

Modified Coir Pith for Gas and Oil Absorption

Invention summary:

Modified coir pith has been developed based on coir piths used to clean-up oil spills in water bodies. Generally, a coir pith is vastly used as a mulching agent due to its hydrophilic nature and sponge like structure. In this invention the inherent hydrophilic nature of typical coir pith was changed to a hydrophobic state so that it has a higher affinity to non-polar liquids. Therefore, it can be used to selectively remove oil spills in water bodies. Further, the ability to absorb gases has also been enhanced.

Technology overview:

Coir piths were selectively charred in an environment with reduced air to modify its surface. Products developed based on this invention can be used as environmental remedies and also has gas scrubbing applications including fruit preservation (currently under investigation).

Potential application:

Environmental remediation, post-harvest applications

Advantages of the products:

- Biodegradable alternative for oil spill remediation
- Floatable pollution remediation material as a natural “foam”
- Cost effective

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