

## DECOMPOSITION OF ORGANIC MATTER IN THE PRESENCE OF THE HERBICIDE CLOMAZONE.

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Clomazone (2-(2-chlorophenyl) methyl-4,4-dimethyl-3-isoxazolidinone) is a post emergence herbicide widely used in rice fields in Rio Grande do Sul (Brazil) with high activity against Gramineae at the recommended application rate of 700 g/ha. The presence of this chemical in the water may affect microorganisms responsible for the decomposition of organic matter. Thus, a disturbance in the trophic chain sustained by the decomposers could happen. In the present work the decomposition rate of organic matter (*Typha latifolia*) exposed to several concentrations of a clomazone formulation: 0 (control), 25.0, 62.0, 156.0, 390.0 and 976.0 mg/l, on the basis of the active ingredient was evaluated. Five liter bags containing about 3.0 g pieces of *T. latifolia* leaves were placed in aquariums with 15 l of reconstituted water. In each aquarium were added 500g of sediment from the same place of the plant collection, as a source of decomposers microorganisms. The results relative to the control, showed that the decomposition rate in the highest and lowest dose was reduced in 50.05 and 1.28%, respectively, after 80 days.