

Table S1. Presumptive *Vibrio* counts (CFU/mL) during four sampling seasons (spring, summer, autumn, winter) in seawater, sediment, and gill and skin swabs of European seabass in the fish farm in Mali Ston Bay in the Adriatic Sea, Croatia, determined in the period 2016 to 2019.

| | | Spring | Summer | Autumn | Winter |
|------|---------------------|---------------|---------------|---------------|----------------|
| 2016 | <i>Vibrio</i> 22 °C | | | | |
| | Seawater | 25.0 ± 24.9 | 44.3 ± 52.4 | 170.0 ± 130.8 | na |
| | Sediment | 220.0 ± 45.3 | 165.0 ± 9.9 | 177.0 ± 4.2 | na |
| | Gills | 0 ± 0 | 0 ± 0 | 0 ± 0 | na |
| | Skin | 0 ± 0 | 0 ± 0 | 0 ± 0 | na |
| | <i>Vibrio</i> 35 °C | | | | |
| | Seawater | 1.0 ± 1.4 | 0.25 ± 0.5 | 43.0 ± 66.3 | na |
| | Sediment | 0 ± 0 | 42.0 ± 9.9 | 20.0 ± 0 | na |
| | Gills | 0 ± 0 | 0 ± 0 | 0 ± 0 | na |
| | Skin | 0 ± 0 | 0 ± 0 | 0 ± 0 | na |
| 2017 | <i>Vibrio</i> 22 °C | | | | |
| | Seawater | 13.3 ± 11.3 | 170.0 ± 175.1 | 35.0 ± 56.9 | 60.5 ± 38.2 |
| | Sediment | 345.0 ± 35.4 | 700.0 ± 113.1 | 270.0 ± 11.3 | 1280.0 ± 113.1 |
| | Gills | 52.0 ± 119.2 | 3.3 ± 4.8 | 0 ± 0 | 10.8 ± 20.8 |
| | Skin | 13.7 ± 34.3 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | <i>Vibrio</i> 35 °C | | | | |
| | Seawater | 5.0 ± 10.0 | 5.25 ± 9.9 | 0 ± 0 | 0 ± 0 |
| | Sediment | 24.0 ± 8.5 | 195.0 ± 18.4 | 0 ± 0 | 0 ± 0 |
| | Gills | 43.4 ± 89.1 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Skin | 13.3 ± 22.4 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| 2018 | <i>Vibrio</i> 22 °C | | | | |
| | Seawater | 50.0 ± 19.6 | 65.5 ± 41.6 | 123.8 ± 178.4 | 500.0 ± 376.6 |
| | Sediment | 264.0 ± 104.7 | 215.0 ± 35.4 | 650.0 ± 70.7 | 112.0 ± 4.2 |
| | Gills | 0.5 ± 0.7 | 0.1 ± 0.3 | 237.5 ± 413.8 | 0 ± 0 |
| | Skin | 0 ± 0 | 0 ± 0 | 12.5 ± 35.4 | 5.2 ± 13.7 |
| | <i>Vibrio</i> 35 °C | | | | |
| | Seawater | 22.5 ± 6.5 | 7.75 ± 6.6 | 0 ± 0 | 0 ± 0 |
| | Sediment | 34.0 ± 22.6 | 300.0 ± 28.3 | 14.0 ± 1.4 | 0 ± 0 |
| | Gills | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Skin | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0.3 ± 0.9 |
| 2019 | <i>Vibrio</i> 22 °C | | | | |
| | Seawater | 15.3 ± 16.8 | na | na | na |
| | Sediment | 74.0 ± 9.9 | na | na | na |
| | Gills | 14.6 ± 26.1 | na | na | na |
| | Skin | 14.6 ± 37.9 | na | na | na |
| | <i>Vibrio</i> 35 °C | | | | |
| | Seawater | 0 ± 0 | na | na | na |
| | Sediment | 0 ± 0 | na | na | na |
| | Gills | 0 ± 0 | na | na | na |
| | Skin | 0.8 ± 2.5 | na | na | na |

Values are average ± standard deviation; na – not analysed

Table S2. Raw data of MALDI-TOF MS identification of *Vibrio* species using the MALDI Biotyper Compass Explorer 4.1 software package and Bruker database version 11.

