Development and Evaluation of a Coconut Coir–Activated Carbon Sorbent Pillow for Oil Spill Remediation

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The research aimed to develop an environmentally friendly and cost-effective sorbent product made from coconut husks and activated carbon for oil spills clean-up. Results showed that the sorbent pillow made from a mixture of coconut husk and activated carbon exhibited superior performance in terms of both dynamic oil retention time and oil sorption capacity. The pillow containing 25% coconut husk and 75% activated carbon demonstrated the highest oil sorption capacity. Overall, these results suggest that the Organic Absorbent Pillow is an effective tool for mitigating the impacts of oil spills.

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