

Table S2. Quality characteristics of fermented and unfermented beans for all cocoa materials

	Number	Cocoa Butter (%)	Theobromine (mg/g)	Caffeine (mg/g)	Polyphenol (mg GAE/g)
F0	F01	39.95±0.61	13.47±0.06	1.83±0.01	56.91±1.03
	F02	42.46±0.54	14.54±0.44	0.96±0.02	66.82±1.50
	F03	44.70±0.53	13.48±0.09	2.98±0.01	66.89±1.11
C0	C01	43.25±0.67	14.16±0.03	1.20±0.00	67.55±0.88
	C02	43.05±0.48	13.67±0.02	1.40±0.01	60.44±0.42
	C03	40.06±0.73	15.65±0.12	1.13±0.01	65.20±1.30
T0	T01	41.11±0.96	15.81±0.04	1.40±0.01	68.91±1.30
	T02	46.56±0.26	13.05±0.04	4.09±0.02	64.60±1.19
	T03	44.32±0.95	11.82±0.20	2.59±0.05	65.13±3.20
F1	F11	37.18±0.63	11.59±0.12	1.71±0.07	61.92±1.00
	F12	36.71±0.49	13.69±0.14	0.83±0.04	53.03±0.47
	F13	42.40±0.75	10.75±0.07	2.66±0.08	45.97±1.89
C1	C11	35.60±0.70	12.55±0.04	1.96±0.04	62.92±2.30
	C12	40.32±0.39	9.53±0.03	1.43±0.00	35.82±0.21
	C13	38.00±0.23	12.97±0.05	1.10±0.02	37.30±0.71
T1	T11	36.62±0.13	13.72±0.09	1.33±0.03	52.39±7.96
	T12	38.33±0.89	12.86±0.21	2.05±0.02	47.70±0.32
	T13	39.94±0.86	10.89±0.06	2.74±0.01	39.13±1.07