

Supplementary materials for the article

Physical and Oxidative Stability of Emulsions Stabilized with Fractionated Potato Protein Hydrolysates Obtained from Starch Production Side Stream

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Table S1. Scanning program for the Turbiscan

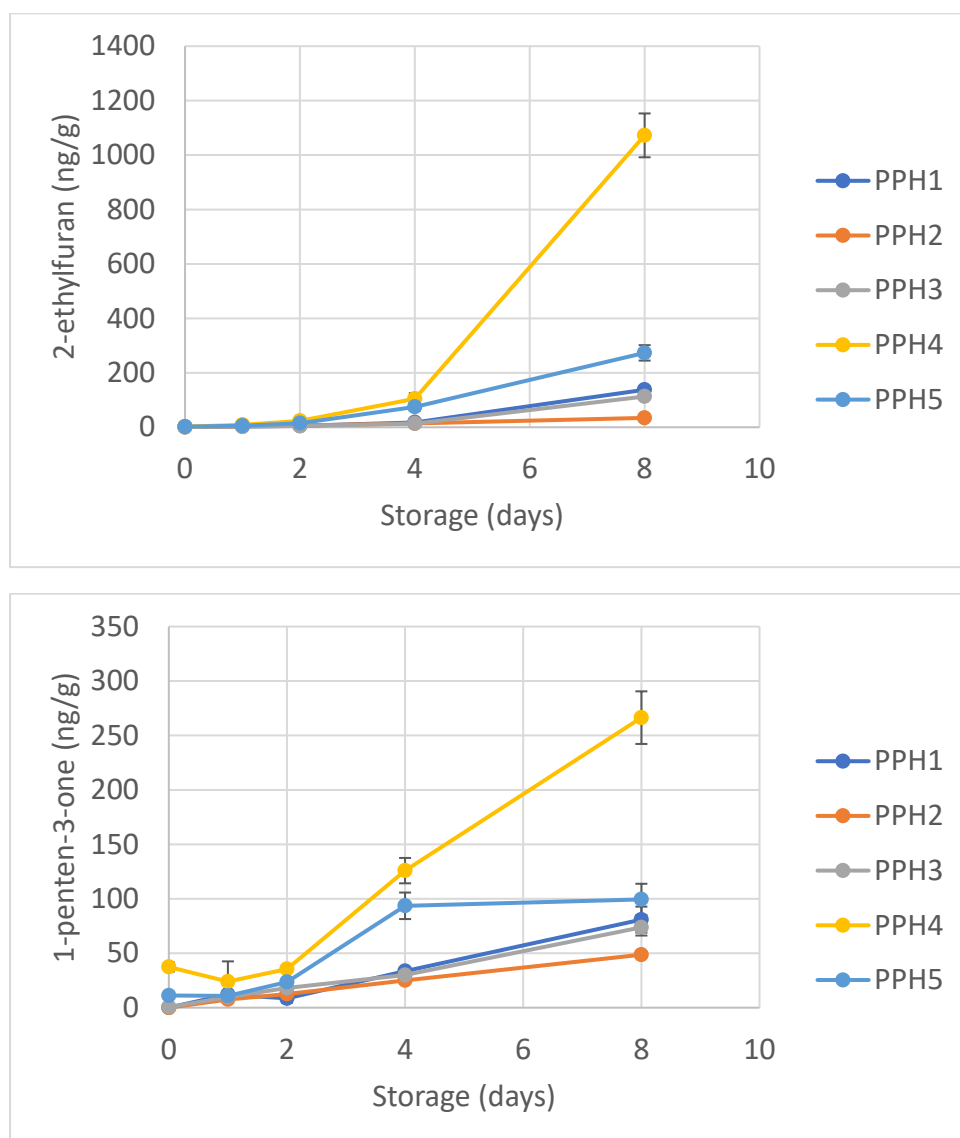
#scans	Interval	time
31	1 min	40 min
31	10 min	5h20min
16	20 min	7h
10	2h	20h
10	2h	22h
7	4h	1d2min
Total		
105 scans		3d7h2min

