

Supplementary Materials

Table S1. Characteristics of all sorghum cultivars assessed for drought and salinity.

Characteristic	WATASOLOT	KUALI*	SUPER-1	SUPER-2	SAMURAI-2*	NUMBU*
	1	2	3	4	5	6
Released	No	No	18.12.2013	18.12.2013	7.2.2014	22.10.2001
Origin	NTT (East Nusa Tenggara)	NTT (East Nusa Tenggara)	improved Watar Hamu Putih	Improved ICRISAT line 15021	Gamma (300 Gy) of line Zh-30	India
50% Flowering age (days)	n/a	n/a	56	60	63	69
Harvest (days)	n/a	n/a	105-110	115-120	113	100-105
Plant height (cm)	n/a	n/a	204.8	229.7	198.7	185
Tiller	n/a	n/a	no	yes	n/a	no
Panicle	n/a	n/a	compact, ellips	scattered	semi compact, ellips	compact, ellips
Panicle length (cm)	n/a	n/a	26.7	26.3	33.9	22-23
Seed shape	n/a	n/a	n/a	n/a	n/a	oval
Seed color	n/a	n/a	white	reddish cream	white lime	light brown
Seed size (mm)	n/a	n/a	4.3; 4.0; 2.6	4.6; 3.6; 2.9	n/a	4.2; 4.8; 4.4
Weight of 1000 seeds	n/a	n/a	28 g	30.1 g	27.4 g	36-37 g
Average yield (ton/ha)	2-5	2-5	2.6	3.0	6.4	3.11
Potential yield (ton/ha)	n/a	n/a	5.7	6.3	8.5	4.0-5.0
Protein (%)	n/a	n/a	12.9	9.2	12.40	9.12
Fat (%)	n/a	n/a	2.2	3.1	2.70	3.94
Carbohydrate (%)	n/a	n/a	71.3	75.6	56.40	84.58
Brix (%)	n/a	n/a	13.5	12.7	7.80	n/a
Tannin (%)	n/a	n/a	0.11	0.3	0.01	n/a
Ethanol production (L/ha)	n/a	n/a	2.8	2.7	6.66	n/a
Purpose	food	food	ethanol	ethanol	food	food/energy
Resistance to P&D	n/a	n/a	yes	yes	yes	yes
Drought	yes	yes	yes	yes	yes	n/a
Salinity	yes	yes	n/a	n/a	n/a	n/a

Source: Cereal Crops Research Institute of Indonesia

* cultivars used in this experiment