

REVIEW: POTENSI MIKOREMEDIASI LOGAM BERAT

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Abstract	<p>Heavy metals contamination is a main issue which has negative impacts to environment and organisms. Various methods have been developed to reduce such pollutants, including utilization of organisms's capability in order to minimize the contamination. Mycoremediation is one of remediation process in contaminated environment using fungi and its reduction mechanisms, involving intracellular, as well as extracellular system. There are some species of fungi that are frequently used as remediation agents, for example <i>Aspergillus</i> sp., <i>Fusarium</i> sp., <i>Penicillium</i> sp., <i>Phanerochaete</i> sp., <i>Trichoderma</i> sp. There are some methods that have been used for heavy metal reduction mechanisms such as biosorption, bioaccumulation, bioprecipitation, bioreduction, and bioleaching. Keywords: Mycoremediation, fungi, heavy metal, biosorption, bioaccumulation.</p> <p>ABSTRAK Kontaminasi logam berat adalah suatu permasalahan utama yang berdampak negatif bagi lingkungan dan juga makhluk hidup. Berbagai metode telah dikembangkan untuk mereduksi cemaran, termasuk memanfaatkan kemampuan organisme untuk meminimalkan kontaminasi tersebut. Mikoredemiasi adalah salah satu proses remediasi cemaran di lingkungan dengan melibatkan fungi beserta mekanisme reduksinya, baik secara intraselular maupun ekstraselular. Beberapa jenis fungi yang sering dijadikan agen remediasi antara lain <i>Aspergillus</i> sp., <i>Fusarium</i> sp., <i>Penicillium</i> sp., <i>Phanerochaete</i> sp., <i>Trichoderma</i> sp. Beberapa prinsip yang digunakan untuk menghilangkan logam berat antara lain biosorpsi, bioakumulasi, biopresipitasi, bioreduksi, dan bioleaching. Kata kunci: Mikoredemiasi, fungi, logam berat, biosorpsi, bioakumulasi</p>
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