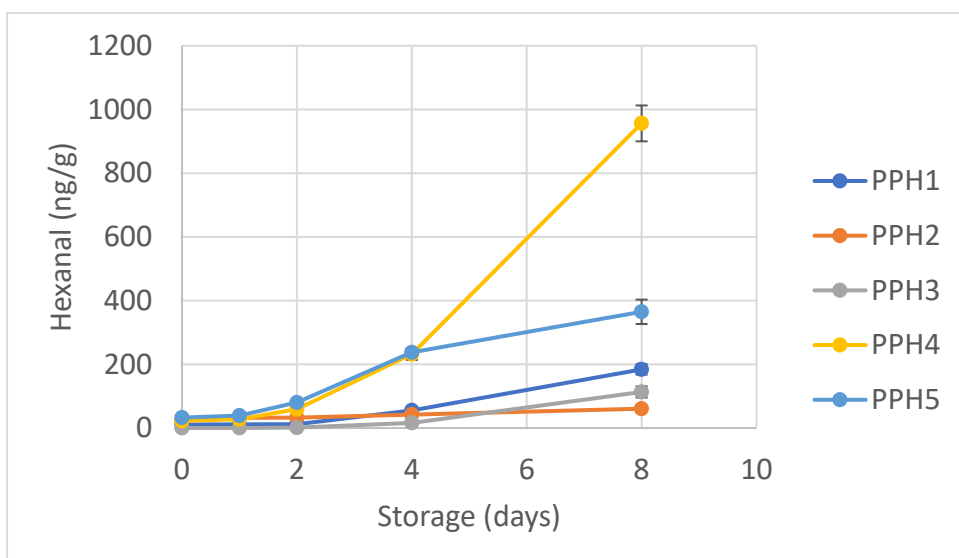
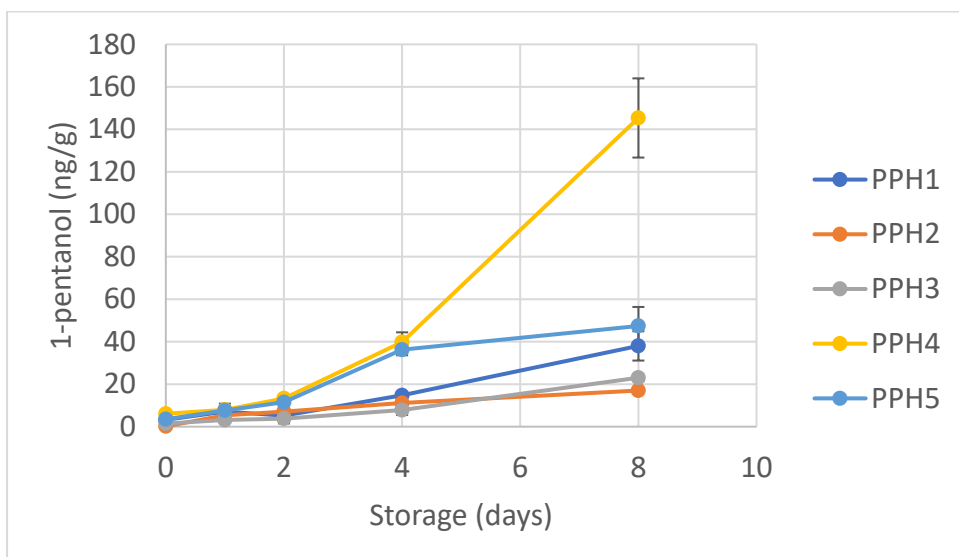
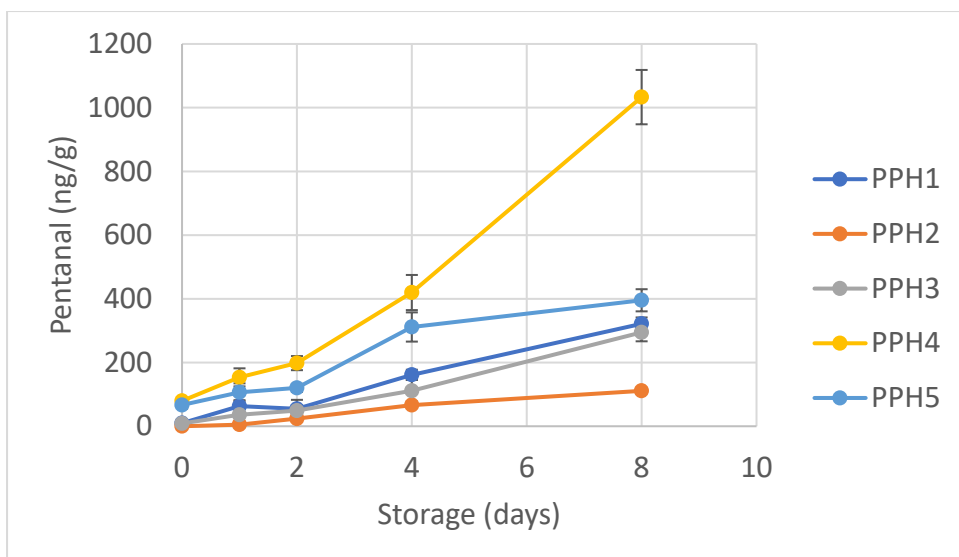
Table S2. Statistical analysis for the (a) formation of hydroperoxides; (b) consumption of α -tocopherols; (c) development of 1-penten-3-ol and (d) development of (*E,E*)-2,4-heptadienal. Letters significant differences between samples at a certain sampling day ($p < 0.05$).

