

## INTISARI

**Prasanti. Nim 3212009.** *Hubungan aktivitas enzim cholinesterase berdasarkan usia pada petani laki-laki di Desa Kadibolo Kabupaten Klaten.*

Penggunaan pestisida untuk pengendalian hama tanaman dapat mengakibatkan dampak yang merugikan kesehatan petani dan lingkungan sekitarnya. Pestisida masuk ke dalam tubuh melalui saluran pernapasan dan kulit yang tak terlindungi. Keracunan pestisida dapat menyebabkan penurunan aktivitas enzim *cholinesterase* dalam darah yang dapat menyebabkan kematian.. Tujuan penelitian ini untuk mengetahui ada tidaknya hubungan aktivitas enzim *cholinesterase* berdasarkan usia pada petani laki-laki di Desa Kadibolo Kabupaten Klaten Jenis penelitian ini observasional analitik dengan teknik *random sampling*. Penelitian dilakukan di Laboratorium Klinik Prodia Surabaya dengan pengukuran aktivitas enzim *cholinesterase* menggunakan Roche Cobas c 501. Penelitian ini menggunakan desain studi *Cross sectional* dengan jumlah sampel 20 petani. Variabel penelitian ini adalah usia dan aktivitas enzim *cholinesterase*. Hasil uji statistik dengan SPSS menggunakan *Fisher's exact test* didapatkan nilai  $p = 0,447$ , nilai  $RP=0,333$  dan  $95\% CI=0,025-4,401$ . Kesimpulan penelitian ini tidak ada hubungan antara aktivitas enzim *cholinesterase* dengan usia pada petani laki – laki di Desa Kadibolo Kabupaten Klaten tahun 2022.

Kata Kunci: *Cholinesterase*, Pestisida, Petani, Usia

## **ABSTRACT**

**Prasanti. Nim 3212009. The Correlation Of Cholinesterase Enzyme Activities Based On Age In Male Farmers In Kadibolo Village Klaten Regency**

The use of pesticides to control plant pests can have an adverse impact on the health of farmers and the surrounding environment. Pesticides enter the body through the respiratory tract and unprotected skin. Pesticide poisoning can cause a decrease in *cholinesterase* enzyme activity in the blood which can cause death. The purpose of this study was to determine whether there was a correlation between *cholinesterase* enzyme activity based on age in male farmers in Kadibolo Village, Klaten Regency. This type of research was observational analytic with random sampling technique. The research was conducted at the Clinical Laboratory of Prodia Surabaya by measuring the activity of the cholinesterase enzyme using Roche Cobas c 501. This study used a cross sectional study design with a sample of 20 farmers. The variables of this study were age and *cholinesterase* enzyme activity. The results of statistical tests with SPSS using *Fisher's exact test* obtained p value = 0.447, RP value = 0.333 and 95% CI=0.025-4.401. The conclusion of this study is that there is no correlation between cholinesterase enzyme activity and age in male farmers in Kadibolo Village, Klaten Regency in 2022.

Keywords: Pesticide, Age, Farmer, *Cholinesterase*