

TABLE 6: PHYSICAL PARAMETERS & IMAGE ANALYSIS OF SORGHUM ACCORDING TO GRADE (2020/21)

Number of samples	Region	Test weight, kg/hl			1000 Kernel mass, g			Image Analysis Length (mm) Average			Image Analysis Length (mm) Std Dev			Width (mm) Average			Width (mm) Std Dev			Elongation (%) Average			Elongation (%) Std Dev			Volume to surface ratio (%) Average			Volume to surface ratio (%) Std Dev		
		ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.
GRADE: GM1																															
1	Region 27	81.3	-	-	23.3	-	-	4.30	-	-	0.25	-	-	3.84	-	-	0.18	-	-	89	-	-	4.7	-	-	69	-	-	3.3	-	-
2	Region 28	80.5	79.8	81.1	29.3	27.5	31.0	4.29	4.18	4.40	0.26	0.24	0.28	3.87	3.84	3.90	0.20	0.19	0.21	90	89	92	4.7	4.4	5.0	69	68	70	3.6	3.3	3.8
7	Region 29	80.4	76.8	82.3	27.4	23.2	29.2	4.26	4.19	4.35	0.24	0.22	0.26	3.89	3.83	3.96	0.20	0.18	0.24	91	90	93	4.8	4.3	5.3	69	68	70	3.4	3.0	3.9
1	Region 33	83.4	-	-	29.0	-	-	4.36	-	-	0.28	-	-	3.94	-	-	0.19	-	-	91	-	-	4.7	-	-	68	-	-	3.0	-	-
9	Region 35	77.1	65.0	81.2	28.2	20.1	31.4	4.66	4.20	4.86	0.31	0.26	0.36	3.80	3.58	3.90	0.21	0.16	0.25	82	80	85	5.4	4.9	5.9	72	66	74	3.8	3.1	4.6
2	Region 36	80.1	78.7	81.4	25.9	25.5	26.3	4.28	4.19	4.36	0.24	0.23	0.25	3.84	3.84	3.84	0.19	0.17	0.20	90	88	92	4.2	4.0	4.5	69	68	69	3.2	2.9	3.5
22	Ave. GM1	79.2			27.6			4.44			0.27			3.85			0.20			87			5.0			70			3.5		
	Min. GM1	65.0			20.1			4.18			0.22			3.58			0.16			80			4.0			66			2.9		
	Max. GM1	83.4			31.4			4.86			0.36			3.96			0.25			93			5.9			74			4.6		
GRADE: GM2																															
1	Region 24	73.0	-	-	28.1	-	-	4.68	-	-	0.29	-	-	3.86	-	-	0.19	-	-	83	-	-	5.2	-	-	73	-	-	3.4	-	-
2	Region 35	73.9	72.4	75.4	23.0	21.5	24.4	4.40	4.29	4.51	0.25	0.23	0.27	3.87	3.85	3.89	0.21	0.20	0.21	88	86	91	4.4	4.3	4.6	70	69	71	3.5	3.3	3.7
3	Ave. GM2	73.6			24.7			4.49			0.26			3.87			0.20			86			4.7			71			3.5		
	Min. GM2	72.4			21.5			4.29			0.23			3.85			0.19			83			4.3			69			3.3		
	Max. GM2	75.4			28.1			4.68			0.29			3.89			0.21			91			5.2			73			3.7		
GRADE: GM3																															
1	Region 29	76.6	-	-	26.1	-	-	4.30	-	-	0.25	-	-	3.89	-	-	0.21	-	-	91	-	-	4.7	-	-	69	-	-	3.4	-	-
2	Region 35	76.4	73.1	79.7	27.5	23.1	31.8	4.60	4.36	4.84	0.31	0.28	0.33	3.77	3.69	3.85	0.20	0.18	0.22	82	80	85	5.3	4.9	5.7	71	68	74	3.8	3.7	3.9
3	Ave. GM3	76.5			27.0			4.50			0.29			3.81			0.20			85			5.1			70			3.7		
	Min. GM3	73.1			23.1			4.30			0.25			3.69			0.18			80			4.7			68			3.4		
	Max. GM3	79.7			31.8			4.84			0.33			3.89			0.22			91			5.7			74			3.9		
GRADE: COS																															
1	Region 29	79.4	-	-	27.4	-	-	4.19	-	-	0.31	-	-	3.82	-	-	0.26	-	-	91	-	-	5.3	-	-	68	-	-	4.4	-	-
1	Region 35	79.6	-	-	29.5	-	-	4.32	-	-	0.30	-	-	3.76	-	-	0.19	-	-	87	-	-	5.8	-	-	68	-	-	3.7	-	-
2	Ave. COS	79.5			28.5			4.25			0.31			3.79			0.23			89			5.5			68			4.1		
	Min. COS	79.4			27.4			4.19			0.30			3.76			0.19			87			5.3			68			3.7		
	Max. COS	79.6			29.5			4.32			0.31			3.82			0.26			91			5.8			68			4.4		