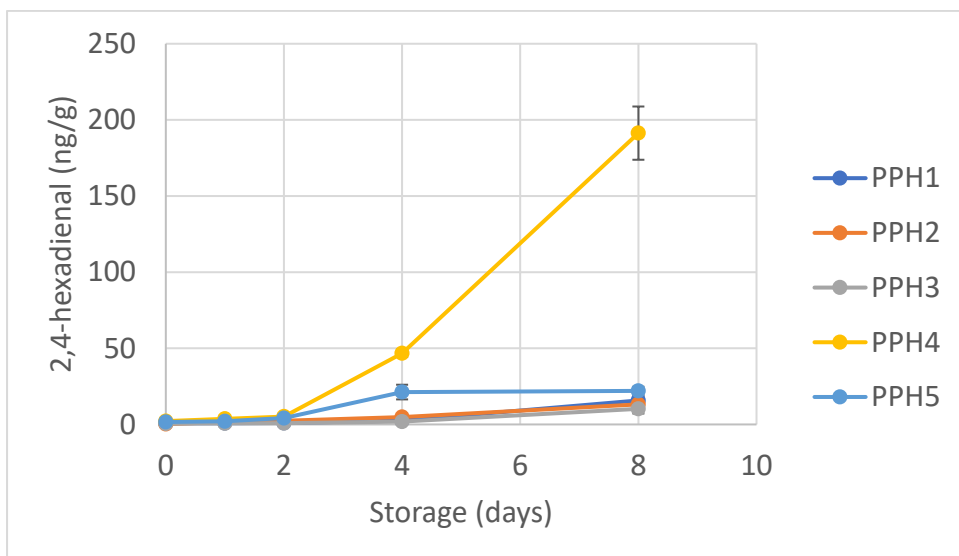
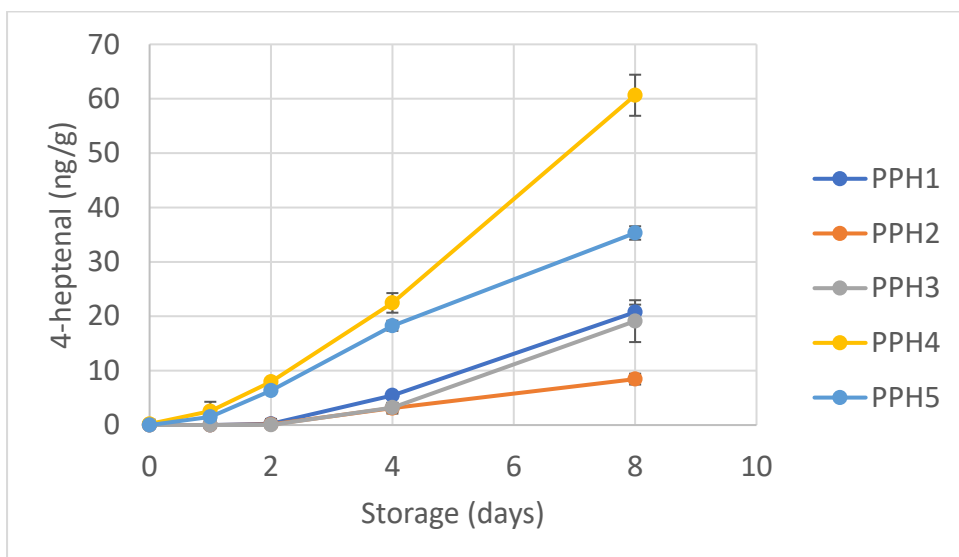
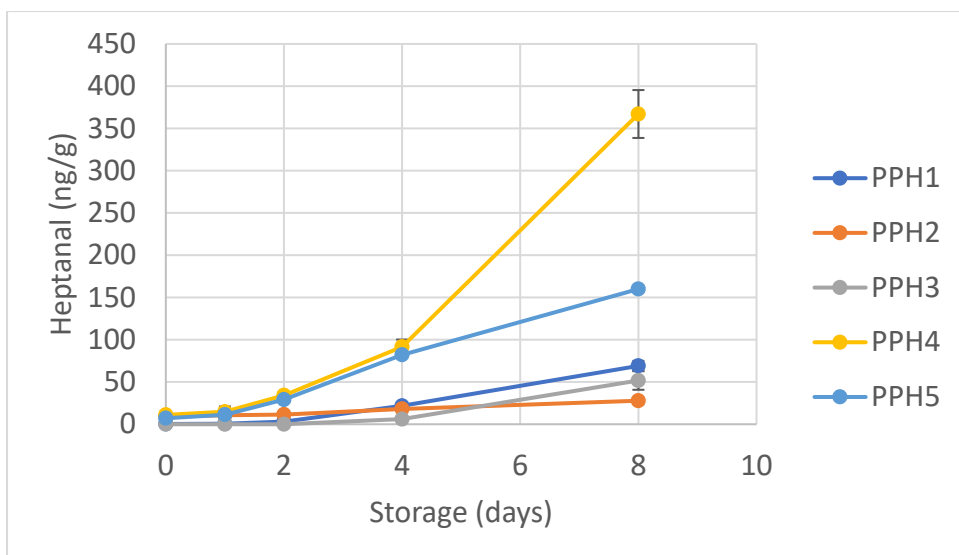
(a) PV	Day 0	Day 1	Day 2	Day 4	Day 8
PPH1	7.5±1.1 ^a	9.0±0.3 ^a	12.0±0.2 ^a	22.1±0.0 ^b	65.1±8.3 ^{c,C}
PPH2	1.2±0.1 ^a	5.0±0.0 ^b	5.6±0.1 ^b	8.9±0.7 ^c	15.1±0.0 ^{d,A}
PPH3	5.7±0.3 ^a	9.2±0.5 ^b	9.4±0.1 ^b	13.0±0.4 ^c	31.7±1.9 ^{d,B}
PPH4	12.8±3.4 ^a	11.8±0.4 ^a	21.2±0.8 ^a	90.3±2.2 ^b	181.1±9.5 ^{c,D}
PPH5	6.9±0.7 ^a	14.9±1.1 ^a	46.5±0.5 ^b	112.5±6.9 ^c	238.1± - ^{d,E}
(b) α -tocopherol	Day 0	Day 1	Day 2	Day 4	Day 8
