INTISARI

Didik Supriyadi. Nim 3212007. Hubungan Aktivitas Enzim *Cholinesterase* Berdasarkan Masa Kerja Akibat Paparan Pestisida Pada Kelompok Tani Desa Gemblegan Kabupaten Klaten

Penggunaan pestisida untuk pengendalian hama tanaman memberikan dampak merugikan bagi kesehatan petani dan lingkungan. Pestisida masuk ke dalam tubuh melalui saluran pernapasan dan kulit yang tak terlindungi. Keracunan pestisida menyebabkan penurunan aktivitas enzim *cholinesterase* dalam darah. Tujuan penelitian ini untuk mengetahui ada tidaknya hubungan aktivitas enzim *cholinesterase* berdasarkan masa kerja pada kelompok tani Desa Gemblegan Kabupaten Klaten. Jenis penelitian ini observasional analitik dengan teknik *random sampling*. Pengukuran aktivitas enzim *cholinesterase* menggunakan Roche Cobas c501. Penelitian ini menggunakan desain studi *Cross sectional* dengan jumlah sampel 20 petani. Sampel diambil dari darah vena petani dan ditampung dalam *vacum tube* tanpa antikoagulan warna kuning kemudian di *centrifuge* untukdiambil serum. Variabel penelitian ini adalah masa kerja dan aktivitas enzim *cholinesterase*. Hasil uji statistik dengan SPSS menggunakan *Fisher's exact test* didapatkan nilai p = 1,000 nilai *RP*=0,667 dan 95% *CI*=0,048-9,189. Tidak ada hubungan antara aktivitas enzim *Cholinesterase* dengan masa kerja petani di Desa Gemblegan Kabupaten Klaten Tahun 2022.

Kata Kunci : *Cholinesterase,* Pestisida, Petani, *Random Sampling*

ABSTRACT

Didik Supriyadi. Nim. 3212007. *Correlation Of Cholinesterase Enzyme Activities Based On Working Period Due To Pesticide Exposure On Farmer Group Gemblegan Village Klaten Regency.*

The use of pesticides to control plant pests has a detrimental impact on the health of farmers and the environment. Pesticides enter the body through the respiratory tract and unprotected skin. Pesticide poisoning causes a decrease in the activity of the cholinesterase enzyme in the blood. The purpose of this study was to determine whether there was a relationship between the activity of the cholinesterase enzyme based on the working period of the farmer group in Gumblegan Village, Klaten Regency. This type of research is analytic observational with random sampling technique. Measurement of cholinesterase enzyme activity using Roche Cobas c501. This study used a cross sectional study design with a sample of 20 farmers. Samples were taken from the farmer's venous blood and stored in a vacuum tube without yellow anticoagulant then centrifuged to collect serum. The variables of this study were the working period and the activity of the cholinesterase enzyme. The results of statistical tests with SPSS using Fisher's exact test obtained p value = 1,000, RP = 0.667 and 95% CI = 0.048-9.189. There is no relationship between the activity of the Cholinesterase enzyme and the working period of farmers in Gumblegan Village, Klaten Regency in 2022.

Keywords : *Cholinesterase,* Pesticide, Farmer, *Random Sampling.*