

Supplementary Material

"Phytic Acid Content of Faba Beans (*Vicia faba*)—Annual and Varietal Effects, and Influence of Organic Cultivation Practices"

Table S1: Bean sample set including meta data and results of phytic acid (PA) and dry mass analysis.

Sample No.	Year	ZIP code of location	cultivar	Summer/ Winter cultivar	farming system	fungicide used	insecticide used	Dry mass (dm) [%]	PA [g/100g]	PA [g/100g] 86% dm
1	2016	D-04442	Fanfare	Summer	conv	yes	no	90.2	1.05	1.00
2	2016	D-04442	Taifun	Summer	conv	yes	no	90.3	1.01	0.96
3	2016	D-06237	Tangenta	Summer	conv	yes	yes	90.8	1.15	1.09
4	2016	D-06333	Fanfare	Summer	org	no	no	90.3	0.89	0.85
5	2016	D-06526	Fuego	Summer	org	no	no	90.5	1.11	1.05
6	2016	D-39606	Bioro	Summer	org	no	no	90.4	0.88	0.84
7	2016	D-06526	Fanfare	Summer	conv	yes	yes	90.5	0.80	0.76
8	2016	D-06526	Fanfare	Summer	conv	yes	yes	90.5	0.91	0.86
9	2016	D-23923	Fanfare	Summer	conv	yes	no	89.9	1.05	1.00
10	2016	D-17309	Fuego	Summer	org	no	no	89.5	1.05	1.01
11	2016	D-27248	Fuego	Summer	org	no	no	89.4	0.87	0.83
12	2016	D-30974	Tiffany	Summer	org	no	no	89.3	0.93	0.90
13	2016	D-38550	Hiverna	Winter	org	no	no	88.9	0.82	0.80
14	2016	D-31061	Tiffany	Summer	conv	no	no	87.3	1.04	1.02
15	2016	D-31061	Taifun	Summer	conv	no	no	88.2	1.18	1.15
16	2016	D-31061	Fanfare	Summer	conv	no	no	89.0	1.09	1.05
17	2016	D-31061	Fuego	Summer	conv	no	no	89.3	1.06	1.02
18	2016	D-31167	Fanfare	Summer	conv	yes	yes	88.3	1.10	1.07
19	2016	D-49565	Fuego	Summer	conv	no	no	88.4	1.10	1.07

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20	2016	D-37115	Taifun	Summer	conv	no	no	90.1	0.93	0.88
21	2016	D-64397	Fanfare	Summer	conv	yes	yes	89.2	1.21	1.17
22	2016	D-64397	Fanfare	Summer	conv	yes	yes	89.2	1.15	1.11
23	2016	D-64397	Fanfare	Summer	conv	yes	yes	89.4	1.22	1.17
24	2016	D-64397	Fanfare	Summer	conv	yes	yes	89.6	1.11	1.06
25	2016	D-34311	Fuego	Summer	conv	yes	yes	89.7	1.09	1.04
26	2016	D-34632	Fuego	Summer	conv	yes	no	89.8	1.01	0.97
27	2016	D-34632	Fuego	Summer	conv	yes	no	89.9	0.93	0.89
28	2016	D-34369	Boxer	Summer	conv	yes	yes	89.7	0.86	0.83
29	2016	D-34369	Fuego	Summer	conv	yes	yes	89.7	1.07	1.03
30	2016	D-34289	Fuego	Summer	conv	yes	yes	90.1	1.06	1.01
31	2016	D-34289	Fuego	Summer	conv	yes	yes	89.9	1.01	0.97
32	2016	D-34289	Bilbo	Summer	org	no	no	89.9	1.00	0.96
33	2016	D-34593	Bilbo	Summer	org	no	no	89.8	1.31	1.25
34	2016	D-59514	Fuego	Summer	conv	no	no	90.6	0.98	0.93
35	2016	D-59469	Fuego	Summer	conv	no	yes	89.8	1.20	1.15
36	2016	D-31020	Fuego	Summer	conv	no	yes	89.8	0.96	0.92
37	2016	D-59174	Taifun	Summer	conv	unknown	unknown	90.6	1.10	1.05
38	2016	D-59457	Fuego	Summer	conv	unknown	unknown	90.4	1.37	1.30
39	2016	D-25718	Fuego	Summer	conv	yes	no	91.0	1.03	0.98
40	2016	D-25718	Fuego	Summer	conv	yes	no	90.6	1.14	1.08
41	2016	D-27478	Fuego	Summer	conv	yes	yes	90.8	1.01	0.96
42	2016	D-21730	Fuego	Summer	conv	yes	yes	90.9	0.95	0.90

