

ANALISIS KADAR HEMOGLOBIN PADA PETANI SAYUR PENYEMPROT PESTISIDA

ABSTRAK

Anemia dapat disebabkan oleh suatu bahan kimia pestisida yang terdapat didalamnya meliputi sulphur serta dietildithiokarbamat (DDC), sehingga akan menimbulkan tertundanya aktifitas superoksida dismutase, akan terbentuk sulfhemoglobin serta methemoglobin pada eritrosit. Anemia juga berkaitan dengan stress oksidatif. Stres oksidatif dapat menyebabkan oksidasi komponen sel darah merah, seperti Hb sehingga menurunkan jumlah sel darah merah yang bersirkulasi dan konsentrasi Hb, yang merujuk pada anemia hemolitik. Jenis penelitian yang digunakan bersifat deskriptif analitik, Jenis dan desain penelitian yang digunakan adalah deskriptif analitik dengan pendekatan cross sectional dapat dilihat bahwa sebagian responden memiliki Kadar Hb yang normal dengan sebanyak 25 responden (83%) dengan nilai rata-rata kadar Hemoglobin 14,28 g/dL dan frekuensi 4 responden (13%) lainnya abnormal dengan range tertinggi 17,4 g/dL dan terendah 10,7 g/dL dengan Standar deviasi 1,3 g/dL.

Kata kunci: Pestisida, Hemoglobin, Stress Oksidatif, Anemia

ANALYSIS OF HEMOGLOBIN LEVELS IN PESTICIDE SPRAYING VEGETABLE FARMERS

ABSTRACT

Anemia can be caused by a chemical pesticide contained in it, including sulfur and diethyldithiocarbamate (DDC), which will cause a delay in the activity of superoxide dismutase, resulting in the formation of sulfhemoglobin and methemoglobin in erythrocytes. Anemia is also related to oxidative stress. Oxidative stress can cause oxidation of red blood cell components, such as Hb, thereby reducing the number of circulating red blood cells and Hb concentration, which refers to hemolytic anemia. The type of research used is analytical descriptive. The type and design of the research used is analytical descriptive with a cross sectional approach. It can be seen that some respondents have normal Hb levels with 25 respondents (83%) with an average hemoglobin level of 14.28 g./dL and the frequency of 4 respondents (13%) was abnormal with the highest range being 17.4 g/dL and the lowest being 10.7 g/dL with a standard deviation of 1.3 g/dL

Key words: Pesticides, Hemoglobin, Oxidative Stress, Anemia