| Sampling year | Tested isolates | Bruker database | |
|------------------|--------------------|--------------------------|-----------|
| | | Identification | Log score |
| 2016 | VP 1 | <i>V. pomeroiyi</i> | 2.040 |
| | VP 2 | <i>V. pomeroiyi</i> | 1.840 |
| | VP 3 | <i>V. pomeroiyi</i> | 2.100 |
| | VP 4 | <i>V. chagasii</i> | 1.970 |
| | VP 5 | <i>V. gigantis</i> | 2.080 |
| | VP 6 | <i>V. ichthyoenteri</i> | 2.070 |
| | VP 7 | <i>V. gigantis</i> | 2.040 |
| | VP 8 | <i>V. pomeroiyi</i> | 1.940 |
| | VP 10 | <i>V. ichthyoenteri</i> | 1.930 |
| | VP 11 | <i>V. pomeroiyi</i> | 2.140 |
| | VP 12 | <i>V. chagasii</i> | 1.880 |
| | VP 13 | <i>V. pomeroiyi</i> | 2.090 |
| | VP 14 | <i>V. pomeroiyi</i> | 2.010 |
| | VP 15 | <i>V. ichthyoenteri</i> | 2.060 |
| | VP 16 | <i>V. pomeroiyi</i> | 1.990 |
| | VP 17 | <i>V. ichthyoenteri</i> | 1.880 |
| | VP 18 | <i>V. gigantis</i> | 1.980 |
| | VP 22 | <i>V. harveyi</i> | 2.050 |
| | VP 23 | <i>V. ichthyoenteri</i> | 1.990 |
| | VP 24 | <i>V. scophthalmi</i> | 1.940 |
| | VP 25 | <i>V. harveyi</i> | 2.210 |
| | VP 26 | <i>V. harveyi</i> | 2.300 |
| | LJV 16 5 | <i>V. pomeroiyi</i> | 1.910 |
| | LJV 16 6 | <i>V. pomeroiyi</i> | 1.950 |
| | LJV 16 7 | <i>V. pomeroiyi</i> | 2.040 |
| | LJV 16 10 | <i>V. gigantis</i> | 2.100 |
| | LJV 16 11 | <i>V. superstes</i> | 1.830 |
| | LJV 16 15 | <i>V. pomeroiyi</i> | 2.130 |
| | LJV 16 19 | <i>V. gigantis</i> | 2.120 |
| | LJV 16 20 | <i>V. superstes</i> | 1.890 |
| | LJV 16 21 | <i>V. gigantis</i> | 1.920 |
| | LJV 16 22 | <i>V. pomeroiyi</i> | 2.040 |
| | LJV 16 23 | <i>V. pomeroiyi</i> | 2.040 |
| | LJV 16 25 | <i>V. harveyi</i> | 1.810 |
| | LJV 16 26 | <i>V. harveyi</i> | 2.240 |
| | LJV 16 28 | <i>V. harveyi</i> | 2.300 |
| | LJV 16 30 | <i>V. harveyi</i> | 1.910 |
| | LJV 16 31 | <i>V. superstes</i> | 1.760 |
| | VJ 16 6 | <i>V. cyclitrophicus</i> | 2.200 |
| | VJ 16 7 | <i>V. gigantis</i> | 1.990 |
| | VJ 16 8 | <i>V. pomeroiyi</i> | 1.950 |
| | VJ 16 9 | <i>V. pomeroiyi</i> | 1.900 |
| | VJ 16 12 | <i>V. gigantis</i> | 1.940 |
| | VJ 16 13 | <i>V. pomeroiyi</i> | 2.060 |
| | VJ 16 14 | <i>V. pomeroiyi</i> | 1.980 |
| | VJ 16 16 | <i>V. harveyi</i> | 2.470 |
| | VJ 16 17 | <i>V. harveyi</i> | 2.430 |
| | VJ 16 18 | <i>V. harveyi</i> | 2.450 |
| | VJ 16 19 | <i>V. orientalis</i> | 1.960 |
| | VJ 16 20 | <i>V. harveyi</i> | 2.260 |

