

Supplementary Materials: Development of a Highly Sensitive FcMito qPCR Assay for the Quantification of the Toxigenic Fungal Plant Pathogen *Fusarium culmorum*

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Table S1. List of fungal strains used for specificity testing of FcMito qPCR assay.

Fungal species	Strain code	Geographical origin, host/habitat of origin	FcMito qPCR assay
<i>F. culmorum</i>	CBS 110568	France, wheat	+
	CBS 139512	Poland, wheat	+
	CBS 129.73	Portugal, <i>Populus nigra</i>	+
	CBS 110269	Canada	+
	CBS 251.52	<i>Triticum aestivum</i> , grain, cv. Koga	+
	CBS 122.73	United Kingdom, <i>Triticum</i>	+
	CBS 256.51	Netherlands, soil	+
	CBS 171.28	Unknown	+
	CBS 579.97	Denmark, chopped stems, buried in soil	+
	CBS 173.31	Canada, <i>Avena sativa</i>	+
	MCR331	Italy, Sardinia	+
	MCR320	Italy, Sardinia	+
	MCR366	Italy, Sardinia	+
	MCR 321	Italy, Sardinia	+
	M601	Luxembourg, Burmerange	+
	M233	Luxembourg, Reisdorf	+
	Fc1g	Germany, winter wheat	+
	Fc2g	Germany, winter wheat	+
	Z Fc 0502*	Poland, potato	+
	Z Fc 0503*	Poland, potato	+
	Z Fc 0505*	Poland, potato	+
	Z Fc 0506*	Poland, potato	+
	Z Fc 0601*	Poland, potato	+
	Z Fc 0602*	Poland, potato	+
	Z Fc 0603*	Poland, potato	+
	Z Fc 0606*	Poland, potato	+
	Z Fc 0608*	Poland, potato	+

Z Fc 0706*	Poland, potato	+
Po Fc 0601*	Poland, winter wheat	+
Po Fc 0602*	Poland, winter wheat	+
Po Fc 0603*	Poland, winter wheat	+
Po Fc0604*	Poland, winter wheat	+
Po Fc 0605*	Poland, winter wheat	+
Po Fc 0606*	Poland, winter wheat	+
Po Fc 0607*	Poland, winter wheat	+
Po Fc 0608*	Poland, winter wheat	+
Po Fc 0610*	Poland, winter wheat	+
Po Fc 0611*	Poland, winter wheat	+
Po Fc 0701*	Poland, winter wheat	+
Po Fc 0702*	Poland, winter wheat	+
Po Fc 0703*	Poland, winter wheat	+
Po Fc 0704*	Poland, winter wheat	+
Po Fc 0705*	Poland, winter wheat	+
Po Fc 0707*	Poland, winter wheat	+
Po Fc 0708*	Poland, winter wheat	+
Po Fc 0710*	Poland, winter wheat	+
Po Fc 0711*	Poland, winter wheat	+
Po Fc 0712*	Poland, winter wheat	+
Po Fc 0713*	Poland, winter wheat	+
Po Fc 0714*	Poland, winter wheat	+
Po Fc 0715*	Poland, winter wheat	+
Pj Fc 0702*	Poland, spring wheat	+
Pj Fc 0703*	Poland, spring wheat	+
