

**Table S1:** Lethal concentration of chromium alone and combined stressors for different exposure in *P. lagowskii*.

| Exposure Conc. (mg/L)          | Initial No. of Test Fish | % Mortality Response (avg.) | LC50      | 95% Confidence Intervals |
|--------------------------------|--------------------------|-----------------------------|-----------|--------------------------|
| 500                            | 20                       | 95                          | 147.5mg/L | 114.03–190.90            |
| 400                            | 20                       | 95                          |           |                          |
| 300                            | 20                       | 85                          |           |                          |
| 200                            | 20                       | 70                          |           |                          |
| 100                            | 20                       | 15                          |           |                          |
| 50                             | 20                       | 10                          |           |                          |
| Exposure with high temperature |                          |                             |           |                          |
| 200                            | 20                       | 100                         | 52.2mg/L  | 44.46–61.14              |
| 150                            | 20                       | 90                          |           |                          |
| 100                            | 20                       | 70                          |           |                          |
| 75                             | 20                       | 65                          |           |                          |
| 50                             | 20                       | 40                          |           |                          |
| 25                             | 20                       | 20                          |           |                          |

**Table S2:** Histopathological alterations of liver, gill and kidney.

| Category of Alteration  | Examples of Specific Tissue Alterations |  |  |
|-------------------------|---|--|--|
|                         | Liver                                   | Gills                                      | Kidney   |
| Circulators disturbers  | Increase of sinusoidal space (1)        | Vasodilation (1)                           | Vasodilation (1)                                       |
|                         | Hemorrhage (1)                          | Hemorrhage (1)                             | Hemorrhage (1)   |
|                         | Oedema (1)                              | Aneurysm (1)                               | Aneurysm (1)   |
|                         |   | Oedema (1)                                 | Oedema (1)   |
| Regressive alterations  | Irregular nucleus (1)                   |  |  |
|                         | Cytoplasmic vacuolization (1)           | Epithelial lifting of lamellae (1)         | Epithelial lifting of lamellae (1)                     |
|                         | Nuclear degeneration (2)                | Lamellar epithelial desquamation (1)       | Lamellar epithelial desquamation (1)                   |
|                         | Pyknotic nucleus (2)                    | Fusion of lamellae (1)                     | Lamellar fusion (1)                                    |
|                         | Hepatocellular necrosis (3)             | Necrosis (3)                               | Necrosis (3)   |
| Progressive alterations | Nuclear hypertrophy of hepatocyte (1)   | Epithelium or mucous cells hypertrophy (1) | Hypertrophy of the gill epithelium or mucous cells (1) |
|                         | Cellular hypertrophy (1)                | Epithelial hyperplasia (2)                 | Hyperplasia of the gill epithelium (2)                 |
|                         | Cellular hyperplasia (1)                |  |  |
| Inflammatory            | Leucocytes infiltration (2)             | Leucocytes infiltration (2)                | Leucocytes infiltration (2)                            |
| Neoplastic              | Not detected                            | Not detected                               | Not detected   |