

Table S1. Fatty acid composition (% of FA in fat) of *C. gariepinus* and heteroclarias fat. Values are expressed as mean \pm standard deviation (SD).

	<i>C.gariepinus</i>		Heteroclarias	
	Male	Female	Male	Female
(C12:0) Lauric acid	0.08 \pm 0.01	0.10 \pm 0.0001	0.09 \pm 0.0001	0.07 \pm 0.0
(C14:0) Myristic acid	0.94 \pm 0.02	1.09 \pm 0.02	1.06 \pm 0.01	1.12 \pm 0.01
(C15:0) Pentadecanoic acid	0.16 \pm 0.004	0.17 \pm 0.01	0.15 \pm 0.01	0.15 \pm 0.01
(C16:0) Palmitic acid	15.25 \pm 0.05	15.33 \pm 0.07	17.22 \pm 0.05	18.37 \pm 0.04
(C16:1n7) Palmitoleic acid	1.85 \pm 0.02	2.09 \pm 0.01	2.00 \pm 0.01	2.01 \pm 0.01
(C17:0) Heptadecanoic acid	0.24 \pm 0.01	0.24 \pm 0.01	0.21 \pm 0.0001	0.21 \pm 0.01
(C17:1n7) cis-10-Heptadecenoic acid	< LOD	0.05 \pm 0.0001	0.05 \pm 0.01	< LOD
(C18:0) Stearic acid	4.46 \pm 0.02	4.44 \pm 0.01	5.19 \pm 0.01	6.17 \pm 0.0001
(C18:1n9c + C18:1n9t) Oleic acid + Elaidic acid	45.66 \pm 0.13	46.20 \pm 0.02	43.44 \pm 0.06	44.62 \pm 0.03
(C18:2n6c) Linoleic acid	17.70 \pm 0.10	17.01 \pm 0.02	17.19 \pm 0.06	15.09 \pm 0.02
(C18:2n6t) Linolelaidic acid	< LOD	< LOD	< LOD	0.06 \pm 0.01
(C18:3n6) gamma-Linolenic acid [GLA]	1.37 \pm 0.01	1.73 \pm 0.01	0.94 \pm 0.0001	0.73 \pm 0.01
(C18:3n3) alfa- Linolenic acid [ALA]	3.39 \pm 0.03	3.39 \pm 0.0001	3.60 \pm 0.01	3.51 \pm 0.01
(C20:0) Arachidic acid	0.41 \pm 0.01	0.38 \pm 0.01	0.36 \pm 0.01	0.34 \pm 0.0001
(C20:1n15) cis-5- Eicosenoic acid	0.17 \pm 0.01	0.18 \pm 0.01	0.15 \pm 0.01	0.13 \pm 0.01
(C20:1n9) cis-11-Eicosenoic acid	1.78 \pm 0.03	1.81 \pm 0.01	1.71 \pm 0.0001	1.72 \pm 0.01
(C20:2n6) cis-11.14-Eicosenoic acid	0.50 \pm 0.01	0.50 \pm 0.01	0.52 \pm 0.01	0.53 \pm 0.01
(C20:3n6) cis-8.11.14-Eicosatrienoic acid [DGLA]	0.89 \pm 0.0041	0.77 \pm 0.0001	0.82 \pm 0.0001	0.74 \pm 0.0001
(C20:4n6) Arachidonic acid [AA]	0.62 \pm 0.0041	0.55 \pm 0.0001	0.64 \pm 0.01	0.57 \pm 0.0001
(C20:3n3) cis-11.14.17-Eicosatrienoic acid[ETE]	0.14 \pm 0.01	0.13 \pm 0.01	0.16 \pm 0.01	0.14 \pm 0.01
(C20:5n3) cis-5.8.11.14.17-Eicosapentaenoic acid [EPA]	0.68 \pm 0.004	0.72 \pm 0.01	0.74 \pm 0.01	0.73 \pm 0.0001
(C22:0) Behenic acid	0.24 \pm 0.01	0.22 \pm 0.01	0.19 \pm 0.0001	0.17 \pm 0.01
(C22:1n9) Erucic acid	0.20 \pm 0.0001	0.23 \pm 0.10	0.17 \pm 0.01	0.18 \pm 0.0001
(C22:2n6) cis-13.16-Docosadienoic acid	< LOD	< LOD	0.13 \pm 0.03	0.05 \pm 0.03
(C24:0) Lignoceric acid	0.10 \pm 0.01	0.09 \pm 0.0001	0.008 \pm 0.01	0.08 \pm 0.0001
(C22:6n3) cis-4.7.10.13.16.19-Docosahexaenoic acid [DHA]	2.86 \pm 0.04	2.26 \pm 0.03	2.90 \pm 0.01	2.23 \pm 0.01
(C24:1n9) Nervonic acid	0.17 \pm 0.01	0.17 \pm 0.01	0.15 \pm 0.01	0.14 \pm 0.01

LOD – level of detection.