

TABLE 6: PHYSICAL PARAMETERS & IMAGE ANALYSIS OF SORGHUM ACCORDING TO GRADE (2017/2018)

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			Relative Roundness (%) Average			Relative Roundness (%) 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.			
GRADE: GM1																															
3	Region 18	73.4	71.7	75.8	21.7	19.9	24.5	4.60	4.48	4.69	0.36	0.33	0.38	3.95	3.78	4.17	0.29	0.26	0.32	86	82	89	5.3	5.0	5.7	72	71	75	4.9	4.3	5.3
1	Region 24	80.3	-	-	25.1	-	-	4.29	-	-	0.32	-	-	3.91	-	-	0.32	-	-	91	-	-	4.2	-	-	69	-	-	4.9	-	-
1	Region 26	80.7	-	-	22.3	-	-	4.15	-	-	0.35	-	-	3.80	-	-	0.34	-	-	92	-	-	5.5	-	-	67	-	-	5.5	-	-
2	Region 27	78.2	77.5	78.9	26.1	25.0	27.2	4.61	4.59	4.63	0.30	0.29	0.31	4.13	4.06	4.19	0.28	0.23	0.32	90	89	91	4.7	4.7	4.7	74	73	74	4.5	4.0	4.9
9	Region 29	78.5	76.0	82.3	25.6	23.2	29.5	4.48	4.12	4.71	0.34	0.28	0.42	3.98	3.73	4.20	0.33	0.28	0.40	89	87	91	5.1	4.4	5.7	71	66	75	5.2	4.4	6.6
1	Region 31	77.5	-	-	26.0	-	-	4.57	-	-	0.37	-	-	4.01	-	-	0.31	-	-	88	-	-	5.1	-	-	73	-	-	5.4	-	-
5	Region 35	80.6	78.9	82.1	28.0	21.6	31.3	4.52	4.32	4.80	0.33	0.28	0.38	3.96	3.75	4.17	0.30	0.23	0.43	88	84	91	5.3	4.3	6.1	72	68	75	4.9	4.1	6.5
22	Ave. GM1	78.4	-	-	25.5	-	-	4.50	-	-	0.34	-	-	3.97	-	-	0.31	-	-	89	-	-	5.1	-	-	72	-	-	5.1	-	-
	Min. GM1	71.7	-	-	19.9	-	-	4.12	-	-	0.28	-	-	3.73	-	-	0.23	-	-	82	-	-	4.2	-	-	66	-	-	4.0	-	-
	Max. GM1	82.3	-	-	31.3	-	-	4.80	-	-	0.42	-	-	4.20	-	-	0.43	-	-	92	-	-	6.1	-	-	75	-	-	6.6	-	-
GRADE: GM2																															
1	Region 27	75.7	-	-	24.4	-	-	4.67	-	-	0.30	-	-	4.07	-	-	0.29	-	-	87	-	-	5.2	-	-	74	-	-	4.5	-	-
1	Region 29	80.3	-	-	27.0	-	-	4.51	-	-	0.36	-	-	4.01	-	-	0.33	-	-	89	-	-	5.3	-	-	72	-	-	5.4	-	-
2	Ave. GM2	78.0	-	-	25.7	-	-	4.59	-	-	0.33	-	-	4.04	-	-	0.31	-	-	88	-	-	5.2	-	-	73	-	-	5.0	-	-
	Min. GM2	75.7	-	-	24.4	-	-	4.51	-	-	0.30	-	-	4.01	-	-	0.29	-	-	87	-	-	5.2	-	-	74	-	-	4.5	-	-
	Max. GM2	80.3	-	-	27.0	-	-	4.67	-	-	0.36	-	-	4.07	-	-	0.33	-	-	89	-	-	5.3	-	-	74	-	-	5.4	-	-
GRADE: GM3																															
2	Region 29	76.4	75.3	77.5	24.7	24.3	25.0	4.27	4.18	4.36	0.31	0.30	0.31	3.87	3.83	3.91	0.30	0.27	0.33	91	90	92	5.2	4.9	5.6	69	67	70	4.7	4.5	5.0
1	Region 35	80.1	-	-	25.8	-	-	4.40	-	-	0.27	-	-	3.85	-	-	0.24	-	-	88	-	-	4.5	-	-	70	-	-	4.0	-	-
3	Ave. GM3	77.6	-	-	25.0	-	-	4.31	-	-	0.30	-	-	3.86	-	-	0.28	-	-	90	-	-	5.0	-	-	69	-	-	4.5	-	-
	Min. GM3	75.3	-	-	24.3	-	-	4.18	-	-	0.27	-	-	3.83	-	-	0.24	-	-	88	-	-	4.5	-	-	67	-	-	4.0	-	-
	Max. GM3	80.1	-	-	25.8	-	-	4.40	-	-	0.31	-	-	3.91	-	-	0.33	-	-	92	-	-	5.6	-	-	70	-	-	5.0	-	-

