

Table S2: Phenolic content and antioxidant activity of differently microencapsulated hop extract during storage at different temperatures.

storage time (days)	storage temperature (°C)	TPC (mg GAE g ⁻¹ dm)			FRAP (μmol Fe ²⁺ g ⁻¹ dm)			TEAC (μmol g ⁻¹ dm)		
		ExGA	ExMD-GA	ExMD	ExGA	ExMD-GA	ExMD	ExGA	ExMD-GA	ExMD
0	-	13.23 ^{abA} ± 0.32 (-)	12.15 ^{abB} ± 0.29 (-)	10.27 ^{abC} ± 0.09 (-)	110.75 ^{aA} ±2.46 (-)	109.17 ^{aA} ± 2.14 (-)	92.96 ^{aB} ± 1.66 (-)	57.83 ^{aA} ±0.55 (-)	48.57 ^{aB} ±0.41 (-)	36.63 ^{aC} ±2.26 (-)
7	5	14.20 ^{aA} ± 0.30 (+7.34±2.27)	12.30 ^{ab} ± 0.66 (+3.98±3.71)	10.54 ^{aC} ± 0.17 (+2.65±1.61)	111.76 ^{aA} ± 3.46 (+0.92±3.13)	107.02 ^{ab} ± 2.95 (1.97±2.71)	94.47 ^{aC} ± 1.09 (+1.62±1.17)	48.89 ^{bcA} ±1.48 (14.29±2.59)	48.99 ^{aA} ±0.13 (+2.07±0.27)	30.53 ^{bcB} ±0.03 (8.68±0.09)
14	5	12.77 ^{bA} ± 0.32 (2.05±0.10)	11.24 ^{cB} ± 0.15 (7.45±1.27)	9.86 ^{bC} ± 0.14 (4.04±1.36)	108.84 ^{aA} ± 2.79 (1.73±2.52)	95.24 ^{bb} ± 1.02 (12.76±0.93)	79.69 ^{bC} ± 1.29 (14.28±1.39)	41.61 ^{cA} ±0.61 (21.99±8.79)	41.41 ^{bA} ±1.12 (13.73±6.96)	27.52 ^{bcB} ±1.75 (17.67±5.24)
21	5	13.53 ^{abA} ± 0.51 (+2.26±3.86)	11.75 ^{abcB} ±0.12 (3.26±0.98)	10.18 ^{abC} ± 0.08 (0.92±0.77)	111.79 ^{aA} ± 2.55 (+0.93±2.30)	98.47 ^{bb} ± 1.04 (9.81±0.95)	84.07 ^{bC} ± 0.65 (9.57±0.70)	52.52 ^{abA} ±1.31 (7.92±2.30)	41.77 ^{bb} ±2.04 (12.97±4.26)	31.29 ^{bC} ±2.45 (6.40±4.26)
35	5	13.20 ^{abA} ± 0.47 (0.21±3.55)	11.29 ^{bcB} ± 0.01 (7.06±0.11)	9.83 ^{bC} ± 0.47 (1.78±1.72)	108.08 ^{aA} ± 3.46 (2.41±3.12)	95.34 ^{bb} ± 0.44 (12.67±0.40)	81.88 ^{bC} ± 4.11 (9.44±1.43)	43.33 ^{cA} ±8.24 (24.04±14.44)	34.50 ^{cB} ±2.9 (28.13±6.15)	24.96 ^{cC} ±2.40 (25.34±7.18)
0	-	13.23 ^{aA} ± 0.32 (-)	12.15 ^{ab} ± 0.29 (-)	10.27 ^{aC} ± 0.09 (-)	110.75 ^{aA} ±2.46 (-)	109.17 ^{aA} ± 2.14 (-)	92.96 ^{aB} ± 1.66 (-)	57.83 ^{aA} ±0.55 (-)	48.57 ^{abB} ±0.41 (-)	36.63 ^{abC} ±2.26 (-)
7	20	11.52 ^{bA} ± 0.78 (16.34±0.23)	11.33 ^{bA} ± 0.51 (4.48±1.98)	9.78 ^{bb} ± 0.36 (4.89±3.50)	110.52 ^{aA} ± 2.02 (0.21±1.82)	100.68 ^{bb} ± 3.95 (5.85±2.00)	80.65 ^{bC} ± 3.58 (11.03±0.31)	57.02 ^{aA} ±0.22 (0.05±0.38)	49.18 ^{ab} ±1.64 (+2.46±0.38)	38.56 ^{aC} ±2.31 (+15.33±6.90)
