



## MINERALISATION OF <sup>14</sup>C-LABELLED METALAXYL FUNGICIDE IN BRAZILIAN SOILS

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### ABSTRACT

Laboratory incubation experiments were carried out to estimate the mineralisation of metalaxyl <sup>14</sup>C {N-(2-6 dimethylphenyl)-N-(methoxyacetyl) alanine methyl ester} in four Brazilian soils with different physico-chemical properties, at 3 and 30 µg a.i. g<sup>-1</sup>. In the Petrolina sandy soil the mineralisation presented higher <sup>14</sup>CO<sub>2</sub> production rates, at two assayed concentrations, after 70 days. Microbiological studies were done to determine the numbers of bacteria, actinobacteria and fungi (CFU g<sup>-1</sup> soil). In relation with other microbial community, bacterial population demonstrated to be a major component of the cultivable heterotrophic community after the application of the compound. No detectable metabolites were found in this study. The results suggest that soil properties and application history may have a strong influence on the fungicide behavior in these soil samples.