RISK ASSESSMENT OF THE HERBICIDE CLOMAZONE IN THE AQUATIC LIFE.

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 (AR) of 700g/ha. The herbicide input into the aquatic ecosystem may occur by aerial application or water drainage. The presence of this chemical in the water may affect non-target organisms leading to impairments in the aquatic food chain. Studies were conducted in this work to evaluate the risk of Clomazone using the estimated mean effective concentration (EC50) for the microalgae *Selenastrum capricornutum* (96h), the duckweed *Lemna valdiviana* (96h) and the crustacean *Daphnia similis* (48h). The EC50 values were 11.2; 31.7 and 13.8 mg/l. respectively. According to the obtained data, and considering a direct input of the herbicide in a 10cm column water, the estimated maximum application rate that doesn't cause acute effects is 5.3 AR for *S. capricornutum*, 6.5 AR for *D. similis* and 15.0 AR for *L. valdiviana*. The estimated maximum application rate that doesn't cause chronic effects is 2.0 AR for *D. similis*, 1.6 AR for *S. capricornutum* and 4.5 AR for *L. valdiviana*. 