**Reversed predation decomposes** *M. xanthus* **cells into diffusible nutrients.** Remains of *M. xanthus* killed by 22 °C-reared *P. fluorescens* sufficient to fuel large *P. fluorescens* population growth pass through 0.2-µm filters within six hours of inter-species interaction. Estimated densities (log-transformed CFU/ml, n = 3) of *P. fluorescens* populations over time inoculated at two initial densities (~10⁶ and ~10⁸ CFU/ml) into supernatant from 22 °C-reared *P. fluorescens* lawns to which *M. xanthus* cells were either added (and which killed those *M. xanthus* cells, green dots) or not (black dots). Trend lines show local polynomial regression fitting and dark-gray bands represent 95% confidence regions. The dataset for this figure and the R script used to analyze it and make the figure are available on Zenodo ([10.5281/zenodo.10214013](https://10.5281/zenodo.10214013)).