

**Table S1.** Temperature and rainfall measured in Karlsruhe during the summer season 2018.

Month	Average temperature	Highest temperature	Lowest temperature	Rain
May	18.0 °C	29 °C	6.3 °C	78.2 mm
June	21.0 °C	31 °C	10.9 °C	52.3 mm
July	23.0 °C	35 °C	15.0 °C	82.6 mm
August	23.0 °C	36 °C	9.4 °C	13.8 mm
September	18.0 °C	32 °C	6.2 °C	25.8 mm

**Table S2.** Analysis of variance of ten agro-morphological traits recorded from 14 sweet, grain and dual-purpose sorghum genotypes.

Source	DF	PHT	LN	IN	FLW	CY	JY	BY	Brix	SY	EY
Genotype	13	10415.09****	9.65*** *	5.95*	1259.52**	2806.63****	688.30****	362.50****	141.40****	9.61****	4.49****
Replication	2	121.80ns	0.07ns	0.07ns	7.66ns	4.58ns	1.86ns	3.59ns	0.46ns	0.04ns	0.01ns
Error	26	53.35	0.04	0.04	5.74	8.43	1.17	32.35	0.11	0.03	0.01
Mean		357.13	11.07	10.92	41.44	75.47	30.55	31.99	11.88	3.39	3.01
C.V		2.04	1.93	1.95	5.78	3.84	3.55	4.7	2.80	5.62	3.80

PHT, Plant height (cm); LN, leaf number; IN, Internode number; FLW, Fresh leaf weight (g/plant); CY, Cane yield (t/ha); Juice yield (Kl/ha); BY, Bagasse yield (t/ha); Brix, SY, Sugar yield (t/ha) and EY, theoretical ethanol yield (Kl/ha). ns= non-significant; \*, \*\*, \*\*\* and \*\*\*\* Significant at 0.05, 0.01, 0.001, and 0.0001 probability levels, respectively.