

TABLE 11: IMPORTED SORGHUM QUALITY

Quality of sorghum imported from March 2018 to February 2019 compared to RSA crop quality of the 2017/2018 season

Country of origin		USA		RSA Crop Average	
Class sorghum		GM		GM	
Grade sorghum		GM2	GM3	GM2	GM3
Grading					
Foreign matter, %		2.03	1.43	0.94	0.09
Unthreshed sorghum, %		1.40	1.40	2.58	2.68
Defective sorghum, %		1.72	1.22	0.78	1.35
Small kernel sorghum, %		2.90	2.40	0.95	0.37
Total defective sorghum and small kernel sorghum, %		4.62	3.62	1.73	1.72
Sorghum of another group, %		0.00	0.00	0.08	0.00
White sorghum, %		4.90	11.59	0.00	66.72
Total of sorghum of another group and white sorghum, %		4.90	11.59	0.08	66.72
Weather-stained sorghum, %		5.52	4.61	1.45	2.17
Physical parameters					
Test weight, kg/hl		78.2	78.5	78.0	77.6
1000 Kernel Mass, g (14% moisture base)		22.9	23.8	25.7	25.0
# Image analysis	Length, mm	4.32	4.34	4.59	4.31
	Standard Deviation	0.34	0.31	0.33	0.30
	Width, mm	3.71	3.74	4.04	3.86
	Standard Deviation	0.33	0.29	0.31	0.28
	Roundness, %	86	86	88	90
	Standard Deviation	6.0	4.9	5.2	5.0
	Surface Area, %	68	68	73	69
	Standard Deviation	5.2	4.7	5.0	4.5
Chemical composition					
Moisture, %		12.6	12.7	11.6	11.2
Protein, % (db)		9.52	9.88	11.9	9.0
Starch content, % (db)		72.9	72.9	70.6	73.3
Hunterlab colour (fraction of dehulled sample above the 1.8 mm slotted sieve milled on Retch mill through 0.5 mm sieve)	L	76.43	74.74	70.49	77.70
	a	3.92	4.16	5.07	3.12
	b	10.73	10.89	9.79	10.86
Mycotoxins (µg/kg)					
Aflatoxin B ₁		ND	ND	ND	ND
Aflatoxin B ₂		ND	ND	ND	ND
Aflatoxin G ₁		ND	ND	ND	ND
Aflatoxin G ₂		ND	ND	ND	ND
Fumonisin B ₁		ND	ND	ND	ND
Fumonisin B ₂		ND	ND	ND	ND
Fumonisin B ₃		ND	ND	ND	ND
Deoxynivalenol		ND	ND	ND	ND
15-ADON		ND	ND	ND	ND
Ochratoxin A		ND	ND	ND	ND
Zearalenone		ND	ND	ND	ND
HT2		ND	ND	ND	ND
T2		ND	ND	ND	ND
Number of samples		1	3	2	3