

Table S4. Effect of different composite ratios of cassava starch and sorghum flours on the sensory attributes of flatbreads.

Sensory attribute	0% Cassava starch (70 % Sorghum)	35% Cassava starch (35 % Sorghum)	70% Cassava starch (0 % sorghum)	p-value
Appearance				
Brown colour	7.6(0.2) ^c	6.1(0.2) ^b	2.5(0.3) ^a	<0.0001
Creamy colour	1.1(0.2) ^a	1.9(0.2) ^b	5.5(0.3) ^c	<0.0001
Yellow colour	0.3(0.1) ^a	0.3(0.1) ^a	2.5(0.3) ^b	<0.0001
Spongy	2.3(0.3) ^a	0.3(0.3) ^a	2.6(0.3) ^a	0.411
Glossy	1.1(0.2) ^c	2.9(0.3) ^b	4.3(0.3) ^a	<0.0001
Specks	2.3(0.2) ^a	2.3(0.2) ^a	1.8(0.3) ^a	0.235
Brittle	3.2(0.3) ^b	2.2(0.3) ^a	1.4(0.2) ^a	<0.0001
Air Pocket	2.4(0.2) ^a	3.0(0.3) ^a	4.6(0.3) ^b	<0.0001
Thick	3.9(0.2) ^a	3.7(0.2) ^a	3.9(0.2) ^a	0.767
Dry	2.6(0.2) ^a	3.3(0.3) ^a	2.6(0.2) ^a	<0.0001
Aroma				
Overall aroma	6.2(0.2) ^a	6.5(0.2) ^{ab}	7.0(0.2) ^b	0.005
Earthy aroma	1.8(0.2) ^a	1.9(0.2) ^a	1.6(0.2) ^a	0.734
Sorghum aroma	3.4(0.2) ^c	2.6(0.2) ^b	0.8(0.2) ^a	<0.0001
Beany aroma	1.4(0.2) ^a	1.6(0.2) ^a	2.1(0.2) ^a	0.062
Green aroma	1.0(0.2) ^a	1.2(0.2) ^a	2.4(0.7) ^b	<0.0001
Nutty aroma	2.2(0.2) ^b	2.1(0.2) ^b	1.4(0.2) ^a	0.014
Fermented aroma	0.9(0.1) ^a	1.7(0.2) ^b	4.1(0.3) ^c	<0.0001
In-mouth texture/Mouthfeel				
Grainy	2.8(0.3) ^c	1.9(0.2) ^b	0.8(0.2) ^a	<0.0001
Rubbery	0.9(0.1) ^a	2.7(0.2) ^b	6.6(0.2) ^c	<0.0001
Chewy	4.4(0.2) ^a	5.9(0.2) ^b	7.7(0.2) ^c	<0.0001
Sticky	3.3(0.3) ^a	3.1(0.2) ^a	2.9(0.3) ^a	0.513
Dry	4.6(0.23) ^c	3.0(0.2) ^b	1.6(0.2) ^a	<0.0001
Flavour				
Overall flavour	4.4(0.2) ^a	4.8(0.2) ^a	4.4(0.2) ^a	0.23
Beany flavour	1.8(0.2) ^{ab}	2.3(0.2) ^b	1.6(0.2) ^a	0.038
Bitter taste	2.1(0.2) ^a	1.9(0.2) ^a	1.6(0.2) ^a	0.222
Nutty flavour	1.5(0.2) ^a	2.1(0.2) ^a	1.5(0.2) ^a	0.107
Sweet taste	1.0(0.1) ^a	1.1(0.1) ^a	1.2(0.1) ^a	0.51
Fermented flavour	0.7(0.2) ^a	1.3(0.2) ^a	2.6(0.3) ^b	<0.0001
After swallowing				
Bitter	2.4(0.2) ^b	1.9(0.2) ^{ab}	1.3(0.2) ^a	0.001
Astringent	3.5(0.3) ^a	3.3(0.3) ^a	3.3(0.3) ^a	0.779
Sour	1.0(0.2) ^a	1.1(0.2) ^a	1.9(0.2) ^b	0.004
Beany	1.2(0.2) ^a	1.8(0.2) ^a	1.2(0.2) ^a	0.093
Residual particles	3.7(0.3) ^c	2.5(0.2) ^b	1.7(0.2) ^a	<0.0001

Means within a row denoted by different superscripts differ significantly ($p < 0.05$). Values in parenthesis represent standard errors.