

Seasonal Variations in Baltic Sprat (*Sprattus sprattus balticus*) Chemical Composition and Their Impact on Smoked Sprat Quality

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SUPPLEMENTARY MATERIALS

Table S1. Fatty acid profile in Baltic sprats across the fishing season (g/100 g of product).

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Variable	Autumn	Winter	Spring
C4:0, butiric acid	<0.1	<0.1	<0.1
C6:0, caproic acid	<0.1	<0.1	<0.1
C8:0, caprylic acid	<0.1	<0.1	<0.1
C10:0, capric acid	<0.1	<0.1	<0.1
C11:0, undecylic acid	<0.1	<0.1	<0.1
C12:0, lauric acid	<0.1	<0.1	<0.1
C13:0, tridecylic acid	<0.1	<0.1	<0.1
C14:0, myristic acid	0.6±0.1 ^a	0.4±0.1 ^b	0.3±0.1 ^b
C14:1, myristoleic acid	<0.1	<0.1	<0.1
C15:0, pentadecanoic acid	0.1±0.1	<0.1	<0.1
C15:1, ginkgolic acid	<0.1	<0.1	<0.1
C16:0, palmitic acid	3.6±0.4 ^a	2.3±0.2 ^b	1.7±0.2 ^c
C17:1n7, palmitoleic acid	0.9±0.1 ^a	0.6±0.1 ^b	0.4±0.1 ^b
C16:1 (sum of)	0.9±0.1 ^a	0.6±0.1 ^b	0.4±0.1 ^b
C17:0, margaric acid	0.2±0.1 ^a	0.1±0.1 ^a	<0.1
C16:2n4, hexadecadienoic acid	<0.1	<0.1	<0.1
C17:1, margaroleic acid	0.1±0.1	<0.1	<0.1
C16:3n4, hexadecatrienoic acid	<0.1	<0.1	<0.1
C18:0, stearic acid	0.4±0.1 ^a	0.3±0.1 ^{ab}	0.2±0.1 ^b
C18:1n9 <i>trans</i> , elaidic acid	<0.1	<0.1	<0.1
C18:1n9, oleic acid	4.8±0.5 ^a	3.4 ±0.3 ^b	2.7±0.1 ^c
C18:1n7, vaccenic acid	0.4±0.1 ^a	0.3±0.1 ^{ab}	0.2±0.1 ^b
C18:1 (sum of)	5.3±0.7 ^a	3.8±0.5 ^b	3.0±0.4 ^b
C18:2n6 <i>trans</i> , linolelaidic acid	<0.1	<0.1	<0.1
C18:2 <i>trans</i> (sum of)	<0.1	<0.1	<0.1
C18:2 (sum of)	0.5±0.1 ^a	0.3±0.1 ^b	0.2±0.1 ^b
C18:2n6, α -linolenic acid	0.4±0.1 ^a	0.3±0.1 ^{ab}	0.2±0.1 ^b
C20:0, arachidonic acid	<0.1	<0.1	<0.1
C18:3n6, γ -linolenic acid	<0.1	<0.1	<0.1
C21:0, heneicosanic acid	<0.1	<0.1	<0.1

C18:3n4, octadecatrienoic acid	<0.1	<0.1	<0.1
C20:1n9, eicosenoic acid	0.1±0.1 ^a	0.1±0.1 ^a	0.1±0.1 ^a
C20:1 (sum of)	0.1±0.1 ^a	0.1±0.1 ^a	0.1±0.1 ^a
C18:3n3, α -linolenic acid	0.5±0.1 ^a	0.3±0.1 ^b	0.2±0.1 ^b
C18:3 (sum of)	0.5±0.1 ^a	0.3±0.1 ^b	0.2±0.1 ^b
C18:4n3, stearidonic acid	0.5±0.1 ^a	0.2±0.1 ^b	0.1±0.1 ^b
C20:2n6, eicosadienoic acid	0.1±0.1 ^a	0.1±0.1 ^a	<0.1
C22:0, behenic acid	<0.1	<0.1	<0.1
C20:3n6, dihomo- γ -linolenic acid	<0.1	<0.1	<0.1
C22:1n11, gadoleic acid	<0.1	<0.1	<0.1
C22:1n9, erucic acid	<0.1	<0.1	<0.1
C22:1 (sum of)	<0.1	<0.1	<0.1
C20:3n3, eicosatrienoic acid	0.1±0.1	<0.1	<0.1
C20:4n6, arachidonic acid	0.1±0.1 ^a	0.1±0.1 ^a	0.1±0.1 ^a
C23:0, tricosylic acid	<0.1	<0.1	<0.1
C22:2n6, docosadienoic acid	<0.1	<0.1	<0.1
C20:4n3, eicosatetraenoic acid	0.1±0.1	<0.1	<0.1
C20:5n3, eicosapentaenoic acid	1.8±0.2 ^a	0.9±0.1 ^b	0.5±0.1 ^b
C24:0, lignoceric acid	<0.1	<0.1	<0.1
C24:1n9, nervonic acid	0.2±0.1 ^a	0.2±0.1 ^a	0.1±0.1 ^a
C22:5n3, docosapentaenoic acid	0.1±0.1 ^a	0.1±0.1 ^a	0.1±0.1 ^a
C22:6n3, docosahexaenoic acid	3.3±0.3 ^a	1.6±0.2 ^b	0.9±0.1 ^c
Other fatty acids	0.6±0.1 ^a	0.3±0.1 ^b	0.3±0.1 ^b

Average value ($n=3$) \pm standard deviation. Different letters in a row show significant differences at $p \leq 0.05$ (t -test).