

**Table S2** Core microbiota, shared genera in the different conditions at 0.1% of relative abundance and presence in, at least, 90 % of the samples

All samples (n=101)				
Genera	<i>Vibrio</i> uncultured-053			
No infection		OshV-1	<i>V. aestuarianus</i>	
Genera	uncultured-053	<i>Vibrio</i> uncultured-053	<i>Arcobacter</i> <i>Vibrio</i>	
Ebro		Brest	Dungarvan	
Genera	<i>Vibrio</i> uncultured-053	<i>Arcobacter</i> <i>Vibrio</i> <i>Mycoplasma</i> <i>Winogradskyella</i> <i>Haliae</i> <i>Sulfitobacter</i> <i>Polaribacter</i> <i>Marinicella</i> <i>Lutimonas</i> <i>Aquibacter</i> <i>Roseovarius</i> uncultured-104 uncultured-079 uncultured-053 uncultured-015 OM60(NOR5) clade uncultured bacterium-088 uncultured-072 uncultured-050 uncultured bacterium-248	<i>Arcobacter</i> <i>Vibrio</i> <i>Pseudoalteromonas</i> <i>Borrelia</i> <i>Sulfitobacter</i> <i>Marinicella</i> uncultured-053	
Winter		Spring	Summer	Autumn
Genera	<i>Arcobacter</i> <i>Vibrio</i> <i>Sulfitobacter</i> <i>Colwellia</i> <i>Marinicella</i> uncultured-053	<i>Vibrio</i>	<i>Vibrio</i> <i>Haliae</i> <i>Marinicella</i> <i>Pseudahrensia</i> uncultured-104 uncultured-079 uncultured-053 uncultured-017	<i>Arcobacter</i> <i>Vibrio</i> <i>Winogradskyella</i> <i>Sulfitobacter</i> <i>Marinicella</i> <i>Lutimonas</i> uncultured-053 OM60(NOR5) clade
Juvenile		Adult		
Genera	Uncultured-053 <i>Haliae</i>	<i>Arcobacter</i> <i>Vibrio</i>		