



## Arang Aktif Pengendali Residu Pestisida *Activated Charcoal Controlling Pesticide Residues*

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Limbah pertanian seperti sekam padi, tempurung kelapa, bonggol jagung, dan tandan kosong kelapa sawit dapat dimanfaatkan menjadi arang aktif yang mampu mengendalikan residu pestisida di lahan pertanian.

Arang aktif ini mampu mengikat residu pestisida golongan organoklorin (lindan, aldrin, dieldrin, heptaklor, DDT dan endosulfan) dan golongan organofosfat (klorpirifos) di tanah sehingga tidak terbawa aliran sungai.

Kegunaan lainnya adalah meningkatkan populasi mikroba berguna, karena merupakan habitat yang baik untuk mikroba yang berperan dalam penguraian senyawa residu pestisida yang terjebak di dalam arang aktif.

Teknologi pengendali residu pestisida ini potensial dikembangkan untuk mengatasi lahan pertanian yang tercemar residu pestisida dan lahan bekas tambang.

*Agricultural waste product such as rice husks, coconut shells, corn stalks, and empty fruit bunches of oil palm can be utilized as activated charcoal that is capable to control pesticide residues in arable land.*

*Activated charcoal is capable to bind residues of organochlorine group of pesticides (lindane, aldrin, dieldrin, heptaklor, DDT and endosulfan) and organophosphate group (chlorpyrifos) presence in the soils so that it will not flow to the river.*

*Other advantage of this technology is to support the increase of useful microbial populations. The free pesticide soil is a good habitat for microbes that play an important role in the decomposition of pesticide residue which is trapped in active charcoal.*

*A technology to control pesticide residue was developed to address farmlands potentially contaminated by pesticide.*