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The role of hydrodynamics in shaping the composition and architecture of epilithic biofilms in fluvial ecosystems



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1 Highlights

- Demonstration of near bed hydrodynamics affecting biofilms in fluvial ecosystems.
- Near bed turbulence significantly affected biofilm composition and architecture.
- Effects were more pronounced under higher dissolved nutrient concentrations.
- Elongated ripples and streamers known from experimental systems were not observed.
- More compact biofilms spreading uniformly on mineral surfaces at high turbulence.

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