

A BENCHMARK SURVEY ON THE CYANIDE AND PROTEIN
CONTENT IN THE LEAVES AND ROOTS OF CASSAVA
(*Manihot esculenta* Crantz) IN ILOILO

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ABSTRACT

BACOLOD, HANNY JOY C. University of the Philippines in the Visayas, April 2006. **A Benchmark Survey on the Cyanide and Protein Content in the Leaves and Roots of Cassava (*Manihot esculenta* Crantz) in Iloilo.**

The cyanide and protein content of the roots and the leaves of the cassava samples were determined. Samples were taken from five locations, namely, Mambatad, Miagao; Poblacion, Lambunao; Ambarihon, Tubungan; Naclub, Miagao; and Calampitao, Miagao.

This study shows the levels of cyanide and protein in the roots and leaves of the cassava samples from the five selected locations in the province of Iloilo only. It does not establish any concrete conclusion on the cyanide and protein content of the cassava in Iloilo. Based on the results, the amount of cyanide varies among parts of the plant with an average of 229 ppm in the leaves and 100 ppm in the roots. It also varies among varieties in the same location, the white root variety having 125 ppm cyanide in the roots and 202 ppm in the leaves, while the yellow root variety has an average of 58.2 ppm cyanide in the roots and

263 ppm in the leaves. Different locations also have different levels of cyanide.

Cyanide content also decreases in the roots as the period of storage is prolonged. The level of cyanide in the white root variety from Lambunao decreased by 17.1% on the 2nd day and 61.5% on the 3rd day, while the yellow root variety, also from Lambunao, decreased by only 4.3% on the 2nd day and 30.1% on the third day.

Total soluble protein in the leaves (0.12%) of the samples is higher than in the roots (0.11%). Among the roots, the amount of protein varies.

It was found out that there is a significant correlation (0.750 at 0.05 level) between the amount of protein in the roots and that in the leaves of the samples.