PPH1	144.1±1.7 ^d	42.1±0.4 ^c	24.5±1.4 ^b	1.7±0.9 ^a	0.0±0.0 ^{a,C}
PPH2	157.9±0.9 ^e	111.1±1.5 ^d	85.0±0.0 ^c	46.2±1.5 ^b	33.1±9.3 ^{a,C}
PPH3	146.1±2.5 ^e	86.1±0.1 ^d	51.1±0.1 ^c	14.6±3.6 ^b	0.0±0.0 ^{a,C}
PPH4	16.0±7.1 ^b	6.2±3.0 ^a	0.0±0.0 ^a	0.0±0.0 ^a	0.0±0.0 ^{a,A}
PPH5	77.5±9.6 ^c	57.3±7.5 ^b	1.7±0.4 ^a	0.0±0.0 ^a	0.0± - ^{a,B}
(c) 1-Penten-3-ol	Day 0	Day 1	Day 2	Day 4	Day 8
PPH1	3.0±2.5 ^a	67.1±13.9 ^a	78.9±23.5 ^a	228.6±7.4 ^b	1016.6±142.0 ^{c,B}
PPH2	0.0±0.0 ^a	32.1±3.4 ^a	62.6±4.3 ^{ab}	125.2±15.1 ^b	217.4±55.9 ^{c,A}
PPH3	0.0±0.0 ^a	38.4±6.8 ^{ab}	73.4±16.7 ^b	124.7±26.9 ^c	462.5±8.3 ^{d,A}

