

Erratum

Erratum to “Contents of starch and non-starch polysaccharides in barley varieties of different origin [Food Chemistry 94 (2006) 348–358]”

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The authors want to make the readers aware of errors in the non-starch polysaccharide (NSP) values in Table 2. A corrected Table 2 is attached also including the original and correct levels of starch, amylose, β-glucan and protein for the convenience of the reader.

The errors in the calculated NSP data have the following implications:

- The values for NSP, arabinoxylan (AX) and arabinogalactan (AG), given in the text should be reduced by 50% of their original values.
- For cellulose the correct calculated values estimated as the difference of glucose in T-NSP and β-glucan are listed in the new Table 2.

In general, the corrected values are in better agreement with the literature, and some statements need to be changed/removed:

- Chapter 3.6, line 16 (p. 354)
“...is somewhat...” is changed to “... is consistent...”

- Chapter 3.9 (p. 354)

Sentence one is changed to:

“Cellulose content varied between 2.1% and 5.7%. The highest amount of cellulose was found in the hulled varieties.

Sentence “These results....” is changed to:

The waxy variety CDC Alamo showed a high level of cellulose, which was rather unexpected since CDC Alamo was hull-less.

Sentence “Whitin the hull-less ...” is removed

- Conclusion (p. 356)

Sentence one and two are changed into:

“Starch was the major constituent of barley accounting for 51–64%, followed by total non-starch polysaccharides (11–21%). The content of total arabinoxylans (4–8%) in this material was consistent with earlier findings.”

The remaining conclusions as well as the statistical analyses performed are still valid since the new PCA plots describing the relations between samples and analysed variables were not significant different from the original ones.

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Table 2

Results of the starch, protein and non-starch polysaccharide analyzes of the barley varieties

