



## Effect of cadmium on nitrogen metabolism in young plants of *Virola surinamensis*

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With the perspective of the use of plants for phytoremediation of environments contaminated by Cadmium (Cd), the objective of this study was to evaluate the effect of Cd doses on nitrogen metabolism in young plants of *Virola surinamensis*. The experimental design was completely randomized with five concentrations of Cd (0, 15, 30, 45 and 60 mg L<sup>-1</sup>), in which the plants were maintained under these conditions for 60 days. The concentrations of Cd in the different organs of the plant were: (Root > Caule > Leaf). In general, the Cd did not affect the nitrate concentration in the root, but had a positive effect on the leaves, the reduction of nitrate reductase (NR) in plants exposed to Cd, was accompanied by the decrease of ammonia (NH<sub>3</sub>), total soluble amino acids (AST) and proteins total soluble solids (PST). The highest values of the bioconcentration factor (BCF) in the root and the translocation factor (FT) of less than 1.0 indicate that *V. surinamensis* developed defense mechanisms in the root system in the presence of Cd, with potential for phytostabilization of Cd.

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