14	20	12.62 ^{abA} ± 0.16 (4.62±1.19)	11.55 ^{abB} ±0.19 (4.91±1.57)	9.98 ^{abC} ± 0.04 (2.84±0.40)	110.49 ^{aA} ± 1.37 (0.23±1.24)	100.50 ^{bb} ± 2.22 (7.95±2.03)	81.36 ^{bC} ± 1.88 (12.48±2.02)	47.34 ^{bA} ±2.05 (15.38±3.60)	42.52 ^{bb} ±1.84 (11.41±3.83)	31.4 ^{bcC} ±1.49 (5.99±4.44)
21	20	12.44 ^{abA} ± 0.30 (6.06±2.27)	11.41 ^{abB} ± 0.10 (6.09±0.85)	10.02 ^{abC} ± 0.11 (2.48±1.02)	107.16 ^{aA} ± 2.53 (3.25±2.29)	99.13 ^{bb} ±1.42 (9.20±1.30)	84.94 ^{bC} ± 2.62 (8.62±2.82)	43.27 ^{abA} ±2.87 (24.15±5.04)	46.09 ^{abA} ±2.65 (3.98±5.52)	26.78 ^{cB} ±2.94 (19.90±8.79)
35	20	12.32 ^{abA} ± 0.12 (6.84±0.88)	11.07 ^{bb} ±0.21 (8.89±1.75)	9.82 ^{abC} ± 0.11 (4.37±1.04)	107.53 ^{aA} ± 1.32 (2.90±1.19)	96.31 ^{bb} ± 1.48 (11.79±1.36)	83.22 ^{bC} ± 0.97 (10.48±1.04)	41.94 ^{bA} ±2.01 (26.48±3.55)	33.94 ^{cB} ±3.29 (29.28±6.86)	27.38 ^{cC} ±3.58 (18.10±10.72)
0	-	13.23 ^{aA} ± 0.32 (-)	12.15 ^{ab} ± 0.29 (-)	10.27 ^{bcC} ± 0.09 (-)	110.75 ^{aA} ±2.46 (-)	109.17 ^{aA} ± 2.14 (-)	92.96 ^{aB} ± 1.66 (-)	57.83 ^{aA} ±0.55 (-)	48.57 ^{ab} ±0.41 (-)	36.63 ^{aC} ±2.26 (-)
7	35	12.65 ^{bA} ± 0.19 (4.41±1.47)	11.95 ^{abB} ± 0.08 (1.66±2.20)	10.75 ^{aC} ± 0.09 (+4.67±0.87)	111.63 ^{aA} ± 1.28 (+0.80±1.16)	102.04 ^{bcB} ± 1.10 (6.53±1.00)	85.22 ^{bc} ±1.31 (8.33±1.41)	49.52 ^{bcA} ±1.09 (13.20±1.92)	45.34 ^{aAB} ±3.54 (5.53±7.38)	35.01 ^{ab} ±2.57 (+15.06±7.70)
14	35	12.18 ^{bcA} ± 0.14 (7.90±1.03)	11.49 ^{cB} ± 0.13 (5.41±1.03)	10.61 ^{abC} ± 0.08 (+3.34±0.75)	108.84 ^{aA} ± 1.66 (1.73±1.50)	97.80 ^{cB} ± 0.75 (10.42±0.69)	84.67 ^{bC} ± 0.63 (8.92±0.68)	45.30 ^{cA} ±0.01 (20.58±0.03)	43.14 ^{aAB} ±3.54 (10.12±7.34)	40.06 ^{ab} ±0.23 (+19.84±0.69)
21	35	12.02 ^{cA} ± 0.19 (9.13±1.42)	11.63 ^{bcA} ± 0.15 (4.23±1.26)	10.37 ^{bB} ± 0.24 (+0.92±2.33)	109.54 ^{aA} ± 1.48 (1.09±1.34)	102.49 ^{bb} ± 1.90 (6.12±1.74)	82.36 ^{bC} ± 2.40 (11.41±2.58)	52.96 ^{abA} ±1.72 (7.15±3.01)	50.18 ^{aA} ±3.99 (+4.55±8.32)	37.02 ^{ab} ±4.96 (+10.75±14.8)
35	35	11.23 ^{dA} ± 0.17 (15.15±1.28)	10.71 ^{dB} ± 0.07 (11.88±0.61)	9.94 ^{cC} ± 0.13 (3.22±1.27)	107.89 ^{aA} ± 0.77 (2.59±0.70)	99.70 ^{bcB} ± 2.25 (8.68±2.06)	84.73 ^{bC} ± 0.60 (8.86±0.64)	37.57 ^{dA} ±1.71 (34.14±2.99)	29.32 ^{bb} ±5.49 (38.92±11.44)	20.95 ^{bC} ±3.36 (37.33±10.05)
