

*The following supplement accompanies the article*

**Salmon lice sampled from wild Atlantic salmon and sea trout throughout Norway display high frequencies of the genotype associated with pyrethroid resistance**

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Table S1: Frequency and distribution of the resistant haplotype in salmon lice sampled from wild and farmed hosts in Norway in 2014 (2013/2015 for farmed salmon from Finnmark).

Region	Municipality	Host species	Genotype		Total	Prevalence resistance	Year sampled
			Sensitive	Resistant			
Finnmark	Alta	Wild salmon	40	10	50	20.0 %	2014
Finnmark	Alta	Sea trout	28	22	50	44.0 %	2014
Finnmark	Kvalsund	Farmed salmon	26	4	30	13.3 %	2013
Finnmark	Alta	Farmed salmon	9	21	30	70.0 %	2015
Finnmark	Loppa	Farmed salmon	1	29	30	96.7 %	2015
Finnmark	Hammerfest	Farmed salmon	5	24	29	82.8 %	2015
Finnmark	All farm data	Farmed salmon	41	78	119	65.5 %	2013/15
Namsfjord	Flatanger	Wild salmon	40	7	47	14.9 %	2014
Namsfjord	Vikna	Sea trout	18	32	50	64.0 %	2014
Namsfjord	Flatanger	Farmed salmon	17	43	50	86.0 %	2014
Trondheimsfjord	Hitra/Agdenes	Sea trout	6	44	50	88.0 %	2014
Trondheimsfjord	Hemne	Farmed salmon	3	57	60	95.0 %	2014
Romsdalsfjord	Rauma	Wild salmon	36	14	50	28.0 %	2014
Romsdalsfjord	Haram/Fræna/ Molde/Rauma	Sea trout	24	161	185	87.0 %	2014
Romsdalsfjord	Misund	Farmed salmon	25	240	265	90.6 %	2014
Storfjord	Ørskog/Stordal	Wild salmon	38	12	50	24.0 %	2014
Storfjord	Skodje	Farmed salmon	27	389	416	93.5 %	2014
Sognefjord	Gulen/Høyanger	Sea trout	2	46	48	95.8 %	2014
Sognefjord	Lindås	Farmed salmon	2	58	60	96.7 %	2014
Sognefjord	Solund	Farmed salmon	4	54	58	93.1 %	2014
Sognefjord	Øygarden	Farmed salmon	6	139	145	95.9 %	2014
Sognefjord	All farm data	Farmed salmon	12	251	263	95.4 %	2014
Hardangerfjord	Etne	Wild salmon	28	22	50	44.0 %	2014
Hardangerfjord	Etne	Sea trout	7	43	50	86.0 %	2014
Hardangerfjord	Etne	Farmed salmon	4	56	60	93.3 %	2014
Hardangerfjord	Etne	Farmed salmon	7	53	60	88.3 %	2014
Hardangerfjord	Fusa	Farmed salmon	4	175	179	97.8 %	2014
Hardangerfjord	Fusa	Farmed salmon	14	340	354	96.0 %	2014
Hardangerfjord	Fusa	Farmed salmon	1	59	60	98.3 %	2014
Hardangerfjord	Fusa	Farmed salmon	2	118	120	98.3 %	2014
Hardangerfjord	Kvam	Farmed salmon	4	99	103	96.1 %	2014
Hardangerfjord	All farm data	Farmed salmon	36	900	936	96.2 %	2014
Rogaland	Sandnes	Wild salmon	30	15	45	33.3 %	2014
Rogaland	Tysvær/ Hjelmeland	Sea trout	11	38	49	77.6 %	2014
Rogaland	Tysvær	Farmed salmon	15	61	76	80.3 %	2014
Sørlandet	Mandal	Wild salmon	9	3	12	25.0 %	2014
Sørlandet	Risør	Sea trout	45	5	50	10.0 %	2014
Sørlandet	Flekkefjord	Farmed salmon	50	9	59	15.3 %	2014
Sørlandet	Flekkefjord	Farmed salmon	51	9	60	15.0 %	2014
Sørlandet	All farm data	Farmed salmon	101	18	119	15.1 %	2014

Table S2: P-values from Chi square tests of frequencies of the resistance genotype between the different host species within each region. Bonferoni corrected threshold value is 0.002.

Region	Wild salmon - Farmed salmon	Wild salmon - Sea trout	Sea trout - Farmed salmon
Finnmark	<0.0001	0.009	0.009
Namsfjord	<0.0001	<0.0001	0.39
Trondheimsfjord	Na	Na	0.18
Romsdalsfjord	<0.0001	<0.0001	0.23
Storfjord	<0.0001	Na	na
Sognefjord	Na	Na	0.9
Hardangerfjord	<0.0001	<0.0001	0.005
Rogaland	<0.0001	<0.0001	0.7
Sørlandet	0.4	0.19	0.36

Table S3: Distribution of resistant and sensitive lice between cohorts of wild Atlantic salmon with P-values from Chi square tests.

Region	Genotype	Sea age			P-value
		1 sw	2sw	3sw	
Namsfjord	Sensitive	28	6	6	0.24
	Resistant	7	0	0	
Romsdalsfjord	Sensitive	6	24	3	0.009
	Resistant	0	7	6	
Storfjord	Sensitive	6	28	4	0.75
	Resistant	3	8	1	
Hardangerfjord	Sensitive	6	15	7	0.76
	Resistant	3	14	5	
Rogaland	Sensitive	4	17	9	0.67
	Resistant	6	2	7	
Sørlandet	Sensitive	0	9	0	1.0
	Resistant	0	3	0	
Total sample	Sensitive	50	99	29	0.17
	Resistant	19	34	19	