**Supplementary materials:**

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**Supplementary Table 1: Microbiological findings from 25 skin swabs obtained from control site (n=6) and from the infected sites (n=19).**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type of culture | Intensity of colonies growth | Sample | *Pseudomonas fluorescens* | *P. luteola* | *Pseudomonas*  sp. | *Burkholderia cepacia* | *Acinetobacter* sp. |
| MIXED | + | CTR (n=5) | 1 (16.7%) | - | - | 4 (66.7%) | - |
| ++ | 4 (66.7%) | - | - | - | - |
| +++ | - | - | - | 1 (16.7%) | - |
| + | INF (n=13) | - | 5 (26.3%) | - | 1 (5.3%) | 1 (5.3%) |
| ++ | 10 (52.6%) | - | 1 (5.3%) | 5 (26.3%) | - |
| +++ | 2 (10.5%) | 1 (5.3%) | - | 1 (5.3%) | - |
| PURE | + | CTR (n=1) | - | - | - | - | - |
| ++ | - | - | - | - | - |
| +++ | - | - | - | 1(5.3%) | - |
| + | INF (n=6) | - | - | - | - | - |
| ++ | 4 (21%) | - | - | - | - |
| +++ | 1 (5.3%) | - | - | 1 (5.3%) | - |

CTR=control site group; INF=infected sites group.

Observed intensity of colonies growth: +=few; ++=moderate; +++=heavy

Results are reported as percentage of observed growth

Skin swab samples from 6 newts in the control group and 19 from infected sites were used to inoculate Horse blood agar (Oxoid PB0122A) and MacConkey agar (Oxoid PO0148A) plates.

Horse blood agar plates were incubated aerobically and anaerobically at 37 °C and Room temperature and MacConkey agar plates were incubated aerobically as the same temperatures as described above.

After 24 hours plates were examined and, if any predominant organisms was observed, these were subbed onto fresh Horse Blood agar plates and incubated either at 37 °C or Room Temperature. The following day the pure colonies were stained by Gram Stain and all were Gram negative bacilli.

These were subbed onto Nutrient agar plates for oxidase tests and used to inoculate API 20NE (Biomerieux 20050) for identification.

**GenBank sequences used for sequence alignment and phylogenetic reconstruction**

*Dermocystida* sp. Larzac/B-m, GU232542.1; *Dermocystidia* sp. Larzac/C-f, GU232543.1; *Rhinosporidium* sp. ex Canis familiaris, AY372365.1; *Rhinosporidium seeberi,* AF158369.1; *Rhinosporidium cygnus*, AF399715.2; *Rhinosporidium seeberi,* AF118851.2; *Dermocystidium sp.,* U21336.1; *Amphibiocystidium ranae* 2-04, AY692319.1; *Amphibiocystidium ranae,* AY550245.1; *Amphibiocystidium sp.* C107, EU650666.1; *Dermocystidium sp.* CM-2002, AF533950.1; *Dermocystidium salmonis,* U21337.1; *Amphibiocystidium sp. viridescens* LA1, EF493030.1; *Amphibiocystidium sp. viridescens* MA1, EF493028.1; *Amphibiocystidium sp. viridescens* MA3, EF493029.1; *Amphibiocystidium penneri*, AY772000.1; *Amphibiocystidium penneri,* AY772001.1; *Dermocystidium percae 35,* AF533948.1; *Dermocystidium percae* 33, AF533946.1; *Dermocystidium percae* 6, AF533944.1; *Dermocystidium percae* 1, AF533941.1; *Dermocystidium percae* 5, AF533943.1; *Dermocystidium percae* 34, AF533947.1; *Dermocystidium percae 9*, AF533945.1; *Dermocystidium percae* 4, AF533942.1; *Dermocystidium percae* 52, AF533949.1; Uncultured eukaryote, AB275066.1.