

BIO-FERTILIZATION AS AN ALTERNATIVE TO INCREASE Fe, Zn AND OTHER MICRONUTRIENT CONTENTS IN CASSAVA ROOTS

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A trial was planted in Colombia aiming at quantifying the possibility of increasing Fe and Zn contents through adequate applications of fertilizers. This is the coherent and logical outcome of previous work where Zn and Fe contents in cassava roots were shown to be heavily dependent of soil conditions (pH in addition to Fe and Zn contents). Therefore, for the delivery of Fe and Zn to human populations, in addition to the possibility of a genetic component, a cultural practice approach was evaluated. Several types and quantity of fertilizers were applied to cassava grown in four environments (three contrasting soils at CIAT and the acidic soil of Santander de Quilichao). The evaluation included three replications per location and two varieties. A split-plot experimental design was used. Experimental units were based on 3-4 plants. The two varieties were the main plots and the fertilizers (within each variety) were the sub-plots. Trials were harvested at the proper age during the second semester of 2008 and samples taken. As all the trials were consolidated a total of 384 samples were prepared and shipped to Australia for their analysis at Waite Laboratory at the University of Adelaide. The information obtained is still preliminary.

Keywords: Bio-fertilization, cassava, Fe, Zn, micronutrients.