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43	2016	D-27283	Fuego	Summer	conv	yes	no	90.0	0.82	0.79
44	2016	D-72531	Bioro	Summer	org	no	no	91.2	1.53	1.44
45	2016	D-85128	Fuego	Summer	org	no	no	90.1	1.32	1.26
46	2016	D-85302	Fuego	Summer	conv	no	no	90.1	1.50	1.43
47	2016	D-86916	Tiffany	Summer	org	no	no	89.6	1.20	1.15
48	2016	D-86916	Taifun	Summer	org	no	no	89.3	1.08	1.04
49	2016	D-86916	Divine	Summer	org	no	no	89.5	1.22	1.17
50	2016	D-86916	Bioro	Summer	org	no	no	89.4	1.30	1.25
51	2016	D-86916	Julia	Summer	org	no	no	89.5	1.22	1.18
52	2016	D-86916	Julia	Summer	org	no	no	89.5	1.38	1.33
53	2016	D-83527	Tiffany	Summer	org	no	no	90.0	1.61	1.54
54	2016	D-83527	Taifun	Summer	org	no	no	90.3	1.37	1.30
55	2016	D-83527	Divine	Summer	org	no	no	89.7	1.61	1.54
56	2016	D-83527	Bioro	Summer	org	no	no	90.0	1.60	1.53
57	2016	D-83527	Julia	Summer	org	no	no	90.0	1.68	1.61
58	2017	D-04442	Fanfare	Summer	conv	yes	no	91.0	1.43	1.35
59	2017	D-04442	Tiffany	Summer	conv	yes	no	90.9	1.51	1.42
60	2017	D-02627	Taifun	Summer	conv	no	yes	91.3	1.36	1.28
61	2017	D-02627	Taifun	Summer	conv	no	yes	91.0	1.26	1.19
62	2017	D-02627	Tiffany	Summer	conv	no	yes	90.7	1.32	1.25
63	2017	D-02627	Birgit	Summer	conv	no	yes	90.7	1.24	1.17
64	2017	D-08396	Espresso	Summer	conv	no	no	91.0	1.08	1.02
65	2017	D-08396	Espresso	Summer	conv	no	no	90.9	1.07	1.02

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66	2017	D-08396	Tiffany	Summer	conv	no	no	90.9	1.03	0.97
67	2017	D-08396	Birgit	Summer	conv	no	no	90.8	1.43	1.36
68	2017	D-08396	Fanfare	Summer	conv	no	no	90.7	1.13	1.07
69	2017	D-01156	Gloria	Summer	org	no	no	87.7	1.37	1.35
70	2017	D-06333	Fuego	Summer	org	no	no	87.2	1.12	1.11
71	2017	D-06526	Fanfare	Summer	conv	yes	yes	87.0	0.96	0.95
72	2017	D-06526	Fanfare	Summer	conv	no	yes	86.8	1.14	1.13
73	2017	D-06526	Fanfare	Summer	conv	yes	no	87.4	1.07	1.06
74	2017	D-06526	Fanfare	Summer	conv	yes	no	87.7	1.13	1.11
75	2017	D-06526	Fanfare	Summer	conv	no	no	87.8	1.19	1.17
76	2017	D-06526	Fanfare	Summer	conv	yes	yes	87.9	1.12	1.10
77	2017	D-06526	Fanfare	Summer	conv	no	no	87.7	0.98	0.96
78	2017	D-06526	Tiffany	Summer	conv	yes	yes	87.6	1.07	1.05
79	2017	D-06526	Taifun	Summer	conv	yes	yes	88.1	1.16	1.14
80	2017	D-06578	Scirocco	Summer	org	no	no	89.1	0.68	0.66
81	2017	D-23923	Fanfare	Summer	conv	yes	no	87.6	0.82	0.81
82	2017	D-36041	Fuego	Summer	org	no	no	89.9	1.08	1.04
83	2017	D-64397	Fanfare	Summer	conv	yes	yes	88.7	1.19	1.15
84	2017	D-64397	Fanfare	Summer	conv	yes	yes	88.7	0.93	0.90
85	2017	D-64397	Fanfare	Summer	conv	yes	yes	88.9	1.00	0.97
86	2017	D-64397	Fanfare	Summer	conv	yes	yes	88.5	0.97	0.95
87	2017	D-34311	Fuego	Summer	conv	yes	yes	89.2	0.88	0.85
88	2017	D-34632	Fuego	Summer	conv	yes	yes	89.5	1.12	1.08