| | | | |
|------|----------|-------------------------|-------|
| | VJ 16 21 | <i>V. harveyi</i> | 2.410 |
| | VJ 16 22 | <i>V. harveyi</i> | 2.380 |
| | VJ 16 23 | <i>V. harveyi</i> | 2.280 |
| | VJ 16 24 | <i>V. harveyi</i> | 2.210 |
| | VJ 16 25 | <i>V. europaeus</i> | 2.120 |
| | VJ 16 26 | <i>V. pelagius</i> | 1.850 |
| | VJ 16 31 | <i>V. gigantis</i> | 1.830 |
| | VJ 16 32 | <i>V. gigantis</i> | 1.970 |
| 2017 | P17 21 | <i>V. harveyi</i> | 1.920 |
| | P17 22 | <i>V. fortis</i> | 1.860 |
| | P17 24 | <i>V. gigantis</i> | 1.890 |
| | P17 26 | <i>V. pomeroyi</i> | 1.920 |
| | P17 29 | <i>V. pomeroyi</i> | 1.870 |
| | P17 32 | <i>V. pomeroyi</i> | 1.930 |
| | P17 111 | <i>V. alginolyticus</i> | 1.830 |
| | P17 112 | <i>V. alginolyticus</i> | 2.080 |
| | P17 113 | <i>V. alginolyticus</i> | 1.870 |
| | P17 114 | <i>V. alginolyticus</i> | 2.010 |
| | P17 126 | <i>V. alginolyticus</i> | 1.840 |
| | P17 127 | <i>V. alginolyticus</i> | 2.110 |
| | P17 128 | <i>V. alginolyticus</i> | 2.260 |
| | P17 129 | <i>V. alginolyticus</i> | 2.100 |
| | P17 130 | <i>V. alginolyticus</i> | 1.900 |
| | P17 131 | <i>V. alginolyticus</i> | 2.060 |
| | P17 132 | <i>V. alginolyticus</i> | 2.040 |
| | P17 137 | <i>V. alginolyticus</i> | 2.000 |
| | P17 138 | <i>V. alginolyticus</i> | 2.100 |
| | P17 139 | <i>V. alginolyticus</i> | 2.000 |
| | P17 140 | <i>V. alginolyticus</i> | 2.150 |
| | P17 143 | <i>V. alginolyticus</i> | 1.890 |
| | P17 144 | <i>V. alginolyticus</i> | 2.090 |
| | P17 155 | <i>V. alginolyticus</i> | 2.150 |
| | P17 9 | <i>V. alginolyticus</i> | 2.040 |
| | P17 10 | <i>V. alginolyticus</i> | 1.970 |
| | P17 11 | <i>V. anguillarum</i> | 2.370 |
| | P17 12 | <i>V. anguillarum</i> | 2.330 |
| | P17 13 | <i>V. anguillarum</i> | 2.140 |
| | P17 14 | <i>V. anguillarum</i> | 2.380 |
| | P17 15 | <i>V. anguillarum</i> | 2.290 |
| | P17 16 | <i>V. anguillarum</i> | 2.280 |
| | ZM17 35 | <i>V. tasmaniensis</i> | 1.980 |
| | ZM17 36 | <i>V. tasmaniensis</i> | 1.870 |
| | ZM17 38 | <i>V. pelagius</i> | 1.870 |
| 2018 | P18 37 | <i>V. alginolyticus</i> | 2.100 |
| | P18 48 | <i>V. alginolyticus</i> | 2.110 |
| | P18 64 | <i>V. scophthalmi</i> | 2.120 |
| | P18 65 | <i>V. pomeroyi</i> | 2.070 |
| | P18 68 | <i>V. harveyi</i> | 2.310 |
| | P18 70 | <i>V. harveyi</i> | 2.200 |
| | P18 71 | <i>V. harveyi</i> | 2.330 |
| | P18 73 | <i>V. harveyi</i> | 2.420 |
| | LJ18 17 | <i>V. chagasii</i> | 1.880 |
| | LJ18 18 | <i>V. pomeroyi</i> | 1.950 |

