

## INTISARI

**Andika Travel Nasruminalloh. NIM 1181011.** Profil Kadar Timbal (Pb) pada Darah Petani yang menggunakan Pestisida Organoklorin di Baki Pandeyan Sukoharjo.

Pestisida mempunyai peran penting dalam sektor pertanian karena dapat membantu para petani untuk mengatasi permasalahan organisme pengganggu tanaman (OPT). Pestisida dapat menyebabkan pencemaran lingkungan dikarenakan adanya kandungan timbal (Pb) pada pestisida. Tujuan penelitian ini adalah Untuk mengetahui Profil kadar logam berat (Pb) dalam darah.

Jenis penelitian yang digunakan dalam penelitian ini adalah deskriptif dengan pendekatan *cross sectional*. Tempat melakukan sampel destruksi basah dilakukan di laboratorium berada di ruang praktikum kimia kualitatif STIKES NASIONAL dan Penelitian dilakukan di Ruang Laboratorium Riset dan Standardisasi Industri (BARISTAND) Surabaya. Dengan sampel penelitian adalah darah petani yang menggunakan pestisida organoklorin di Desa Baki, Pandeyan Sukoharjo.

Penelitian pada 15 responden dengan menggunakan sampel darah pada petani yang menggunakan pestisida jenis organoklorin di Desa Baki Pandeyan Sukoharjo didapatkan hasil kadar timbal yaitu B1 0.249  $\mu\text{g/L}$ , B2 0.367  $\mu\text{g/L}$ , B3 0.314  $\mu\text{g/L}$ , B4 1.066  $\mu\text{g/L}$ , B5 0.157  $\mu\text{g/L}$ , B6 0.252  $\mu\text{g/L}$ , B7 0.113  $\mu\text{g/L}$ , B8 0.226  $\mu\text{g/L}$ , B9 0.203  $\mu\text{g/L}$ , B10 0.361  $\mu\text{g/L}$ , B11 0.30  $\mu\text{g/L}$ , B12 0.152  $\mu\text{g/L}$ , B13 2.054  $\mu\text{g/L}$ , B14 5.026  $\mu\text{g/L}$ , B15 3.855  $\mu\text{g/L}$ .

Berdasarkan hasil penelitian dapat disimpulkan bahwa sampel dalam darah petani di Desa Baki pandeyan Sukoharjo yang diperiksa mengandung logam berat Timbal dalam batas ambang normal yang ditetapkan (*Centre for Disease Control and Prevention*) CDC yaitu 10  $\mu\text{g/L}$ .

**Kata Kunci: Pestisida, Kadar Timbal (Pb), CDC**

## **ABSTRACT**

**Andika Travel Nasruminalloh. NIM 1181011.** Profile of Lead (Pb) Levels in Blood of Farmers using Organochlorine Pesticides in Pandeyan Trays Sukoharjo.

Pesticides have an important role in the agricultural sector because they can help farmers to overcome the problem of plant pest organisms (OPT). Pesticides can cause environmental pollution due to the presence of lead (Pb) in pesticides. The purpose of this study was to determine the profile of heavy metal (Pb) levels in the blood.

The type of research used in this research is descriptive with a cross sectional approach. The place to do wet digestion samples is in the laboratory in the qualitative chemistry practicum of STIKES NASIONAL and the research is carried out in the Laboratory of Research and Industrial Standardization (BARISTAND) Surabaya. The research sample is the blood of farmers who use organochlorine pesticides in Baki Village, Pandeyan Sukoharjo.

Research on 15 respondents using blood samples on farmers who use organochlorine pesticides in Baki Pandeyan Sukoharjo Village using an Atomic Absorption Spectrophotometer, the results obtained lead levels are B1 0.249 g/L, B2 0.367  $\mu\text{g/L}$ , B3 0.314  $\mu\text{g/L}$ , B4 1.066  $\mu\text{g/L}$ , B5 0.157  $\mu\text{g/L}$ , B6 0.252  $\mu\text{g/L}$ , B7 0.113  $\mu\text{g/L}$ , B8 0.226  $\mu\text{g/L}$ , B9 0.203  $\mu\text{g/L}$ , B10 0.361  $\mu\text{g/L}$ , B11 0.30  $\mu\text{g/L}$ , B12 0.152  $\mu\text{g/L}$ , B13 2,054  $\mu\text{g/L}$ , B14 5.026  $\mu\text{g/L}$ , B15 3,855  $\mu\text{g/L}$ .

Based on the results of the study, it can be concluded that the samples in the blood of farmers in Baki Pandeyan Village, Sukoharjo, which were examined contained heavy metal Lead within the normal threshold set by the CDC (Center for Disease Control and Prevention) of 10 g/L.

**Keywords: Pesticide, Lead (Pb), CDC**