Varieties	Starch	Amylose	β -Glucan	Protein	T-NSP	I-NSP	S-NSP	T-AX	I-AX	S-AX	A/X (T-AX)	A/X (I-AX)	A/X (S-AX)	T-AG	I-AG	S-AG	Cellulose
1 Arve	57.76	25.29	3.10	10.72	16.40	11.43	4.97	6.45	5.78	0.67	0.37	0.36	0.41	0.49	0.19	0.30	4.54
2 Thule	57.26	24.18	3.46	11.13	19.06	13.66	5.39	7.51	6.71	0.79	0.36	0.34	0.49	0.53	0.21	0.32	5.42
3 Olsok	58.71	24.33	2.64	11.17	14.50	12.10	2.41	6.11	5.93	0.18	0.36	0.35	1.13	0.43	0.19	0.23	3.95
4 Ven	59.13	24.04	3.37	11.45	16.08	11.22	4.86	6.56	5.76	0.80	0.37	0.37	0.43	0.44	0.17	0.27	3.95
5 Lavrans	58.01	25.43	3.79	11.98	16.56	10.89	5.67	6.40	5.49	0.91	0.36	0.37	0.33	0.46	0.18	0.28	4.16
6 Gute	57.49	24.12	3.26	10.63	18.19	12.81	5.38	7.31	6.45	0.86	0.36	0.37	0.34	0.52	0.21	0.31	5.08
7 Fager	60.44	23.51	3.31	10.44	18.13	12.71	5.42	7.02	6.20	0.82	0.35	0.36	0.28	0.54	0.20	0.34	5.22
8 NK96300	59.63	23.02	3.14	10.28	15.74	11.50	4.24	5.99	5.79	0.20	0.38	0.37	0.30	0.51	0.20	0.31	4.23
9 NK98268	60.68	25.52	3.29	11.61	16.60	10.69	5.91	6.60	5.41	1.19	0.37	0.38	0.34	0.56	0.18	0.38	4.23
10 NK96737	59.16	24.67	3.08	12.28	17.15	11.34	5.80	6.99	5.74	1.25	0.37	0.38	0.36	0.55	0.18	0.37	4.58
11 Åker	56.04	25.72	3.90	10.44	17.59	13.26	4.33	6.87	6.46	0.40	0.39	0.36	1.10	0.46	0.22	0.24	4.51
12 Tyra	59.46	26.00	3.77	12.35	17.09	11.54	5.55	6.35	5.78	0.57	0.38	0.37	0.49	0.52	0.22	0.30	4.71
13 Kinnan	59.14	24.98	3.57	12.00	17.12	11.37	5.75	6.56	5.65	0.91	0.40	0.40	0.42	0.52	0.19	0.33	4.68
14 Sunnita	56.46	24.47	4.06	12.80	18.58	12.68	5.90	6.93	6.42	0.51	0.38	0.37	0.47	0.49	0.20	0.28	5.41
15 Henni	59.89	24.09	3.77	10.72	18.37	12.99	5.39	6.92	6.36	0.57	0.35	0.35	0.32	0.56	0.21	0.35	5.12
16 Saana	59.13	23.00	2.75	12.03	16.63	10.76	5.86	6.40	5.41	0.99	0.39	0.39	0.38	0.47	0.18	0.28	5.28
17 Justina	60.29	24.37	3.15	12.03	16.64	12.38	4.26	6.19	6.08	0.11	0.34	0.34	0.59	0.57	0.21	0.36	4.86
18 Iver	58.37	24.88	3.59	11.92	16.48	10.61	5.87	6.13	5.40	0.73	0.38	0.38	0.31	0.48	0.18	0.30	4.53
19 Bond	59.63	24.72	3.29	11.75	17.07	11.90	5.17	6.53	5.92	0.61	0.36	0.37	—	0.56	0.21	0.36	4.70
20 Annabell	59.47	24.72	3.03	11.52	16.57	11.25	5.32	6.20	5.61	0.59	0.37	0.35	0.22	0.52	0.20	0.32	4.93
21 SWÅ97150	56.84	25.22	3.68	11.94	16.76	11.04	5.72	6.33	5.56	0.76	0.37	0.38	0.74	0.46	0.18	0.28	4.58
22 Olve	51.31	24.58	4.59	13.35	20.54	13.71	6.83	7.82	6.82	1.00	0.38	0.36	0.25	0.56	0.22	0.33	5.53
23 PF 14035-54	59.22	24.25	3.53	10.77	16.67	10.77	5.90	6.24	5.49	0.75	0.40	0.39	0.91	0.48	0.17	0.31	4.66
24 CDC Dolly	58.48	26.59	5.03	14.50	19.83	10.55	9.28	6.81	5.35	1.46	0.36	0.37	0.50	0.50	0.15	0.34	5.72
25 CDC Bold	58.33	26.15	2.95	11.35	13.55	9.08	4.47	5.37	4.62	0.76	0.41	0.41	0.35	0.39	0.14	0.24	3.35
26 CDC Helgason	59.45	25.71	3.71	12.32	16.01	9.88	6.13	5.76	4.92	0.84	0.40	0.40	0.41	0.48	0.18	0.30	4.31
27 Otira	60.60	24.67	3.13	8.23	16.54	13.29	3.25	6.41	6.51	0.00	0.39	0.36	0.37	0.45	0.21	0.24	4.84
28 Chamant	64.20	23.71	2.41	8.42	15.20	10.10	5.10	6.04	5.08	0.96	0.40	0.41	0.17	0.45	0.16	0.29	4.58
29 NK95003	62.43	24.71	3.69	13.21	12.37	8.08	4.29	4.63	4.35	0.28	0.51	0.50	0.27	0.42	0.17	0.25	2.20
30 CDC Dawn	59.64	24.52	3.91	16.93	15.62	6.39	9.22	5.93	3.45	2.49	0.40	0.62	0.33	0.45	0.13	0.32	3.90
31 CDC Gainer	63.26	25.20	3.39	13.93	11.24	5.83	5.41	4.13	3.21	0.91	0.56	0.66	0.59	0.41	0.15	0.27	2.91
32 CDC Freedom	59.68	25.70	4.21	16.05	13.02	5.96	7.05	4.15	3.36	0.79	0.58	0.64	0.31	0.46	0.12	0.34	2.68
33 CDC McGwire	60.17	25.69	4.01	13.39	11.51	6.10	5.41	3.70	3.32	0.38	0.58	0.63	0.51	0.41	0.15	0.26	2.09
34 CDC Speedy	59.80	24.79	3.96	15.49	11.88	5.93	5.95	3.97	3.26	0.71	0.56	0.62	0.34	0.48	0.14	0.33	2.32
35 CDC Candle	58.49	4.87	6.36	15.62	14.02	5.30	8.72	3.71	2.95	0.76	0.59	0.68	0.32	0.39	0.13	0.26	2.36
36 CDC Alamo	53.65	2.45	7.19	18.28	19.40	5.88	13.52	4.89	3.17	1.71	0.60	0.65	0.34	0.53	0.17	0.36	5.06
37 SB94897	53.47	35.54	8.25	18.52	17.40	6.28	11.12	4.42	3.40	1.02	0.58	0.68	0.33	0.45	0.13	0.32	2.92
38 SW 2680	62.30	6.62	4.81	12.62	13.85	5.97	7.88	4.48	3.31	1.18	0.55	0.60	0.35	0.46	0.15	0.31	2.55
39 SW Cindy	55.18	8.26	6.49	11.55	20.34	11.20	9.13	6.21	5.47	0.74	0.37	0.38	0.42	0.48	0.20	0.28	5.62
5%, LSD	3.56	—	0.19	3.06	1.92	0.54	1.26	0.41	0.26	0.46	0.04	0.03	0.78	0.04	0.04	0.05	0.66

Data are averages of triplicates, presented as % of dry weight except for amylose contents, which are % of starch.

T, total; I, insoluble; S, soluble; NSP, non-starch polysaccharides; AX, arabinoxylans; AG, arabinogalactans; A/X, degree of branching in arabinoxylans.