

Table 29 Concentration of cinnamaldehyde in the headspace and at the surface of rice butter cake, total yeast and mould and total bacteria of the rice butter cake kept at 30 °C for a month.

Treatment No.	Optimum conditions	Time storage (Wk)	Cinnamaldehyde in the headspace (ppm)	Cinnamaldehyde in the surface of butter cake (ppm)	Total yeast and mould (cfu/g)	Total bacteria (cfu/g)
1 (Control)	Temp (40 °C)	0	-	-	<10	<10
	Time (10 min)	1	-	-	6.9x10 ⁶	3.5x10 ⁷
	Volume of oil (0 µl)	2	-	-	-	-
	Volume of jar (700 ml)	3	-	-	-	-
		4	-	-	-	-
2	Temp (40 °C)	0	1,784±205a	167±51a	<10	<10
	Time (10 min)	1	1,669±112a	153±45a	<10	<10
	Volume of oil (100 µl)	2	1,578±173b	148±49b	<10	<10
	Volume of jar (700 ml)	3	1,442±258c	141±58c	<10	<10
		4	1,339±154d	125±47d	<10	<10

^{a,b,c,d} Means with different superscript in the same column different (P < 0.05).

Table 29 (Continued)

Treatment No.	Optimum conditions	Time storage (Wk)	Cinnamaldehyde in the headspace (ppm)	Cinnamaldehyde in the surface of butter cake (ppm)	Total yeast and mould (cfu/g)	Total bacteria (cfu/g)
3	Temp (40 0C)	0	1,546±116a	143±57a	<10	<10
	Time (10 min)	1	1,448±110a	135±35a	<10	<10
	Volume of oil (50 µl)	2	1,375±98b	124±33b	<10	<10
	Volume of jar (700 ml)	3	1,198±104c	103±28c	<10	<10
		4	937±178c	85±15c	<10	<10

^{a,b,c,d} Means with different superscript in the same column different (P < 0.05).

Table 30 Hedonic scores of the rice butter cake kept at 30 °C for a month.

Treatment No.	Optimum conditions	Time storage (Wk)	Odour	Flavour	Texture	Overall
1 (Control)	Temp (40 °C)	0	8.2±0.5a	7.8±1.2a	8.3±0.4a	8.2±0.6a
	Time (10 min)	1	-	-	-	-
	Volume of oil (0 µl)	2	-	-	-	-
	Volume of jar (700 ml)	3	-	-	-	-
		4	-	-	-	-
2	Temp (40 °C)	0	5.8±2.1c	5.4±1.7d	7.7±0.9b	6.4±1.4c
	Time (10 min)	1	5.1±3.1c	5.0±1.5d	7.0±0.5b	6.1±1.3c
	Volume of oil (100 µl)	2	6.3±1.4b	6.4±1.4b	6.6±1.3c	6.8±1.1b
	Volume of jar (700 ml)	3	6.5±1.6b	6.5±1.3b	6.7±1.1c	6.6±1.4bc
		4	6.5±1.5b	6.6±1.3b	5.5±1.7d	6.5±1.4c

^{a,b,c,d} Means with different superscript in the same column different (P < 0.05).

Table 30 (Continued)

Treatment No.	Optimum conditions	Time storage (Wk)	Odour	Flavour	Texture	Overall
3	Temp (40 °C)	0	6.3±1.9b	6.1±1.5c	7.8±0.7b	7.3±0.4b
	Time (10 min)	1	6.3±1.9b	6.1±1.5c	7.8±0.7b	7.3±0.4b
	Volume of oil (50 µl)	2	6.4±1.7b	6.2±1.6c	6.8±1.1c	7.0±0.7b
	Volume of jar (700 ml)	3	6.6±1.4b	6.7±1.5b	6.7±1.4c	6.6±1.6bc
		4	-	-	-	-

^{a,b,c,d} Means with different superscript in the same column different (P < 0.05).

