**SUPPLEMENTARY MATERIAL**

**Title:** Implication of viral infections for greenhouse gas dynamics in freshwater wetlands: challenges and perspectives

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**Figure 1S.** Graphic summary of studies that have examined the viruses in wetland ecosystems in the last 10 years. The online scientific database search occurred in December 2018 on (A) Number of studies per year; (B) Viral topics explored expressed as percentage.

**Table S1.** Numbers and reference of studies that have examined virus and virus-prokaryote interactions organized into seven broad types following Mitsch & Gosselink (2007), with wetland microcosms and reviews as additional categories. Data are provided according to our bibliographic research from online scientific databases in December 2018.

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| **Wetland type** | **Number of studies** | **References** |
| Tidal salt marsh | 0 |  |
| Tidal freshwater marsh | 0 |  |
| Mangrove swamps | 0 |  |
| Freshwater marsh | 7 | (1–7) |
| Peatlands, bogs and fens | 2 | (8–12) |
| Forested wetlands | 1 | (13) |
| Riparian wetlands | 6 | (6,14–18) |
| Wetland microcosms | 3 | (19–21) |
| Reviews | 4 | (22–25) |

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