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89	2017	D-34289	Fuego	Summer	conv	yes	yes	89.6	1.11	1.06
90	2017	D-34289	Fuego	Summer	conv	yes	yes	89.5	1.34	1.29
91	2017	D-34289	Fanfare	Summer	conv	yes	yes	89.8	1.13	1.08
92	2017	D-34289	Bilbo	Summer	org	no	no	89.4	1.21	1.16
93	2017	D-34289	Bilbo	Summer	org	no	no	89.6	1.22	1.17
94	2017	D-34289	Bilbo	Summer	org	no	no	89.5	1.06	1.02
95	2017	D-34593	Bilbo	Summer	org	no	no	89.8	1.45	1.38
96	2017	D-59469	Fuego	Summer	conv	unknown	unknown	89.7	0.92	0.88
97	2017	D-59469	Tiffany	Summer	conv	unknown	unknown	89.7	0.74	0.71
98	2017	D-59174	Taifun	Summer	conv	yes	yes	88.9	0.74	0.72
99	2017	D-25718	Fanfare	Summer	conv	yes	no	83.9	1.11	1.14
100	2017	D-25718	Fuego	Summer	conv	yes	no	83.9	1.06	1.09
101	2017	D-21762	Tiffany	Summer	conv	yes	yes	88.3	0.63	0.61
102	2017	D-21762	Taifun	Summer	conv	yes	yes	88.5	0.75	0.72
103	2017	D-21762	Fanfare	Summer	conv	yes	yes	88.6	0.85	0.82
104	2017	D-21762	Isabell	Summer	conv	yes	yes	88.4	1.00	0.97
105	2017	D-21763	Boxer	Summer	conv	yes	yes	88.7	0.66	0.64
106	2017	D-21762	Fuego	Summer	conv	yes	yes	88.5	0.79	0.77
107	2017	D-21762	Fuego	Summer	conv	yes	yes	88.5	0.90	0.87
108	2017	D-21762	Fuego	Summer	conv	yes	yes	88.5	0.71	0.69
109	2017	D-21764	Fuego	Summer	conv	yes	yes	88.4	0.75	0.73
110	2017	D-21762	Birgit	Summer	conv	yes	yes	88.3	0.92	0.90
111	2017	D-21762	Birgit	Summer	conv	yes	yes	88.6	0.73	0.71

