

TABLE 6: PHYSICAL PARAMETERS & IMAGE ANALYSIS OF SORGHUM ACCORDING TO GRADE (2019/20)

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																															
1	Region 16	77.1	-	-	31.5	-	-	4.58	-	-	0.30	-	-	4.01	-	-	0.26	-	-	88	-	-	6.1	-	-	73	-	-	4.0	-	-
4	Region 29	78.1	75.0	79.5	23.5	22.3	25.2	4.49	4.40	4.63	0.30	0.28	0.34	3.91	3.86	3.97	0.21	0.19	0.25	87	86	88	5.4	4.7	5.8	71	70	73	3.8	3.5	4.2
7	Region 35	77.5	75.3	78.6	25.6	22.4	27.5	4.72	4.63	4.83	0.34	0.28	0.37	3.81	3.72	3.92	0.24	0.21	0.27	81	80	82	5.7	5.2	6.0	72	71	74	4.2	3.3	4.9
12	Ave. GM1	77.7			25.4			4.63			0.32			3.86			0.23			84			5.6			72			4.1		
	Min. GM1	75.0			22.3			4.40			0.28			3.72			0.19			80			4.7			70			3.3		
	Max. GM1	79.5			31.5			4.83			0.37			4.01			0.27			88			6.1			74			4.9		
GRADE: GM2																															
1	Region 29	76.2	-	-	25.4	-	-	4.23	-	-	0.26	-	-	3.79	-	-	0.20	-	-	90	-	-	5.0	-	-	68	-	-	3.4	-	-
1	Region 35	77.0	-	-	25.0	-	-	4.57	-	-	0.37	-	-	3.67	-	-	0.28	-	-	81	-	-	5.7	-	-	70	-	-	4.9	-	-
2	Ave. GM2	76.6			25.2			4.40			0.31			3.73			0.24			85			5.4			69			4.2		
	Min. GM2	76.2			25.0			4.23			0.26			3.67			0.20			81			5.0			68			3.4		
	Max. GM2	77.0			25.4			4.57			0.37			3.79			0.28			90			5.7			70			4.9		
GRADE: GM3																															
2	Region 29	79.5	76.2	80.8	22.9	22.7	23.0	4.51	4.48	4.54	0.32	0.29	0.34	3.87	3.85	3.89	0.24	0.24	0.25	86	86	86	5.8	5.8	5.9	71	71	71	4.1	3.9	4.3
1	Region 30	76.6	-	-	20.3	-	-	4.49	-	-	0.52	-	-	3.88	-	-	0.24	-	-	88	-	-	6.4	-	-	70	-	-	3.9	-	-
8	Region 35	76.1	69.2	79.8	21.8	19.2	25.4	4.40	4.25	4.72	0.32	0.27	0.42	3.78	3.68	3.85	0.24	0.20	0.28	86	81	89	6.0	5.4	6.5	69	67	72	4.2	3.5	5.2
1	Region 36	73.5	-	-	22.1	-	-	4.29	-	-	0.27	-	-	3.89	-	-	0.23	-	-	91	-	-	4.5	-	-	69	-	-	3.9	-	-
12	Ave. GM3	76.5			21.8			4.42			0.33			3.81			0.24			87			5.9			70			4.2		
	Min. GM3	69.2			19.2			4.25			0.27			3.68			0.20			81			4.5			67			3.5		
	Max. GM3	80.8			25.4			4.72			0.52			3.89			0.28			91			6.5			72			5.2		
GRADE: COS																															
1	Region 29	71.1	-	-	21.1	-	-	4.36	-	-	0.33	-	-	3.76	-	-	0.24	-	-	87	-	-	6.1	-	-	69	-	-	4.1	-	-
1	Region 31	49.1	-	-	19.0	-	-	4.45	-	-	0.38	-	-	3.71	-	-	0.32	-	-	84	-	-	7.2	-	-	69	-	-	5.1	-	-
2	Ave. COS	60.1			20.1			4.40			0.35			3.73			0.28			85			6.6			69			4.6		
	Min. COS	49.1			19.0			4.36			0.33			3.71			0.24			84			6.1			69			4.1		
	Max. COS	71.1			21.1			4.45			0.38			3.76			0.32			87			7.2			69			5.1		