Pj Fc 0704*	Poland, spring wheat	+
Pj Fc 0705*	Poland, spring wheat	+
Pj Fc 0706*	Poland, spring wheat	+
Pj Fc 0707*	Poland, spring wheat	+
Pj Fc 0708*	Poland, spring wheat	+
Pj Fc 0709*	Poland, spring wheat	+
Pj Fc 0710*	Poland, spring wheat	+
Pj Fc 0711*	Poland, spring wheat	+
Pj Fc 0712*	Poland, spring wheat	+
Pj Fc 0801*	Poland, spring wheat	+
Pj Fc 0802*	Poland, spring wheat	+
Pj Fc 0803*	Poland, spring wheat	+

	Jj Fc 0502*	Poland, spring barley	+
	Jj Fc 0504*	Poland, spring barley	+
	Jj Fc 0512*	Poland, spring barley	+
	Jj Fc 0518*	Poland, spring barley	+
	Jj Fc 0526*	Poland, spring barley	+
	Jj Fc 0621*	Poland, spring barley	+
	Jj Fc 0629*	Poland, spring barley	+
	Jj Fc 0640*	Poland, spring barley	+
	Jj Fc 0641*	Poland, spring barley	+
	Jj Fc 0649*	Poland, spring barley	+
	Jj Fc 0801*	Poland, spring barley	+
	Jj Fc 0802*	Poland, spring barley	+
	Pz Fc 0802*	Poland, triticales	+
	Pz Fc 0803*	Poland, triticales	+
	Pz Fc 0804*	Poland, triticales	+
	Zo Fc 0801*	Poland, winter rye	+
	Zo Fc 0802*	Poland, winter rye	+
	Zo Fc 0803*	Poland, winter rye	+
	Zo Fc 0804*	Poland, winter rye	+
	O Fc 0801*	Poland, oats	+
<i>F. aethiopicum</i>	CBS 123667	Ethiopia, Gugsu womberma district, wheat	-
<i>F. acaciae-mearnsii</i>	CBS 110253	South Africa, <i>Acaciae mearnsii</i> (Leguminosae-mimosoideae)	-
	CBS 123662	Australia, soil	-
<i>F. asiaticum</i>	CBS 110258	China, Shanghai Province, wheat	-
	CBS 110257	Japan, barley	-
	CBS 110256	barley	-
<i>F. austroamericanum</i>	CBS 110246	Brazil, maize	-
	CBS 110245	Venezuela, herbaceous vine	-
	CBS 110244	Brazil, polypore	-
<i>F. boothii</i>	CBS 110270	South Africa	-
	CBS 110250	South Africa, corn	-
<i>F. brasilicum</i>	CBS 119180	Brazil, oats	-
<i>F. cortaderiae</i>	CBS 123655	New Zealand, corn	-
<i>F. gerlachii</i>	CBS 123666	USA, North Dakota, wheat	-
<i>F. graminearum s. s.</i>	CBS 139513	Argentina, Tandil, barley	-
	CBS 128539	Belgium, wheat	-
	CBS 110263	Iran, maize	-
	CBS 389.62	Netherlands, wheat	-

	CBS 138561	Poland, Tywęzy, wheat	-
	CBS 138563	Poland, wheat	-
	CBS 119800	South Africa, corn	-
	CBS 123688	Sweden, oats	-
	CBS 110266	USA, Kansas, wheat	-