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112	2017	D-21762	Birgit	Summer	conv	yes	yes	88.3	0.76	0.74
113	2017	D-21765	Birgit	Summer	conv	yes	yes	88.2	0.93	0.91
114	2017	D-21762	Birgit	Summer	conv	yes	yes	88.3	0.80	0.78
115	2017	D-21762	Birgit	Summer	conv	yes	yes	88.2	0.87	0.85
116	2017	D-21730	Fuego	Summer	conv	yes	yes	83.7	0.66	0.68
117	2017	D-27283	Fuego	Summer	conv	yes	no	87.3	0.86	0.84
118	2017	D-27283	Fuego	Summer	conv	yes	no	87.3	0.88	0.87
119	2017	D-85128	Fanfare	Summer	org	no	no	88.9	1.13	1.10
120	2017	D-85302	Boxer	Summer	conv	no	no	90.2	1.03	0.98
121	2017	D-97729	Detpop	Summer	org	no	no	82.6	1.19	1.24
122	2017	D-86916	Tiffany	Summer	org	no	no	85.7	1.07	1.08
123	2017	D-83527	Fanfare	Summer	org	no	no	88.2	1.35	1.31
124	2018	D-06333	Fuego	Summer	org	no	no	88.9	0.69	0.67
125	2018	D-06268	Fanfare	Summer	conv	yes	no	89.1	1.06	1.03
126	2018	D-06268	Fanfare	Summer	conv	yes	yes	89.3	1.06	1.02
127	2018	D-06268	Fanfare	Summer	conv	yes	yes	89.8	0.57	0.55
128	2018	D-06268	Tiffany	Summer	conv	yes	yes	89.6	0.95	0.91
129	2018	D-06268	Tiffany	Summer	conv	no	yes	89.5	0.90	0.87
130	2018	D-06268	Tiffany	Summer	conv	no	yes	89.7	0.77	0.74
131	2018	D-99955	Tiffany	Summer	org	no	yes	89.7	1.13	1.09
132	2018	D-99955	Espresso	Summer	conv	yes	yes	89.3	0.82	0.79
133	2018	D-99955	Scirocco	Summer	org	no	no	90.6	1.21	1.15
134	2018	D-23923	Fanfare	Summer	conv	no	yes	89.1	0.65	0.63

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135	2018	D-36041	Fuego	Summer	org	no	no	89.7	1.27	1.22
136	2018	D-64397	Fanfare	Summer	conv	unknown	yes	90.2	0.98	0.93
137	2018	D-64397	Fanfare	Summer	conv	unknown	yes	90.3	1.18	1.12
138	2018	D-64397	Fanfare	Summer	conv	unknown	yes	90.0	1.18	1.13
139	2018	D-64397	Fanfare	Summer	conv	unknown	yes	89.9	1.08	1.04
140	2018	D-64397	Fanfare	Summer	conv	unknown	yes	89.6	1.17	1.12
141	2018	D-34311	Tiffany	Summer	conv	yes	yes	91.2	1.05	0.99
142	2018	D-34632	Fuego	Summer	conv	no	yes	89.9	0.73	0.70
143	2018	D-34289	Tiffany	Summer	conv	yes	yes	89.9	1.16	1.11
144	2018	D-34289	Bilbo	Summer	org	no	no	90.4	1.27	1.20
145	2018	D-34593	Bilbo	Summer	org	no	no	90.2	1.30	1.24
146	2018	D-59514	Fanfare	Summer	org	no	no	89.4	1.05	1.01
147	2018	D-59469	Tiffany	Summer	conv	unknown	yes	89.0	1.25	1.21
148	2018	D-59174	Taifun	Summer	conv	yes	yes	89.3	1.51	1.45
149	2018	D-25718	Fuego	Summer	conv	yes	yes	89.7	0.99	0.95
150	2018	D-25718	Fuego	Summer	conv	yes	yes	89.9	1.20	1.15
151	2018	D-27283	Tiffany	Summer	conv	yes	yes	89.5	0.76	0.73
152	2018	D-27283	Tiffany	Summer	conv	yes	yes	89.9	1.18	1.13
153	2018	D-26736	Fuego	Summer	conv	no	no	85.9	1.09	1.09
154	2018	D-26737	Fuego	Summer	conv	yes	yes	86.2	1.28	1.27
155	2018	D-34431	Fanfare	Summer	conv	no	no	91.0	0.78	0.74
156	2018	D-72531	Bioro	Summer	org	no	no	91.0	1.50	1.42
157	2018	D-88450	Tiffany	Summer	org	no	no	90.7	1.43	1.36

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158	2018	D-88450	Tiffany	Summer	org	no	no	88.2	1.58	1.54
159	2018	D-85128	Fanfare	Summer	org	no	no	89.6	1.24	1.19
160	2018	D-94086	Fanfare	Summer	conv	no	no	90.0	1.31	1.25
161	2018	D-86916	Tiffany	Summer	org	no	no	87.2	1.26	1.25
162	2018	D-83527	Fuego	Summer	org	no	no	87.6	0.86	0.84