TABLE 6: PHYSICAL PARAMETERS & IMAGE ANALYSIS OF SORGHUM ACCORDING TO GRADE (2020/21)
(continue)

Number of samples	Region	Test weight, kg/ha			1000 Kernel mass, g			Image Analysis Length (mm) Average			Image Analysis Length (mm) Std Dev			Width (mm) Average			Width (mm) Std Dev			Elongation (%) Average			Elongation (%) Std Dev			Volume to surface ratio (%) Average			Volume to surface ratio (%) Std Dev		
		ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.
GRADE: GH1																															
1	Region 18	74.5	-	-	26.6	-	-	4.18	-	-	0.24	-	-	3.88	-	-	0.22	-	-	93	-	-	3.9	-	-	68	-	-	3.6	-	-
2	Region 19	74.4	72.8	75.9	23.2	22.0	24.4	4.19	4.12	4.26	0.25	0.24	0.26	3.79	3.77	3.81	0.21	0.20	0.22	91	90	92	5.0	5.0	5.1	67	66	68	3.5	3.5	3.5
1	Region 29	78.1	-	-	27.0	-	-	4.03	-	-	0.27	-	-	3.61	-	-	0.21	-	-	90	-	-	5.5	-	-	65	-	-	3.6	-	-
2	Region 33	79.4	79.2	79.6	27.5	27.4	27.6	4.16	4.14	4.18	0.19	0.19	0.19	3.86	3.82	3.90	0.16	0.15	0.17	93	92	93	3.7	3.5	3.9	68	67	68	2.7	2.7	2.7
3	Region 35	78.8	78.2	79.6	27.1	25.6	28.8	4.20	3.88	4.39	0.25	0.22	0.26	3.73	3.51	3.85	0.18	0.16	0.21	89	88	91	4.4	4.0	5.0	67	62	70	3.2	3.0	3.5
9	Ave. GH1	77.4	-	-	26.3	-	-	4.17	-	-	0.24	-	-	3.78	-	-	0.19	-	-	91	-	-	4.5	-	-	67	-	-	3.3	-	-
	Min. GH1	72.8	-	-	22.0	-	-	3.88	-	-	0.19	-	-	3.51	-	-	0.15	-	-	88	-	-	3.5	-	-	62	-	-	2.7	-	-
	Max. GH1	79.6	-	-	28.8	-	-	4.39	-	-	0.27	-	-	3.90	-	-	0.22	-	-	93	-	-	5.5	-	-	70	-	-	3.6	-	-
GRADE: GH2																															
1	Region 19	61.1	-	-	25.3	-	-	4.26	-	-	0.28	-	-	3.83	-	-	0.19	-	-	90	-	-	4.9	-	-	68	-	-	3.6	-	-
1	Ave. GH2	61.1	-	-	25.3	-	-	4.26	-	-	0.28	-	-	3.83	-	-	0.19	-	-	90	-	-	4.9	-	-	68	-	-	3.6	-	-
	Min. GH2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Max. GH2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GRADE: COS																															
1	Region 24	71.8	-	-	26.9	-	-	4.30	-	-	0.23	-	-	3.83	-	-	0.16	-	-	89	-	-	4.4	-	-	69	-	-	2.9	-	-
1	Ave. COS	71.8	-	-	26.9	-	-	4.30	-	-	0.23	-	-	3.83	-	-	0.19	-	-	89	-	-	4.4	-	-	69	-	-	2.9	-	-
	Min. COS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Max. COS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	Ave. sorghum	77.6	61.1	-	27.0	20.1	-	4.37	3.88	-	0.27	0.19	-	3.83	3.51	-	0.20	0.15	-	88	80	-	4.9	3.5	-	69	62	-	3.5	2.7	-
	Min. sorghum	61.1	-	-	20.1	-	-	3.88	-	-	0.19	-	-	3.51	-	-	0.15	-	-	80	-	-	3.5	-	-	62	-	-	2.7	-	-
	Max. sorghum	83.4	-	-	31.8	-	-	4.86	-	-	0.36	-	-	3.96	-	-	0.26	-	-	93	-	-	5.9	-	-	74	-	-	4.6	-	-