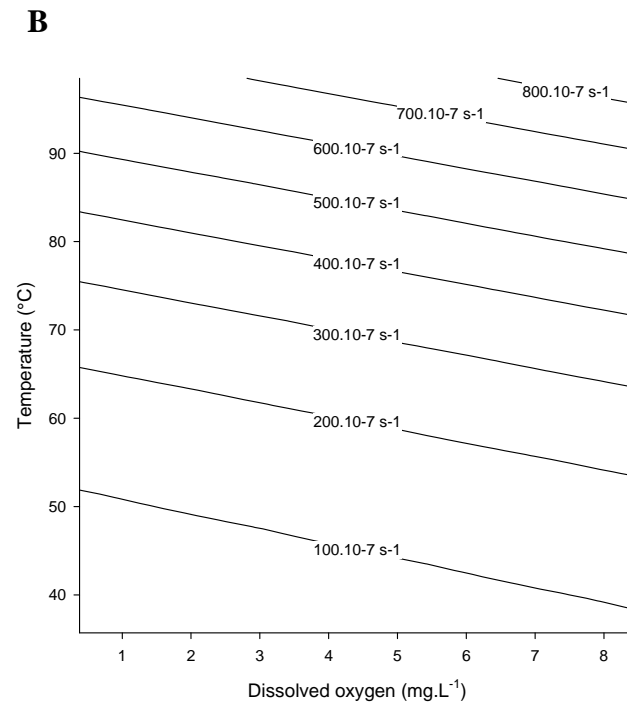
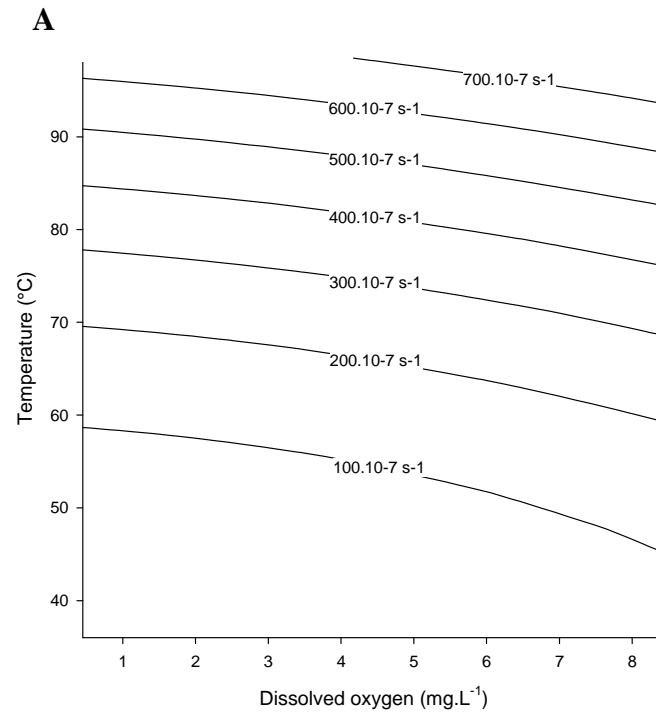


SUPPLEMENTAL INFORMATION

Isothermal kinetic parameters k and D vs. temperature for the thermal degradation of anthocyanins in blackberry and blood orange juices, and roselle extracts (n = 3 replications).

	T (°C)	kx10 ⁻⁷ /s	Dx10 ⁵ (s)
Blood orange juice (O ₂ =2.2±0.1 mg/L)	60.0	145.5 (10.1)	158.7 (10.9)
	70.0	262.2 (4.2)	87.8 (1.4)
	80.0	506.9 (4.7)	45.4 (0.5)
	90.0	1205.0 (29.1)	19.1 (0.5)
	100.0	1660.0 (48.4)	13.9 (0.4)
Blackberry reference juice (BRJ) (O ₂ =2.5±0.1 mg/L)	30.0	81.0 (0.8)	284.0 (2.9)
	40.0	84.2 (0.7)	273.6 (2.1)
	50.0	138.1 (0.9)	166.8 (1.2)
	60.0	202.4 (7.4)	113.9 (4.2)
	70.0	326.0 (8.7)	70.7 (1.9)
	80.0	582.1 (25.3)	39.6 (1.7)
	90.0	747.7 (62.5)	30.9 (2.5)
Blackberry pulpy juice (BPJ) (O ₂ =2.5± 0.1 mg/L)	30.0	67.5 (1.4)	341.1 (7.0)
	40.0	69.4 (0.8)	331.9 (3.9)
	50.0	105.9 (2.1)	217.4 (2.4)
	60.0	133.0 (4.3)	173.2 (5.6)
	70.0	221.6 (6.5)	104.0 (3.1)
	80.0	489.2 (7.6)	47.1 (0.7)
	90.0	671.6 (3.5)	34.3 (0.1)
Roselle Guatemala extract (0.4<O ₂ <8.5 mg/L)	35.7	28.6 (1.8)	806.0 (50.0)
	45.0	37.5 (2.2)	616.3 (36.8)
	67.5	208.9 (6.1)	110.3 (3.0)
	90.0	344.1 (7.4)	66.9 (1.4)
	98.5	751.0 (30.8)	30.7 (1.3)
Roselle Koor extract (O ₂ =2.5±0.1 mg/L)	30.0	28.2 (1.5)	846.2 (95.7)
	40.0	53.4 (5.4)	443.8 (44.3)
	50.0	107.8 (8.7)	214.6 (18.0)
	60.0	169.9 (14.4)	135.6 (15.1)
	70.0	325.7 (11.2)	70.8 (2.2)
	80.0	571.6 (21.8)	40.3 (1.3)
	90.0	642.6 (14.1)	35.9 (1.0)
Roselle Vimto extract (O ₂ =2.5±0.1 mg/L)	30.0	27.3 (1.2)	818.9 (34.4)
	40.0	49.5 (4.9)	468.2 (46.3)
	50.0	63.6 (2.4)	362.0 (13.6)
	60.0	103.8 (11.6)	223.7 (24.5)
	70.0	210.1 (9.4)	109.8 (4.9)
	80.0	380.6 (10.8)	60.5 (1.7)
	90.0	616.1 (47.1)	37.5 (2.8)
Roselle Thai extract (O ₂ =2.5±0.1 mg./L)	30.0	10.1 (0.7)	2286.0 (161.5)
	40.0	21.0 (5.1)	1135.0 (257.0)
	50.0	51.5 (1.8)	447.8 (14.9)
	60.0	131.7 (7.1)	175.2 (9.7)
	70.0	197.2 (10.5)	116.8 (8.8)
	80.0	281.8 (14.1)	81.7 (8.1)
	90.0	594.3 (30.4)	38.8 (2.4)



Rate constant k (s⁻¹) during the thermal degradation of anthocyanins vs. oxygen concentration and temperature in (A) Guatemala roselle extract, with model fittings at $R^2 = 0.98$, $P < 0.0014$, and $P_{lof} = 0.15$; (B) blackberry reference juice, with model fittings at $R^2 = 0.98$, $P < 0.006$, and $P_{lof} = 0.75$.