<i>F. louisianense</i>	CBS 127524	USA, Louisiana, wheat	-
<i>F. meridionale</i>	CBS 110247	New Caledonia, orange twig	-
	CBS 110248	Nepal, maize	-
	CBS 110249	South Africa, soil	-
<i>F. mesoamericanum</i>	CBS 415.86	Honduras, Musa (Musaceae)	-
<i>F. nepalense</i>	CBS 127503	Nepal, rice	-
<i>F. ussurianum</i>	CBS 123754	Russian Federation, near Ussuriysk	-
	CBS 123751	Russian Federation, Jewish Autonomous Region, wheat	-
<i>F. vorosii</i>	CBS 123664	Japan, wheat	-
Unknown	CBS 123663	South Africa, soil	-
<i>F. cerealis</i>	CBS 195.80	Colombia, burnt páramo soil	-
	CBS 623.85	Netherlands, potato tuber buried in soil	-
	CBS 314.73	New Zealand, Azalea	-
<i>F. pseudograminearum</i>	CBS 109956	Australia, barley	-
	CBS 109953	New South Wales, soil	-
<i>F. avenaceum</i>	DBNP 0404	Poland, wheat	-
	DBNP 03162	Poland, wheat	-
<i>F. aywerte</i>	CBS 395.96	Australia, soil under <i>Plectrachne</i> sp.	-
<i>F. chlamydosporum</i>	CBS 445.67	Australia, wheat	-
<i>F. graminum</i>	CBS 119845	Australia, <i>Claviceps paspali</i> sclerotia on <i>Paspalum</i> sp.	-
<i>F. oxysporum</i>	CBS 620.87	Denmark, barley	-
<i>F. oxysporum</i> f. sp. <i>pisi</i>	CBS 127.73	United Kingdom, <i>Pisum sativum</i>	-
<i>F. poae</i>	CBS 180.96	Norway, wheat	-
<i>F. sambucinum</i> var. <i>sambucinum</i>	CBS 135.73	Egypt, <i>Lycopersicon esculentum</i>	-
<i>F. venenatum</i>	CBS 458.93	Austria, Rohrau, wheat	-
<i>F. tricinctum</i>	CBS 410.86	Denmark, mouldy grain	-
	DBNP 168bm	Poland, wheat	-
<i>F. verticillioides</i>	CBS 734.97	Germany, maize	-
<i>F. nurragi</i>	CBS 393.96	Australia, soil	-
<i>F. reticulatum</i>	CBS 618.87	Denmark, soil from fruit plantation	-

* strains from Baturo-Cieśniewska and Suchorzyńska (2011).

Table S2. Results of quantification of *F. culmorum* and *F. graminearum* s.s. DNA from cereals with defined levels of trichothecenes using three different TaqMan assays.

Sample no.	Cereal crop	FcMito assay		Nuclear based assay specific for <i>F. culmorum</i> (Waalwijk et al 2004)		FgMito assay specific for <i>F. graminearum</i> s. s (Kulik et al 2015)		Trichothecene levels (µg/kg)			
