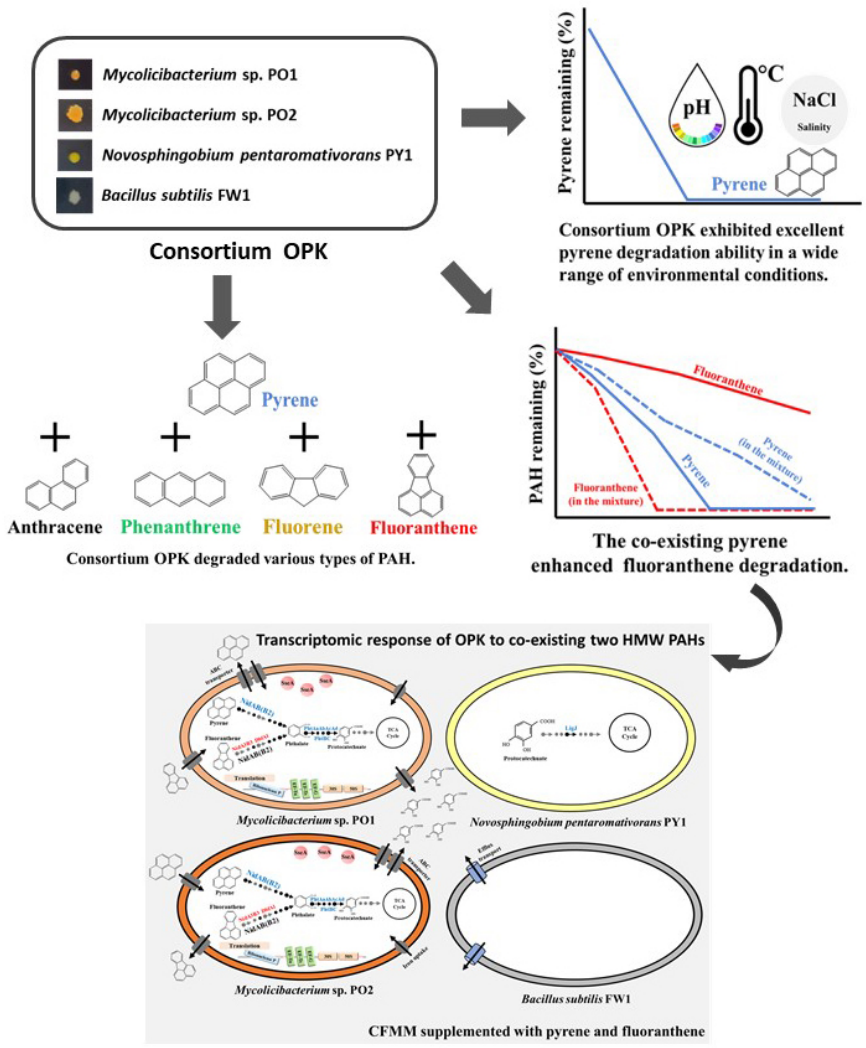

A bacterial consortium, comprising *Mycolicibacterium* strains PO1 and PO2, *Novosphingobium pentaromativorans* PY1 and *Bacillus subtilis* FW1, capable of degrading pyrene was previously isolated from mangrove sediment in Thailand. This study demonstrates that the consortium had high pyrene-degrading activity over a wide range of conditions. It was also found that pyrene could enhance fluoranthene degradation by the consortium, although pyrene degradation rate decreased. Transcriptomic analysis of the consortium during the degradation of two PAHs revealed that pyrene possibly induced the expression of the primary enzymes involved in fluoranthene and pyrene degradation (Laothamteep et al. 2021). This study expands on the understanding of the responses of polycyclic aromatic hydrocarbon-degrading consortium to various environmental conditions, which is important for the management of a successful bioremediation.

References

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