PPH4	97.5±8.3 ^a	148.1±25.7 ^a	281.0±10.9 ^a	1206.7±122.1 ^b	3523.5±242.9 ^{c,D}
PPH5	65.9±9.9 ^a	156.0±38.4 ^{ab}	343.2±31.1 ^b	1465.9±164.6 ^c	1950.6±92.8 ^{d,C}
(d) (E,E)-2,4-heptadienal	Day 0	Day 1	Day 2	Day 4	Day 8
PPH1	0.0±0.0 ^a	0.0±0.0 ^a	2.3±3.9 ^a	41.9±6.3 ^a	283.6±35.5 ^{b,AB}
PPH2	0.0±0.0 ^a	13.2±2.6 ^{ab}	49.0±30.3 ^b	115.4±15.3 ^c	225.0±5.3 ^{d,A}
PPH3	0.0±0.0 ^a	0.3±0.5 ^a	2.0±2.1 ^a	32.4±19.2 ^a	206.9±105.0 ^{b,A}
PPH4	49.1±12.1 ^a	145.2±126.4 ^a	221.6±31.9 ^a	723.0±42.3 ^b	1214.1±77.7 ^{c,C}
PPH5	0.0±0.0 ^a	22.9±5.5 ^{ab}	69.8±19.2 ^b	264.2±40.1 ^c	407.3±13.3 ^{d,B}