0	-	13.23 ^{aA} ± 0.32 (-)	12.15 ^{ab} ± 0.29 (-)	10.27 ^{aC} ± 0.09 (-)	110.75 ^{aA} ±2.46 (-)	109.17 ^{aA} ± 2.14 (-)	92.96 ^{aB} ± 1.66 (-)	57.83 ^{aA} ±0.55 (-)	48.57 ^{bb} ±0.41 (-)	36.63 ^{bC} ±2.26 (-)
7	50	11.09 ^{bA} ± 0.06 (16.19±0.44)	10.97 ^{bA} ± 0.07 (9.68±0.59)	10.37 ^{ab} ± 0.05 (+0.99±0.48)	105.25 ^{aA} ± 2.32 (4.97±2.10)	101.58 ^{abA} ± 1.35 (6.96±1.24)	85.72 ^{abB} ± 1.87 (7.79±2.01)	44.96 ^{bA} ±3.81 (21.18±6.68)	36.07 ^{cdAB} ±1.30 (24.86±2.71)	29.03 ^{bb} ±4.71 (21.97±14.10)
14	50	10.83 ^{bA} ± 0.09 (18.12±0.65)	10.24 ^{cB} ± 0.17 (15.71±1.39)	10.05 ^{aB} ± 0.09 (2.13±0.89)	105.53 ^{aA} ± 1.10 (4.71±0.99)	90.87 ^{cB} ± 7.09 (13.02±0.09)	90.60 ^{abB} ± 5.79 (6.13±0.70)	43.35 ^{bA} ±6.26 (29.65±7.02)	44.97 ^{bcA} ±1.46 (6.32±3.04)	34.05 ^{bA} ±4.31 (+8.96±5.42)
21	50	10.05 ^{cA} ± 0.21 (24.00±1.57)	10.20 ^{cA} ± 0.05 (16.07±0.38)	9.35 ^{bb} ± 0.36 (8.98±3.49)	105.18 ^{aA} ± 2.91 (5.04±2.63)	94.75 ^{bcB} ±1.68 (13.21±1.54)	83.43 ^{bcC} ± 3.19 (10.26±3.44)	29.47 ^{cA} ±1.37 (52.46±2.41)	32.92 ^{dA} ±6.18 (39.85±12.87)	28.24 ^{bA} ±5.07 (34.19±15.15)
35	50	9.51 ^{dA} ± 0.05 (28.12±0.37)	9.28 ^{dB} ± 0.02 (23.62±0.14)	8.70 ^{cB} ± 0.19 (15.31±1.90)	105.90 ^{aA} ± 2.22 (4.38±2.01)	96.22 ^{bcB} ±0.74 (11.87±0.67)	81.66 ^{cA} ± 1.41 (12.16±1.52)	64.89 ^{aA} ±4.26 (+13.75±7.47)	64.82 ^{aA} ±2.96 (+35.04±6.17)	57.53 ^{aA} ±1.57 (+72.09±4.70)

ExGA: microencapsulated hop extract with Arabic gum; ExMD-GA: microencapsulated hop extract with mixture of maltodextrin and Arabic gum; ExMD: microencapsulated hop extract with maltodextrin; TPC: Total Phenolic Content (mg GAE g⁻¹ dm); FRAP: Ferric Reducing Antioxidant Power (μmol Fe²⁺Eq g⁻¹ dm);TEAC: Trolox Equivalent Antioxidant Capacity (μmol g⁻¹ dm). Data reported in parenthesis are loss percentages with respect to the initial content. Data on columns with different lowercase letters are statistically different at *p* level < 0.05. Data on rows with different capital letters are statistically different at *p* level < 0.05.