

Mineralization of ^{14}C -diuron by *Acinetobacter baumannii*.

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The diuron [3-(3,4-dichlorophenyl)-1,1-dimethylurea] is a herbicide used in sugarcane and other crops. This work evaluated the diuron mineralization by an bacteria strain of *Acinetobacter baumannii* and developed protocols for extraction and quantification of ^{14}C -diuron. The bacteria strain (D12-12), isolated from sugarcane cultivated in soils treated with the herbicide diuron, was transferred for mineral media J.E. plus diuron at 20 $\mu\text{g}/\text{ml}$ and plus ^{14}C -diuron (specific activity = 2.43 MBq/mg) aplicated at 39,3215 KBq/50 ml, and incubated for 32 days, in duplicate. The ^{14}C -diuron extraction was developed in C-18 SEP-PAK columns, resuspended in scintillation cocktail and the activity determinated by liquid scintillation counting. The diuron recuperated was more than 96,2% and $^{14}\text{CO}_2$ acumulated, after 32 days, was 1,77%.

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