Figure S1. The development of volatile compounds during 8 days of storage







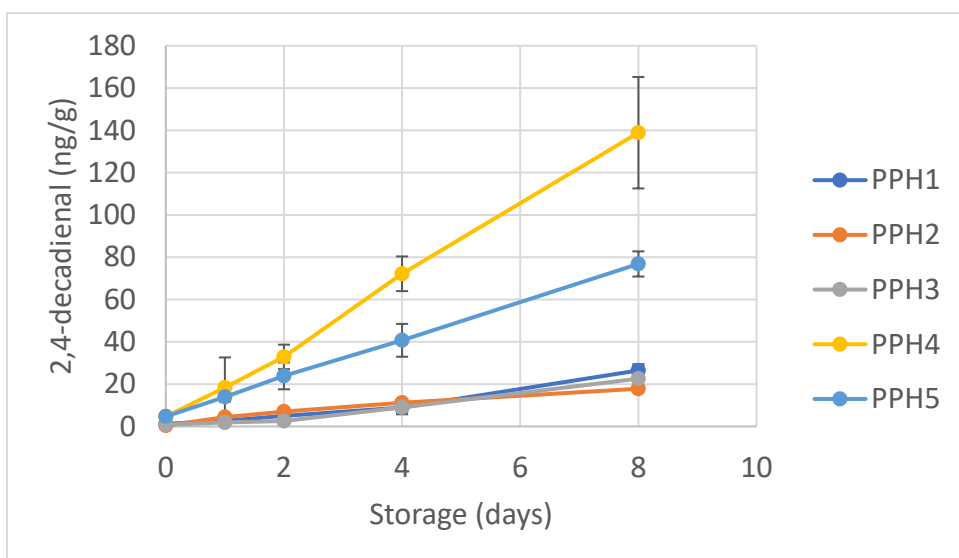
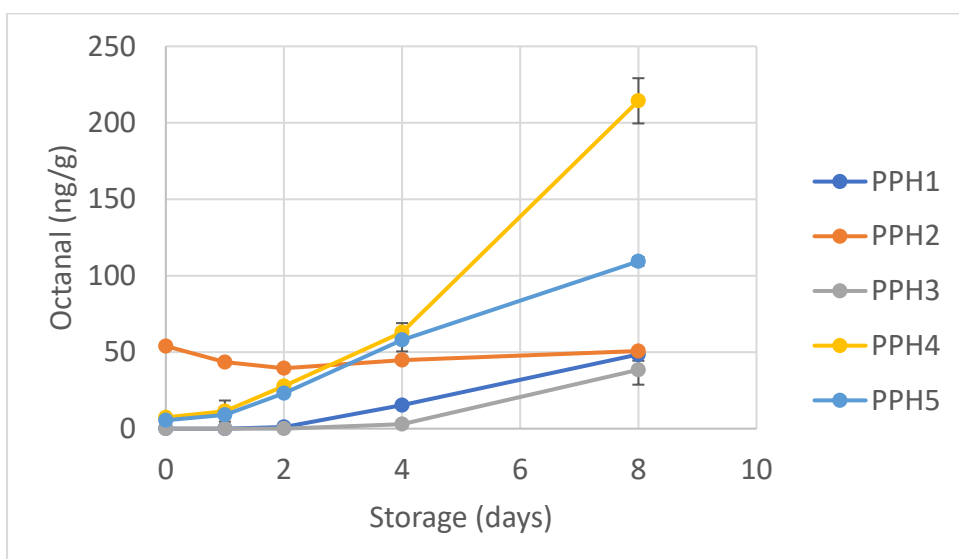
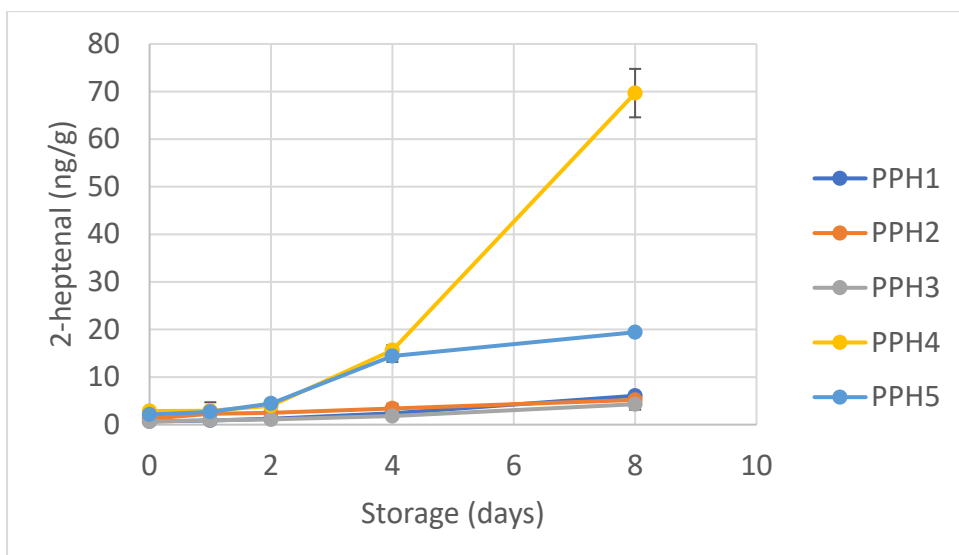


Table S3. References for sensory analysis.

ISO 13300-2: 2006 Sensory analysis – General guidance for the staff of a sensory evaluation laboratory – Part 2: Recruitment and training of panel leaders
ISO 3972:2011 & ISO 3972:2011/Cor 1:2012 Sensory analysis – Methodology – Method of investigating sensitivity of taste
ISO 5492:2008 Sensory analysis – Vocabulary
ISO 6658:2017 Sensory analysis – Methodology – General guidance
ISO 8586:2012 Sensory analysis – General guidelines for the selection, training and monitoring of selected assessors and expert sensory assessors
ISO 8589:2007 Sensory analysis – General guidance for the design of test rooms (EN ISO 8589:2010)
NMKL Procedure No. 6 General guidelines for quality assuring sensory laboratories (2023)