

## Mercury contamination along the Igarapé Rato, brazilian Amazon

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This study has the aim of evaluating the environmental impact caused by gold *garimpos* in a pilot area of the Rio Tapajó Basin.

For the diagnosis of the physical environment, samples were collected and analysed from an 80km stretch along the Igarapé Rato, a right-bank tributary of the Rio Tapajós. These samples included sediment samples from the flood plain (>0.07 mm fraction), as well as suspension material, soil, air and the biota. This paper discusses only the results obtained from the sediments.

Sections across the flood plain showed that the mercury values (total Hg) were highest at the surface, diminishing with depth, thus revealing a man-made contribution caused by *garimpero* activity. In the sediments along the margins of the Igarapé Rato, the average value for mercury (total Hg) was found to be 0.22 ppm Hg, whereas in the tributaries average values reached 1.40 ppm Hg. Along some tributaries, in which the *garimpeiro* activity had been more intense (Igarapé Fé em Deus, for example), the average mercury values reached 2.41 ppm Hg, which exceeds the normal value by a factor of ten.