

Supplementary information:

Effects of Incorporating Alkaline Hydrogen Peroxide Treated Sugarcane Fibre on The Physical Properties and Glycemic Potency of White Bread

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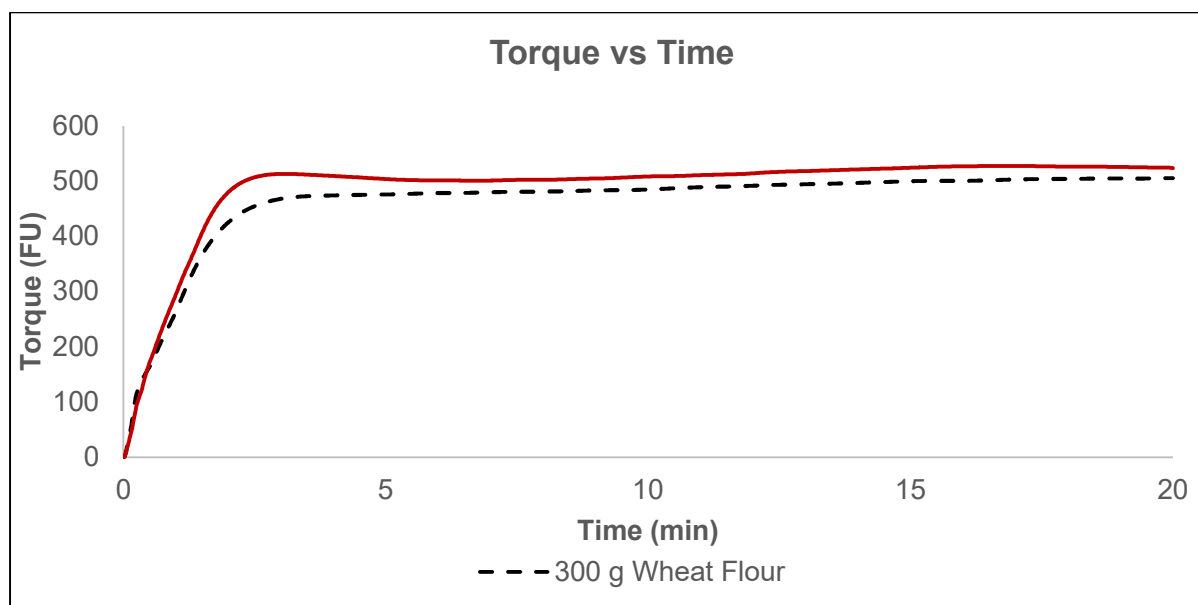
Table S1. PMI for different methods used in different paper.

	Our method	Sangnark & Noomhorm [18]	Alencar et al. [57]
AHP treatment condition	12.6% sugarcane fibre, 0.5-5 h, washed twice.	1% sugarcane bagasse, 12 h	10% corn staver biomass, 1h
Process Mass Efficiency (PMI)	18.4	101 – 200	29.2 – 34.8

$$\text{Process Mass Intensity [58]} = \frac{\text{Total mass in process steps (kg)}}{\text{Mass of products (kg)}} \quad \text{Eq. (S1)}$$

Table S2. Parameters to determine particle size of samples.

Sample Identification	Sugarcane Fiber
Particle Type	Spherical
Material	Cellulose
Refractive Index	1.4683 [59]
Absorption Index	0.001
Dispersant	Water
Dispersant Refractive Index	1.33
Measurement Duration	Background: 10 s Sample: 5 s
Sequence	5
Measurement Obscuration	5 – 15 %

**Fig S1.** Farinograph analysis indicating the dough development of flour samples over a 20 min mixing regime.**Table S3.** Dough extensibility test parameters on texture analyzer.

Parameters	Settings
Test Mode	Tension
Pre-Test Speed	2.00 mm/s
Test Speed	3.00 mm/s
Post-Test Speed	10.00 mm/s
Distance	90 mm
Trigger Force	5.0 g

Table S4. Double compression test parameters on texture analyzer.

Parameters	Settings
Test Mode	Strain – Double Compression Test
Pre-Test Speed	1.00 mm/s
Test Speed	2.00 mm/s
Post-Test Speed	2.00 mm/s
Initial Probe Height	40 mm
Trigger Force	5.0 g
Time Gap	5.0 s
Strain	40 %

Table S5. Total iAUC, relative glycemic potency (RGP), and rapidly digestible starch (RDS) values of bread samples.

Samples	Total iAUC (g.min)	RGP (g/100g bread)	RDS (%)
Reference	1431.4 ± 14.0 ^a	38.3 ± 0.3 ^a	43.6 ± 3.2 ^a
Untreated SCF	807.2 ± 35.4 ^{bc}	23.0 ± 0.9 ^b	28.3 ± 0.3 ^{bc}
0.5h AHP SCF	908.7 ± 25.4 ^b	22.4 ± 0.6 ^{bc}	30.3 ± 1.1 ^b
1h AHP SCF	753.6 ± 51.7 ^c	19.3 ± 0.6 ^d	24.3 ± 0.3 ^c
3h AHP SCF	704.0 ± 59.2 ^c	19.0 ± 1.0 ^d	23.4 ± 0.6 ^c
5h AHP SCF	723.1 ± 7.9 ^c	19.8 ± 0.1 ^{cd}	23.7 ± 0.6 ^c

References

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