

ABSTRACT

Degradation of pesticides propineb through the processes of Sonolysis, Ozonolysis And Sonolysis Using Catalysts N-doped TiO₂

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Propineb is one of the pesticide that widely used in agriculture. Propineb including dithiocarbamates pesticide groups. Purpose of degradation of propineb compound is decompose or break propineb molecules into simple compounds. Degradation of propineb in pesticide antracol 70WP done sonolysis, ozonolysis, and sonozolysis by using using UV-Vis spectrophotometer and HPLC. The result showed degradation propineb 6 mg/l through sonolysis process for 120 minute; degradation percentage of sonolysis value is 62.36% and with the addition of the catalyst degradation percentage increased to 64.92% for 120 minutes. Whereas ozonolysis and sonolizis process for 40 minute; degradation precentage of ozonolysis value is 39,98 % and increase to 53,30 % with addition of the catalyst. Whereas degradation percentage of sonolisis is 47,31% and increase to 55,49 % with addition of the catalyst.

Key word : Propineb, Sonolysis, Ozonolysis, Sonozolysis, N-doped TiO₂