		C _T Mean ± C _T SD	Mean quantity ± quantity SD pg	C _T Mean ± C _T SD	Mean quantity ± quantity SD pg	C _T Mean ± C _T SD	Mean quantity ± quantity SD pg	DON	3ADON	15ADON	NIV
1	wheat	23.24 ± 0.09	18.211 ± 1.13	29.61 ± 0.13	5.858 ± 0.534	25.39 ± 0.19	20.605 ± 2.742	681	nd	nd	nd
2	wheat	24.06 ± 0.08	10.437 ± 0.583	30.71 ± 0.1	2.746 ± 0.198	25.49 ± 0.06	19.177 ± 0.74	268	nd	nd	341
3	wheat	23.33 ± 0.25	17.261 ± 2.788	27.98 ± 0.06	18.008 ± 0.739	27.85 ± 0.05	3.716 ± 0.137	1903	nd	nd	nd
4	wheat	25.92 ± 0.1	2.908 ± 0.192	30.59 ± 0.1	2.977 ± 0.213	27.25 ± 0.06	5.641 ± 0.231	842	nd	nd	nd
5	wheat	25.5 ± 0.13	3.882 ± 0.35	31.03 ± 0.27	2.224 ± 0.386	28.04 ± 0.003	3.259 ± 0.006	968	nd	nd	532
6	wheat	24.47 ± 0.19	7.886 ± 1.015	29.62 ± 0.05	5.788 ± 0.184	27.76 ± 0.07	3.965 ± 0.187	489	nd	nd	202
7	wheat	21.46 ± 0.12	61.969 ± 5.019	26.99 ± 0.09	35.203 ± 2.105	22.5 ± 0.07	152.37 ± 7.907	1215	nd	nd	462
8	wheat	35.42 ± 2.67	0.012 ± 0.014	nd	-	nd	-	nd	nd	nd	nd
9	wheat	35.33 ± 0.74	0.008 ± 0.003	nd	-	22.81 ± 0.09	61.361 ± 3.952	333	nd	nd	nd
10	wheat	29.56 ± 0.03	0.381 ± 0.007	nd	-	nd	-	nd	nd	nd	nd
11	wheat	35.75 ± 2.62	0.012 ± 0.016	nd	-	23.44 ± 0.33	39.869 ± 9.133	34	1	1	1
12	wheat	31.83 ± 0.29	0.074 ± 0.015	nd	-	33.78 ± 0.43	0.027 ± 0.008	1	nd	0	1
13	wheat	36.87 ± 1.53	0.004 ± 0.003	nd	-	nd	-	2	nd	nd	nd
14	wheat	33.89 ± 0.81	0.02 ± 0.009	nd	-	35.34 ± 0.88	0.01 ± 0.005	1	nd	nd	nd
15	wheat	36.94 ± 0.06	0.002 ± <0.001	nd	-	24.23 ± 0.78	25.124 ± 12.344	6	1	nd	nd
16	crop mixture	26.24 ± 0.15	2.301 ± 0.231	31.54 ± 0.08	0.008 ± <0.001	nd	-	9	nd	nd	nd
17	rye	33.0 ± 1.44	0.033 ± 0.025	nd	-	nd	-	5	6	4	4
18	spelt	31.56 ± 0.3	0.088 ± 0.017	nd	-	33.96 ± 0.63	0.024 ± 0.012	23	nd	nd	nd
19	wheat	26.84 ± 0.13	2.017 ± 0.168	31.08 ± 0.1	0.142 ± 0.01	34.28 ± 1.32	0.023 ± 0.015	11	11	6	11
20	rye	34.88 ± 0.64	0.01 ± 0.004	nd	-	35.35 ± 0.81	0.009 ± 0.004	nd	nd	nd	14
21	crop mixture	34.95 ± 0.61	0.012 ± 0.004	nd	-	nd	-	13	nd	nd	8
22	spelt	34.32 ± 0.57	0.018 ± 0.006	nd	-	nd	-	11	nd	nd	nd
23	wheat	26.69 ± 0.05	2.429 ± 0.077	30.83 ± 0.2	0.236 ± 0.012	30.83 ± 1.43	0.27 ± 0.18	7	nd	nd	2
24	wheat	29.24 ± 0.11	0.324 ± 0.024	nd	-	nd	-	115	nd	nd	nd
25	oat	36.61 ± 1.27	0.003 ± 0.002	nd	-	nd	-	nd	nd	nd	9
26	rye	33.63 ± 0.38	0.015 ± 0.004	nd	-	nd	-	nd	nd	nd	9
