

Table 6: Fatty acid profile results of a selection of crop quality samples from the 2022/23 season

Cultivar	Region	g Fatty acids/100 g Fatty Acids																	
		C14:0	C16:0	C16:1	C17:0	C18:0	C18:1 cis	C18:1 n7*	C18:2 cis	C18:3 n6	C18:3 n5	C18:3 n3	C20:0	C20:1	C20:2	C22:0	C24:0	Unknown 1	Unknown 2
North West	14	ND	10.50	LOQ	LOQ	5.05	21.23	1.5	52.5	ND	7.8	0.437	0.157	ND	0.472	LOQ	ND	ND	ND
	15	ND	10.37	LOQ	LOQ	5.13	21.23	1.4	53.2	ND	7.2	0.443	0.157	ND	0.470	LOQ	LOQ	ND	ND
	16	ND	10.39	LOQ	LOQ	5.22	19.98	1.3	53.4	ND	8.2	0.454	0.150	ND	0.498	LOQ	LOQ	ND	ND
	Min	-	10.37	-	-	5.05	19.98	1.3	52.5	-	7.2	0.437	0.150	-	0.470	-	-	-	-
	Max	-	10.50	-	-	5.22	21.23	1.5	53.4	-	8.2	0.454	0.157	-	0.498	-	-	-	-
Free State	N	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	21	ND	10.35	LOQ	LOQ	5.02	19.32	1.3	54.1	ND	8.4	0.443	0.157	ND	0.474	LOQ	LOQ	ND	ND
	22	ND	10.26	LOQ	LOQ	4.92	19.54	1.3	54.3	ND	8.2	0.426	0.151	ND	0.440	LOQ	LOQ	ND	ND
	23	ND	10.35	LOQ	LOQ	4.63	18.82	1.3	55.1	ND	8.4	0.399	0.152	ND	0.426	LOQ	LOQ	ND	ND
	24	ND	10.30	LOQ	LOQ	4.87	21.04	1.3	52.5	ND	8.5	0.443	0.163	ND	0.472	0.143	LOQ	LOQ	ND
	28	ND	10.53	LOQ	LOQ	5.11	18.56	1.4	54.3	ND	8.8	0.392	LOQ	LOQ	0.392	LOQ	LOQ	LOQ	ND
	28	ND	9.77	LOQ	LOQ	5.82	19.57	1.3	53.7	ND	8.3	0.498	0.151	ND	0.477	LOQ	LOQ	LOQ	ND
	28	ND	10.33	LOQ	LOQ	4.95	20.06	1.3	54.1	ND	7.8	0.434	0.164	ND	0.448	LOQ	LOQ	LOQ	ND
	Min	-	9.77	-	-	4.63	18.56	1.3	52.5	-	7.8	0.392	0.151	-	0.392	-	-	-	-
	Max	-	10.53	-	-	5.82	21.04	1.4	55.1	-	8.8	0.498	0.163	-	0.477	0.143	-	-	-
Mpumalanga	N	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	29	ND	10.75	LOQ	LOQ	6.83	20.40	1.4	51.4	ND	7.8	0.481	LOQ	ND	0.397	LOQ	LOQ	ND	ND
	29	ND	9.51	LOQ	LOQ	5.48	20.56	1.4	53.4	ND	8.2	0.469	0.155	ND	0.497	0.148	LOQ	LOQ	ND
	29	ND	9.80	LOQ	LOQ	5.56	19.71	1.3	53.0	ND	9.0	0.472	0.143	ND	0.482	0.146	LOQ	LOQ	ND
	30	ND	10.02	LOQ	LOQ	5.21	18.98	1.3	53.4	ND	9.6	0.453	0.146	ND	0.474	LOQ	LOQ	LOQ	ND
	30	ND	10.53	LOQ	LOQ	4.72	20.84	1.4	52.8	ND	8.4	0.407	0.146	ND	0.441	LOQ	LOQ	LOQ	ND
	33	ND	11.5	LOQ	LOQ	4.52	21.75	1.5	52.5	ND	6.7	0.435	0.178	ND	0.475	0.143	LOQ	LOQ	LOQ
	33	ND	9.72	LOQ	LOQ	5.19	19.70	1.4	53.0	ND	9.6	0.450	0.141	ND	0.445	LOQ	LOQ	LOQ	LOQ
	Min	-	9.51	-	-	4.52	18.98	1.3	51.4	-	6.7	0.407	0.141	-	0.397	0.143	-	-	-
	Max	-	11.45	-	-	6.83	21.75	1.5	53.4	-	9.6	0.481	0.178	-	0.497	0.148	-	-	-
Gauteng	N	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	34	ND	9.68	LOQ	LOQ	4.72	19.59	1.3	54.4	ND	9.0	0.393	LOQ	ND	0.428	LOQ	LOQ	LOQ	LOQ
	35	ND	11.6	LOQ	LOQ	5.02	23.62	1.4	50.0	ND	7.0	0.380	0.156	ND	0.369	LOQ	LOQ	LOQ	LOQ
	36	ND	10.86	LOQ	LOQ	4.59	20.86	1.4	53.2	ND	7.7	0.411	0.160	ND	0.461	LOQ	LOQ	LOQ	LOQ
	Min	-	9.51	-	-	4.52	18.56	1.3	50.0	-	6.7	0.380	0.141	-	0.369	0.143	-	-	-
RSA	Max	-	11.6	-	-	6.83	23.62	1.5	55.1	-	9.6	0.498	0.178	-	0.498	0.148	-	-	-
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20

Note:
 All fatty acids marked with an asterisk (*) are not SANAS accredited.
 Limit of detection (LOD) = 0.09 g Fatty acid/100 g Fatty acids.
 Values below the limit of detection are reported as ND (not detected).
 Limit of quantitation (LOQ) = 0.28 g Fatty acid/100 g Fatty acids.
 Values below the limit of quantitation cannot be accurately quantified.