TABLE 6: PHYSICAL PARAMETERS & IMAGE ANALYSIS OF SORGHUM ACCORDING TO GRADE (2017/2018)
(continue)

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		Relative Roundness (%) Average		Relative Roundness (%) Std Dev		Volume to surface ratio (%) Average		Volume to surface ratio (%) Std Dev		
		ave.	max.	ave.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.
GRADE: GH1																						
1	Region 18	75.4	-	23.0	-	4.19	-	0.37	-	3.80	-	0.37	-	91	-	5.2	-	67	-	5.8	-	-
1	Region 19	74.7	-	24.4	-	4.22	-	0.29	-	3.87	-	0.22	-	92	-	4.4	-	68	-	4.2	-	-
1	Region 20	75.6	-	27.8	-	4.36	-	0.29	-	4.06	-	0.29	-	93	-	4.6	-	71	-	4.6	-	-
1	Region 21	75.6	-	21.8	-	4.01	-	0.30	-	3.68	-	0.29	-	92	-	4.0	-	65	-	4.4	-	-
3	Region 24	75.4	73.8	21.8	20.7	23.4	4.14	4.11	4.18	3.72	3.70	0.31	0.27	90	90	5.4	4.8	66	66	5.3	4.7	5.8
2	Region 29	74.6	74.2	20.3	24.2	4.09	4.05	4.14	0.30	3.71	3.65	0.27	0.25	91	90	4.9	4.5	66	65	4.5	4.2	4.8
2	Region 35	77.1	74.7	23.3	24.1	4.22	4.20	4.23	0.36	3.76	3.74	0.33	0.26	89	88	5.6	5.3	67	67	5.4	4.7	6.2
11	Ave. GH1	75.5	-	23.1	-	4.17	-	0.33	-	3.77	-	0.30	-	91	-	5.0	-	67	-	5.0	-	-
	Min. GH1	73.8	-	20.3	-	4.01	-	0.28	-	3.65	-	0.22	-	88	-	4.0	-	65	-	4.2	-	-
	Max. GH1	79.4	-	27.8	-	4.36	-	0.41	-	4.06	-	0.40	-	93	-	5.9	-	71	-	6.2	-	-
GRADE: GH2																						
1	Region 17	54.1	-	17.0	-	4.15	-	0.45	-	3.64	-	0.32	-	88	-	8.4	-	66	-	5.0	-	-
1	Region 18	70.9	-	19.7	-	4.54	-	0.39	-	3.95	-	0.28	-	87	-	5.9	-	72	-	5.2	-	-
1	Region 20	71.0	-	19.7	-	4.11	-	0.29	-	3.65	-	0.30	-	89	-	5.8	-	66	-	4.5	-	-
1	Region 27	77.0	-	23.2	-	4.28	-	0.33	-	3.78	-	0.32	-	89	-	6.5	-	68	-	4.8	-	-
4	Ave. GH2	68.3	-	19.9	-	4.27	-	0.36	-	3.76	-	0.30	-	88	-	6.7	-	68	-	4.9	-	-
	Min. GH2	54.1	-	17.0	-	4.11	-	0.29	-	3.64	-	0.28	-	87	-	5.8	-	66	-	4.5	-	-
	Max. GH2	77.0	-	23.2	-	4.54	-	0.45	-	3.95	-	0.32	-	89	-	8.4	-	72	-	5.2	-	-
42	Ave. sorghum	76.6	-	24.3	-	4.38	-	0.33	-	3.90	-	0.31	-	89	-	5.2	-	70	-	5.0	-	-
	Min. sorghum	54.1	-	17.0	-	4.01	-	0.27	-	3.64	-	0.22	-	82	-	4.0	-	65	-	4.0	-	-
	Max. sorghum	82.3	-	31.3	-	4.80	-	0.45	-	4.20	-	0.43	-	93	-	8.4	-	75	-	6.6	-	-