR-602486	12.8	2.14	34.0	5.95	98
SHIR-602489	14.0	3.05	57.7	3.48	96
SHIR-602507	13.6	3.02	52.8	4.37	98
SHIR-602517	13.2	2.27	47.4	4.85	97
SHIR-602518	13.3	2.34	35.8	5.46	95
SHIR-602519	13.0	2.24	60.7	3.20	94
SHIR-602520	14.1	2.67	54.0	4.08	95
SHIR-602522	13.9	2.59	49.9	4.70	98
SHIR-602530	13.2	3.45	59.2	3.26	94
SHIR-602531	14.2	2.47	57.8	3.58	95
SHIR-602533	14.4	2.66	52.8	4.23	97
SHIR-602534	13.8	2.70	58.3	3.53	96
SHIR-602536	13.6	2.49	56.2	3.72	97
SHIR-602539	13.6	2.41	57.3	3.91	99
SHIR-602545	13.7	3.06	53.1	4.29	97
SHIR-602546	13.8	3.01	58.9	3.54	97
SHIR-602550	14.1	2.67	59.3	3.57	91
SHIR-602557	13.7	2.31	53.9	4.12	99
SHIR-602561	13.7	3.02	54.9	4.18	95
SHIR-602567	13.6	2.46	58.8	3.78	97
SHIR-602576	13.5	2.49	45.2	5.09	100
SHIR-602582	14.0	2.34	47.6	4.95	100
SHIR-602586	13.2	2.42	53.4	4.35	98
SHIR-602589	13.5	2.29	52.9	4.33	98
SHIR-602612	13.5	2.40	55.4	3.90	96
SHIR-602613	14.4	2.46	56.1	3.84	99
SHIR-602614	13.7	3.49	57.3	3.73	97
SHIR-602630	13.2	2.73	50.7	4.59	94
SHIR-602632	13.1	1.98	55.3	3.81	97
SHIR-602636	14.1	2.87	60.2	3.31	97
SHIR-602647	14.2	3.27	73.7	2.96	92
SHIR-602649	14.6	3.17	57.6	3.64	92
SHIR-602654	13.1	2.90	53.7	4.26	97
SHIR-602659	12.6	2.36	49.3	4.63	100
SHIR-602667	13.2	1.99	58.9	3.93	95
SHIR-603098	13.3	2.53	60.3	3.43	95
SHIR-603100	14.4	3.03	56.0	3.92	96
SHIR-603111	13.7	2.20	52.8	4.48	95
SHIR-603117	13.5	2.93	57.2	3.55	96
SHIR-603119	13.9	3.27	59.8	3.28	97
SHIR-603124	13.8	2.11	74.3	2.82	89
SHIR-603130	13.7	2.79	57.6	3.71	100
SHIR-603132	14.2	2.27	60.4	3.43	93
SHIR-603135	14.5	3.23	52.8	4.21	95
Mean	13.7	2.66	55.4	3.98	96
LSD			4.2***	0.36***	4***

\*\*\* Significant difference at P <0.001

**Table S2.** Initial moisture content (MC), 100 grain weight (GW), time to 70% germination (T<sub>70</sub>), germination rate (GR) and final germination percentage (FG) of 24 diversity varieties. Experiment 7.

Variety	MC (%)	GW (g)	T70 (h)	GR (grain/h)	FG (%)
4108	14.2	2.24	67.2	3.05	95
Arlesienne	13.8	3.18	34.9	5.70	97
Carnaroli	14.8	3.08	55.2	3.93	98
Cigalon	13.7	2.58	65.4	3.07	92
Darmali	13.3	1.75	55.2	3.92	92
Domsiah_III	12.1	1.44	61.0	3.52	97
Doongara	13.2	2.10	52.6	4.23	98
IR28	12.4	2.29	57.8	3.74	96
Irat109	13.1	2.84	60.1	3.40	97
Kinandang_Patong_(Y2)	12.9	1.98	57.9	3.45	96
Koshihikari	13.5	2.31	56.1	3.62	99
Langi	13.9	2.26	52.7	4.37	97
Oscar	13.6	2.94	38.5	5.23	96
Reiziq	12.8	2.71	58.3	3.68	95
RIL266	13.5	1.85	52.9	4.21	95
Sherpa	13.7	2.44	57.4	3.49	97
Tachiminori	13.5	2.60	54.1	4.21	98
Toro2	11.8	2.29	47.4	4.60	97
Vialone_Nano_(Y4)	12.9	2.87	47.8	5.16	96
YRK5	13.2	2.39	57.7	3.66	99
YRL24	13.4	1.69	40.5	5.20	98
YRM69_LT2	14.3	2.13	50.8	4.34	96
YRM70	11.7	2.38	56.1	4.01	98
YRW4	14.0	2.58	73.7	2.94	97
Mean	13.3	2.37	54.6	4.03	97
LSD			4.9 <sup>***</sup>	0.42 <sup>***</sup>	3 <sup>***</sup>

<sup>\*\*\*</sup> Significant difference at P <0.001