27	crop mixture	27.52 ± 2.52	1.753 ± 2.083	nd	-	nd	-	3	1	3	nd
28	wheat	25.16 ± 0.16	4.844 ± 0.544	30.5 ± 0.1	0.079 ± 0.015	29.79 ± 0.59	0.468 ± 0.206	82	nd	nd	3
29	rye	28.22 ± 0.22	0.808 ± 0.122	32.21 ± 0.1	0.114 ± 0.005	28.97 ± 1.01	0.948 ± 0.595	8	nd	nd	9
30	rye	29.96 ± 0.25	0.297 ± 0.045	nd	-	nd	-	16	nd	nd	6
31	crop mixture	29.49 ± 0.22	0.347 ± 0.052	32.47 ± 0.22	0.004 ± 0.001	29.53 ± 1.11	0.627 ± 0.411	5	nd	nd	3

32	wheat	36.15 ± 0.37	0.003 ± 0.001	nd	-	nd	-	nd	nd	nd	43
33	crop mixture	28.19 ± 0.12	0.687 ± 0.057	33.18 ± 0.41	0.003 ± 0.001	28.05 ± 0.43	1.539 ± 0.497	6	2	3	1
34	crop mixture	31.74 ± 0.19	0.094 ± 0.011	nd	-	nd	-	33	2	13	2
35	wheat	35.8 ± 1.47	0.004 ± 0.003	nd	-	25.13 ± 0.13	11.852 ± 1.045	117	nd	nd	nd
36	wheat	32.88 ± 0.08	0.027 ± 0.001	nd	-	26.62 ± 0.31	4.189 ± 0.877	31	nd	1	0
37	wheat	27.92 ± 0.16	0.794 ± 0.084	33.57 ± 0.3	0.299 ± 0.002	36.99 ± 0.23	0.003 ± <0.001	3	nd	nd	nd
38	wheat	24.63 ± 0.1	7.707 ± 0.51	30.17 ± 0.18	0.019 ± 0.002	nd	-	63	2	nd	5
39	wheat	32.78 ± 0.1	0.026 ± 0.002	nd	-	nd	-	184	nd	nd	nd
40	wheat	29.61 ± 0.06	0.253 ± 0.01	nd	-	nd	-	3	nd	nd	3
41	wheat	36.71 ± 0.44	0.002 ± 0.001	nd	-	25.75 ± 0.31	7.75 ± 1.603	3	nd	nd	4
42	wheat	33.53 ± 0.32	0.018 ± 0.004	nd	-	32.57 ± 0.28	0.061 ± 0.013	2	nd	nd	4
43	wheat	29.83 ± 0.17	0.219 ± 0.026	nd	-	nd	-	1	nd	nd	3
44	wheat	33.84 ± 0.36	0.015 ± 0.004	nd	-	nd	-	8	nd	nd	nd
45	wheat	28.44 ± 0.12	0.47 ± 0.038	nd	-	nd	-	5	2	1	1
46	wheat	36.73 ± 0.47	0.002 ± 0.001	nd	-	nd	-	70	nd	nd	nd
47	wheat	31.73 ± 0.23	0.062 ± 0.009	nd	-	23.49 ± 0.22	38.101 ± 6.06	9	nd	nd	7
48	wheat	31.38 ± 0.19	0.069 ± 0.009	37.18 ± 1.43	0.0401 ± 0.034	27.76 ± 0.19	3.98 ± 0.523	101	nd	nd	nd
49	wheat	35.17 ± 1.98	0.011 ± 0.014	nd	-	28.17 ± 2.42	3.415 ± 3.438	11	nd	4	39
50	crop mixture	31.26 ± 0.2	0.082 ± 0.011	nd	-	32.9 ± 0.16	0.048 ± 0.005	36	nd	nd	nd
51	crop mixture	30.17 ± 0.19	0.172 ± 0.022	nd	-	37.56 ± 0.64	0.002 ± 0.001	3	nd	nd	nd
52	wheat	27.71 ± 0.17	0.9134 ± 0.104	34.2 ± 0.3	0.266 ± 0.001	29.66 ± 0.44	0.497 ± 0.15	21	nd	nd	2
53	wheat	36.08 ± 1.47	0.004 ± 0.003	nd	-	nd	-	nd	nd	nd	5
54	wheat	27.89 ± 0.21	0.811 ± 0.12	34.86 ± 0.3	0.249 ± 0.002	30.66 ± 0.25	0.237 ± 0.044	39	nd	nd	nd