Table 31 Concentration of cinnamaldehyde in the headspace and at the surface of rice butter cake, total yeast and mould and total bacteria of the rice butter cake kept at room temperature for a month.

Treatment No.	Optimum conditions	Time storage (Wk)	Cinnamaldehyde in the headspace (ppm)	Cinnamaldehyde in the surface of butter cake (ppm)	Total yeast and mould (cfu/g)	Total bacteria (cfu/g)
1 (Control)	Temp (40 °C)	0	-	-	<10	<10
	Time (10 min)	1	-	-	5.5x10 ⁶	3.5x10 ⁷
	Volume of oil (0 µl)	2	-	-	-	-
	Volume of jar (700 ml)	3	-	-	-	-
		4	-	-	-	-
2	Temp (40 °C)	0	1,784±205a	167±51a	<10	<10
	Time (10 min)	1	1,699±103a	153±51a	<10	<10
	Volume of oil (100 µl)	2	1,350±155b	128±78b	<10	<10
	Volume of jar (700 ml)	3	1,218±132c	100±58c	<10	<10
		4	1,104±204d	98±11d	<10	<10

^{a,b,c,d} Means with different superscript in the same column different (P < 0.05).

Table 31 (Continued)

Treatment No.	Optimum conditions	Time storage (Wk)	Cinnamaldehyde in the headspace (ppm)	Cinnamaldehyde in the surface of butter cake (ppm)	Total yeast and mould (cfu/g)	Total bacteria (cfu/g)
3	Temp (40 0C)	0	1,546±116a	143±57a	<10	<10
	Time (10 min)	1	1,525±102a	135±59a	<10	<10
	Volume of oil (50 µl)	2	1,458±78b	139±29b	<10	<10
	Volume of jar (700 ml)	3	1,198±104c	95±5c	<10	<10
		4	897±178d	68±4d	<10	<10

^{a,b,c,d} Means with different superscript in the same column different (P < 0.05).

Table 32 Hedonic scores of the rice butter cake kept at room temperature for a month.

Treatment No.	Optimum conditions	Time storage (Wk)	Odour	Flavour	Texture	Overall
1 (Control)	Temp (40 °C)	0	8.2±0.5a	7.8±1.2a	8.3±0.4a	8.2±0.6a
	Time (10 min)	1	-	-	-	-
	Volume of oil (0 µl)	2	-	-	-	-
	Volume of jar (700 ml)	3	-	-	-	-
		4	-	-	-	-
2	Temp (40 °C)	0	5.9±1.5b	5.4±2.1c	7.8±1.2a	6.4±1.1c
	Time (10 min)	1	6.0±1.5b	5.8±1.1c	7.2±2.2a	6.7±3.1c
	Volume of oil (100 µl)	2	6.2±1.4b	6.4±1.7b	6.6±0.9b	6.8±1.2c
	Volume of jar (700 ml)	3	6.5±1.7b	6.5±1.9b	6.7±1.2b	6.6±1.4c
		4	6.6±1.3b	6.7±1.3b	5.3±0.8c	6.5±1.3c

^{a,b,c,d} Means with different superscript in the same column different (P < 0.05).

Table 32 (Continued)

Treatment No.	Optimum conditions	Time storage (Wk)	Odour	Flavour	Texture	Overall
3	Temp (40 °C)	0	6.3±1.9b	6.1±1.5c	7.8±0.7b	7.3±0.4b
	Time (10 min)	1	6.4±1.8b	6.2±1.8b	7.9±0.6a	7.3±0.7b
	Volume of oil (50 µl)	2	6.5±1.6b	6.0±0.9b	6.9±1.4b	6.8±1.1c
	Volume of jar (700 ml)	3	6.6±1.7b	6.7±1.2b	6.8±1.7b	6.5±1.3c
		4	-	-	-	-

^{a,b,c,d} Means with different superscript in the same column different (P < 0.05).