TABLE 6: PHYSICAL PARAMETERS & IMAGE ANALYSIS OF SORGHUM ACCORDING TO GRADE (2019/20)
(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			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: GH1																															
1	Region 16	78.7	-	-	24.1	-	-	4.37	-	-	0.26	-	-	3.99	-	-	0.22	-	-	91	-	-	4.8	-	-	70	-	-	3.7	-	-
1	Region 17	72.0	-	-	24.4	-	-	4.31	-	-	0.30	-	-	3.90	-	-	0.24	-	-	91	-	-	5.3	-	-	69	-	-	4.2	-	-
1	Region 20	78.3	-	-	27.5	-	-	4.31	-	-	0.28	-	-	3.94	-	-	0.23	-	-	92	-	-	3.9	-	-	70	-	-	4.0	-	-
1	Region 21	74.8	-	-	24.7	-	-	4.30	-	-	0.30	-	-	3.94	-	-	0.22	-	-	92	-	-	4.9	-	-	69	-	-	4.0	-	-
1	Region 24	74.6	-	-	23.3	-	-	4.25	-	-	0.27	-	-	3.87	-	-	0.20	-	-	91	-	-	5.1	-	-	68	-	-	3.6	-	-
1	Region 27	79.8	-	-	27.4	-	-	4.64	-	-	0.29	-	-	3.95	-	-	0.21	-	-	85	-	-	5.2	-	-	73	-	-	3.6	-	-
1	Region 33	76.0	-	-	25.1	-	-	4.26	-	-	0.29	-	-	3.91	-	-	0.22	-	-	92	-	-	4.8	-	-	69	-	-	4.0	-	-
2	Region 35	75.7	74.0	77.4	18.8	18.5	19.0	4.31	4.26	4.36	0.31	0.31	0.31	3.79	3.77	3.82	0.26	0.23	0.28	88	87	90	5.6	5.1	6.0	69	68	69	4.3	4.3	4.4
1	Region 36	82.8	-	-	25.6	-	-	4.43	-	-	0.30	-	-	3.95	-	-	0.21	-	-	89	-	-	4.9	-	-	71	-	-	4.0	-	-
10	Ave. GH1	76.8	-	-	24.0	-	-	4.35	-	-	0.29	-	-	3.90	-	-	0.23	-	-	90	-	-	5.0	-	-	70	-	-	4.0	-	-
	Min. GH1	72.0	-	-	18.5	-	-	4.25	-	-	0.26	-	-	3.77	-	-	0.20	-	-	85	-	-	3.9	-	-	68	-	-	3.6	-	-
	Max. GH1	82.8	-	-	27.5	-	-	4.64	-	-	0.31	-	-	3.99	-	-	0.28	-	-	92	-	-	6.0	-	-	73	-	-	4.4	-	-
GRADE: GH2																															
1	Region 33	76.3	-	-	20.9	-	-	4.35	-	-	0.36	-	-	3.88	-	-	0.28	-	-	90	-	-	5.9	-	-	70	-	-	5.0	-	-
1	Region 35	74.8	-	-	25.2	-	-	4.18	-	-	0.25	-	-	3.83	-	-	0.22	-	-	92	-	-	4.5	-	-	67	-	-	3.6	-	-
2	Ave. GH2	75.6	-	-	23.1	-	-	4.26	-	-	0.31	-	-	3.86	-	-	0.25	-	-	91	-	-	5.2	-	-	69	-	-	4.3	-	-
	Min. GH2	74.8	-	-	20.9	-	-	4.18	-	-	0.25	-	-	3.83	-	-	0.22	-	-	90	-	-	4.5	-	-	67	-	-	3.6	-	-
	Max. GH2	76.3	-	-	25.2	-	-	4.35	-	-	0.36	-	-	3.88	-	-	0.28	-	-	92	-	-	5.9	-	-	70	-	-	5.0	-	-
40	Ave. sorghum	76.1	-	-	23.6	-	-	4.45	-	-	0.32	-	-	3.84	-	-	0.24	-	-	87	-	-	5.6	-	-	70	-	-	4.1	-	-
	Min. sorghum	49.1	-	-	18.5	-	-	4.18	-	-	0.25	-	-	3.67	-	-	0.19	-	-	80	-	-	3.9	-	-	67	-	-	3.3	-	-
	Max. sorghum	82.8	-	-	31.5	-	-	4.83	-	-	0.52	-	-	4.01	-	-	0.32	-	-	92	-	-	7.2	-	-	74	-	-	5.2	-	-