55	wheat	28.59 ± 0.2	0.462 ± 0.064	31.8 ± 0.02	0.006 ± <0.001	29.69 ± 0.24	0.479 ± 0.085	nd	nd	nd	20
56	barley	28.88 ± 0.1	0.593 ± 0.038	34.13 ± 0.42	0.001 ± <0.001	nd	-	5	18	nd	2
57	wheat	31.5 ± 0.13	0.062 ± 0.006	nd	-	nd	-	6	nd	nd	5
58	wheat	28.75 ± 0.14	0.454 ± 0.043	nd	-	nd	-	36	nd	nd	7
59	triticale	21.87 ± 0.1	43.175 ± 3.09	27.46 ± 0.21	0.122 ± 0.017	nd	-	92	9	4	2
60	wheat	33.46 ± <0.01	0.031 ± <0.001	nd	-	23.46 ± 0.07	38.643 ± 1.785	223	nd	nd	8
61	wheat	27.9 ± 0.07	0.68 ± 0.032	32.82 ± 0.03	0.003	nd	-	129	17	36	nd
62	rye	27.67 ± 0.01	0.86 ± 0.005	32.55 ± 0.18	0.004	nd	-	241	nd	nd	nd
63	wheat	28.55 ± 0.15	0.471 ± 0.05	31.13 ± 0.1	0.105 ± 0.016	27.84 ± 0.25	1.757 ± 0.311	24	nd	nd	nd
64	wheat	27.65 ± 0.11	0.948 ± 0.071	32.62 ± 0.3	0.341 ± 0.004	nd	-	54	nd	nd	nd
65	triticale	23.77 ± 0.12	11.722 ± 0.971	30.01 ± 0.07	0.022 ± 0.001	nd	-	5	nd	nd	nd
66	rye	24.63 ± 0.05	6.476 ± 0.201	30.7 ± 0.03	0.014	nd	-	12	nd	nd	nd
67	wheat	32.6 ± 0.04	0.054 ± 0.001	nd	-	nd	-	15	nd	nd	nd
68	wheat	30.45 ± 0.14	0.148 ± 0.014	nd	-	24.22 ± 0.36	23.028 ± 5.924	88	nd	nd	nd
69	wheat	24.7 ± 0.09	7.025 ± 0.431	31.32 ± 0.2	0.231 ± 0.009	27.65 ± 0.23	2.002 ± 0.331	28	nd	nd	nd
70	wheat	30.65 ± 0.14	0.123 ± 0.011	nd	-	30.11 ± 0.02	0.347 ± 0.004	5	6	nd	nd

71	barley	27.54 ± 0.34	1.03 ± 0.237	33.27 ± 0.7		29.71 ± 0.16	0.463 ± 0.053	45	7	16	nd
72	crop mixture	29.87 ± 0.07	0.311 ± 0.014	nd	-	nd	-	4	3	nd	8
73	wheat	35.31 ± 1.01	0.006 ± 0.003	nd	-	30.06 ± 0.23	0.364 ± 0.056	nd	nd	nd	15
74	wheat	26.33 ± .08	2.163 ± 0.119	30.9 ± 0.43	0.012 ± 0.003	nd	-	25	nd	nd	nd
75	triticale	28.35 ± 0.2	0.503 ± 0.068	nd	-	nd	-	31	nd	nd	nd
76	wheat	23.52 ± 0.06	13.924 ± 0.622	28.57 ± 0.17	0.057 ± 0.006	nd	-	17	nd	nd	nd
77	crop mixture	33.51 ± 0.56	0.017 ± 0.007	nd	-	nd	-	38	nd	nd	nd
78	wheat	26.27 ± 0.05	2.254 ± 0.074	31.7 ± 0.13	0.007 ± 0.001	nd	-	244	nd	nd	33
79	wheat	30.74 ± 0.21	0.117 ± 0.017	nd	-	29.38 ± 0.43	0.602 ± 0.174	42	11	20	nd
80	crop mixture	28.21 ± 0.16	0.577 ± 0.061	32.81 ± 0.27	0.003 ± 0.001	nd	-	14	nd	nd	nd
81	wheat	35.77 ± 1.05	0.005 ± 0.003	nd	-	nd	-	6	nd	nd	nd
82	wheat	23.46 ± 0.05	16.146 ± 0.569	30.4 ± 0.19	0.017 ± 0.002	nd	-	182	nd	nd	nd
