

Article

Dual Modification of Sago Starch via Heat Moisture Treatment and Octenyl Succinylation to Improve Starch Hydrophobicity

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Supplementary Data

Table S1. Intensity of X-Ray Diffractogram of native and HMT sago starches.

Sample	Intensity at 2theta						Crystallinity (%)
	5.57°	15.06°	17.12°	18.07°	23.01°	26.7°	
Native	1357±22.63 ^a	3357±13.43 ^a	4036±49.50 ^a	3825±36.77 ^a	3176±21.21 ^{ab}	1739±38.13 ^{8a}	36.57±1.20 ^a
HMT 10	1219±16.26 ^{bc}	3413±14.14 ^a	3976±67.18 ^a	3917±69.30 ^a	3269±19.80 ^a	1709±4.95 ^a	36.74±0.30 ^a
HMT 15	1338±101.1 ^b	3495±80.61 ^a	4002±4.24 ^a	3892±2.83 ^a	3261±10.61 ^a	1709±16.93 ^{7a}	35.75±2.75 ^a
HMT 20	1119±109.6 ^c	3440±3.54 ^a	3874.5±19.0 ^{9ab}	3893±1.41 ^a	3239±41.01 ^{ab}	1664±33.93 ^{4a}	32.30±1.65 ^{ab}
HMT 25	1154±91.92 ^{bc}	3391±159.0 ^{9a}	3698±61.52 ^b	3740±36.77 ^c	3033±59.40 ^{ab}	1719±78.43 ^{9a}	30.16±1.25 ^b
HMT 30	1150±52.33 ^{bc}	3094±53.03 ^a	3610±149.91 ^c	3634±112.4 ^{3bc}	3009±219.2 ^b	1702±25.42 ^{6a}	28.70±2.76 ^b

[†] Data are expressed as means ± SD. Mean values with the same letters within a column are not significantly ($p < 0.05$) different. HMT 10: modified HMT sago starch with moisture level 10% treatment; HMT 15: modified HMT sago starch with moisture level 15% treatment; HMT 20: modified HMT sago starch with moisture level 20% treatment; HMT 25: modified HMT sago starch with moisture level 25% treatment; HMT 30: modified HMT sago starch with moisture level 30% treatment.