| | | |
|----------|-------------------------|-------|
| LJ18 20 | <i>V. alginolyticus</i> | 2.040 |
| LJ18 21 | <i>V. alginolyticus</i> | 2.170 |
| LJ18 22 | <i>V. alginolyticus</i> | 1.940 |
| LJ18 23 | <i>V. alginolyticus</i> | 2.110 |
| LJ18 24 | <i>V. alginolyticus</i> | 2.180 |
| LJ18 25 | <i>V. harveyi</i> | 2.200 |
| LJ18 26 | <i>V. harveyi</i> | 2.150 |
| LJ18 27 | <i>V. alginolyticus</i> | 2.220 |
| LJ18 29 | <i>V. alginolyticus</i> | 2.140 |
| LJ18 31 | <i>V. harveyi</i> | 2.280 |
| LJ18 33 | <i>V. harveyi</i> | 2.180 |
| LJ18 34 | <i>V. chagasii</i> | 2.000 |
| LJ18 35 | <i>V. chagasii</i> | 2.000 |
| LJ18 59 | <i>V. harveyi</i> | 2.210 |
| LJ18 60 | <i>V. harveyi</i> | 2.040 |
| LJ18 62 | <i>V. pelagius</i> | 2.190 |
| LJ18 65 | <i>V. pelagius</i> | 2.230 |
| LJ18 66 | <i>V. chagasii</i> | 1.770 |
| LJ18 69 | <i>V. chagasii</i> | 1.870 |
| LJ18 138 | <i>V. chagasii</i> | 1.890 |
| LJ18 139 | <i>V. fortis</i> | 2.300 |
| LJ18 141 | <i>V. gigantis</i> | 2.090 |
| LJ18 142 | <i>V. chagasii</i> | 2.050 |
| LJ18 143 | <i>V. harveyi</i> | 2.120 |
| LJ18 144 | <i>V. chagasii</i> | 1.980 |
| LJ18 149 | <i>V. pomeroyi</i> | 1.980 |
| LJ18 150 | <i>V. chagasii</i> | 1.950 |
| LJ18 153 | <i>V. gigantis</i> | 2.040 |
| LJ18 154 | <i>V. gigantis</i> | 2.030 |
| LJ18 155 | <i>V. chagasii</i> | 2.060 |
| LJ18 156 | <i>V. chagasii</i> | 2.080 |
| LJ18 157 | <i>V. chagasii</i> | 2.090 |
| J18 9 | <i>V. harveyi</i> | 2.150 |
| J18 10 | <i>V. harveyi</i> | 1.900 |
| J18 11 | <i>V. harveyi</i> | 2.100 |
| J18 12 | <i>V. harveyi</i> | 2.160 |
| J18 13 | <i>V. gigantis</i> | 2.080 |
| J18 14 | <i>V. pomeroyi</i> | 1.920 |
| J18 16 | <i>V. pomeroyi</i> | 2.020 |
| J18 17 | <i>V. pomeroyi</i> | 1.830 |
| J18 18 | <i>V. pomeroyi</i> | 1.890 |
| J18 19 | <i>V. gigantis</i> | 1.860 |
| J18 20 | <i>V. gigantis</i> | 1.780 |
| J18 21 | <i>V. pomeroyi</i> | 2.020 |
| J18 22 | <i>V. gigantis</i> | 2.030 |
| J18 23 | <i>V. pomeroyi</i> | 1.970 |
| J18 24 | <i>V. pomeroyi</i> | 2.020 |
| J18 26 | <i>V. alginolyticus</i> | 2.080 |
| J18 28 | <i>V. alginolyticus</i> | 1.950 |
| J18 29 | <i>V. harveyi</i> | 2.040 |
| J18 31 | <i>V. alginolyticus</i> | 1.970 |
| J18 32 | <i>V. alginolyticus</i> | 2.330 |
| Z18 41 | <i>V. tasmaniensis</i> | 1.950 |
| Z18 42 | <i>V. tasmaniensis</i> | 1.850 |
| Z18 45 | <i>V. tasmaniensis</i> | 1.980 |

| | | | |
|------|---------|-------------------------|-------|
| | Z18 46 | <i>V. tasmaniensis</i> | 1.960 |
| | Z18 49 | <i>V. tasmaniensis</i> | 1.890 |
| | Z18 69 | <i>V. tasmaniensis</i> | 1.950 |
| | Z18 71 | <i>V. tasmaniensis</i> | 1.900 |
| | Z18 110 | <i>V. tasmaniensis</i> | 1.860 |
| | Z18 120 | <i>V. tasmaniensis</i> | 1.990 |
| 2019 | 14 | <i>V. anguillarum</i> | 2.280 |
| | 22 | <i>V. alginolyticus</i> | 1.870 |
| | 24 | <i>V. alginolyticus</i> | 2.160 |
| | 27 | <i>V. chagasii</i> | 1.710 |
| | 28 | <i>V. alginolyticus</i> | 2.150 |
| | 29 | <i>V. chagasii</i> | 1.890 |
| | 30 | <i>V. orientalis</i> | 1.830 |
| | 31 | <i>V. orientalis</i> | 1.940 |
| | 33 | <i>V. harveyi</i> | 2.120 |
| | 35 | <i>V. pomeroyi</i> | 1.930 |
| | 37 | <i>V. gigantis</i> | 2.000 |
| | 42 | <i>V. scophthalmi</i> | 1.930 |
| | 43 | <i>V. scophthalmi</i> | 1.930 |

Shaded green, MALDI-TOF MS identifications that match assigned species identifications; shaded yellow, MALDI-TOF MS identifications that match assigned genus-level identifications only.