83	wheat	26.91 ± 0.1	1.572 ± 0.114	30.89 ± 0.12	0.012 ± 0.001	nd	-	194	nd	nd	nd
84	wheat	23.98 ± 0.09	10.838 ± 0.644	30.58 ± 0.1	0.096 ± 0.015	28.52 ± 1.22	1.397 ± 1.277	164	nd	nd	nd
85	wheat	25.76 ± 0.08	3.411 ± 0.177	31.61 ± 0.26	0.007 ± 0.001	nd	-	532	10	9	7
86	wheat	27.17 ± 0.19	1.378 ± 0.171	31.36 ± 0.26	0.009 ± 0.002	nd	-	9	nd	nd	23
87	wheat	32.41 ± 0.19	0.039 ± 0.005	nd	-	31.08 ± 0.25	0.176 ± 0.031	15	nd	nd	12
88	wheat	24.95 ± 0.13	5.514 ± 0.488	29.76 ± 0.2	0.026 ± 0.004	nd	-	88	nd	nd	4
89	wheat	30.79 ± 0.09	0.095 ± 0.006	nd	-	22.47 ± 0.12	78.349 ± 6.508	249	nd	nd	nd
90	wheat	29.00 ± 0.09	0.319 ± 0.02	33.55 ± 0.25	0.002 ± <0.001	nd	-	35	nd	nd	nd
91	wheat	30.71 ± 0.17	0.121 ± 0.014	nd	-	nd	-	650	nd	nd	nd
92	wheat	31.59 ± 0.47	0.057 ± 0.02	nd	-	28.9 ± 2.22	1.837 ± 1.859	16	nd	nd	nd
93	wheat	35.81 ± 0.89	0.004 ± 0.003	nd	-	nd	-	57	nd	nd	nd
94	wheat	29.57 ± 0.07	0.237 ± 0.012	35.87 ± 1.62	0.107 ± 0.074	26.09 ± 0.05	12.631 ± 0.461	463	nd	nd	nd
95	wheat	25.8 ± 0.18	3.175 ± 0.397	32.73 ± 0.34	0.696 ± 0.161	24.02 ± 0.13	52.888 ± 4.588	487	nd	nd	nd
96	wheat	33.19 ± 0.23	0.023 ± 0.004	nd	-	nd	-	58	nd	nd	nd
97	wheat	35.16 ± <0.01	0.005 ± <0.001	nd	-	23.86 ± 0.31	29.59 ± 6.754	352	nd	nd	nd
98	wheat	34.74 ± 1.08	0.007 ± 0.004	nd	-	nd	-	89	nd	nd	nd
99	wheat	27.61 ± 0.06	0.915 ± 0.037	33.79 ± 0.15	0.331 ± 0.035	22.22 ± 0.1	184.408 ± 12.905	1014	nd	nd	nd
100	wheat	34.0 ± 1.03	0.015 ± 0.008	nd	-	35.84 ± 0.22	0.006 ± 0.001	15	nd	nd	nd
101	wheat	34.49 ± 0.88	0.01 ± 0.006	nd	-	nd	-	39	nd	nd	nd
102	wheat	27.62 ± 0.07	0.904 ± 0.043	34.35 ± 0.25	0.227 ± 0.04	22.27 ± 0.08	177.73 ± 10.35	928	nd	nd	nd
103	wheat	35.58 ± 0.99	0.004 ± 0.003	nd	-	nd	-	19	nd	nd	nd
104	wheat	24.49 ± 0.24	7.823 ± 1.233	35.3 ± 0.7	0.125 ± 0.052	27.11 ± 0.18	6.231 ± 0.778	220	nd	nd	nd
105	wheat	34.85 ± 1.18	0.007 ± 0.005	nd	-	nd	-	19	nd	nd	13
106	wheat	36.46 ± 0.95	0.002 ± 0.001	nd	-	nd	-	31	nd	nd	nd
107	unknown	25.92 ± 0.06	2.811 ± 0.117	32.01 ± 0.35	0.006 ± 0.001	29.32 ± 0.53	0.636 ± 0.253	19	nd	nd	14
108	unknown	27.94 ± 0.03	0.661 ± 0.015	33.345 ± 0.21	0.002 ± <0.001	nd	-	31	nd	nd	4

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