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Molecular Tools to Understand the Bioremediation Effect of Plants and Earthworms on Contaminated Marine Sediments

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### Highlights

- A bioremediation system applied to contaminated marine sediments is proposed.
- The best effects were found when plants and earthworms were combined.
- DNA and RNA-based methodologies were used to monitoring the process.
- Specialization within the bacterial community was detected during the process.
- Activity of Gram-positive PAH-degraders was related to hydrocarbons degradation.

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