



TEKNOLOGI INOVATIF PERTANIAN



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Urea Berlapis Arang Aktif dan Zeoliteolit *Active Charcoal Coated Urea and Zeoliteolit*

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Pupuk ini diformulasikan dari tiga bahan utama, yaitu urea, arang aktif, dan zeolit yang diperkaya dengan mikroba bermanfaat seperti *Citrobacter* sp, *Sphaerotillus natans*, *Bacillus* sp., *Azotobacter*, dan *Azospirillum* sp. Formula pupuk ini dapat mengikat pencemar residu pestisida (organoklorin), mempercepat degradasi pestisida, mengefisiensikan penggunaan urea sebesar 35%, dan sifat kerjanya lambat urai (*slow release*).

Teknologi ini dapat menjadi alternatif bagi petani dalam memperoleh pupuk urea lambat urai sekaligus mengurangi pencemaran lingkungan. Pupuk ramah lingkungan ini prospektif dikembangkan secara komersial.

The active charcoal coated urea and zeolite is formulated from three main ingredients, namely urea, activated charcoal and zeolite. It is enriched with beneficial microbes such as Citrobacter sp, Sphaerotillus natans, Bacillus sp, Azotobacter sp, and Azospirillum sp. This fertilizer formula can bind contaminants organochlorine pesticide residue, accelerate the degradation of pesticides, urea efficiency increased by 35%, and a slow release urea.

This technology could be an alternative for farmers in obtaining slow release urea while reducing environmental pollution. This environmentally friendly fertilizer can be developed commercially.