LAND COVER CHANGE IN RONDÔNIA (AMAZON BASIN) AND BIOGENIC HYDROCARBON EMISSIONS: ENCLOSURE MEASUREMENTS.

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Tropical regions are the major global sources of biogenic VOCs. Vegetation emits large numbers and amounts of these volatile organic hydrocarbons, mainly isoprene and terpenes. These compounds can strongly influence the chemical composition of the atmosphere.

Researchers have noted some ecological patterns in VOC emissions. The emissions of isoprene and terpenes are very dependent on vegetation type, the amount of biomass, and the plant canopy microclimate.

There is an increasing recognition that these compounds, contribute to the production of photochemical oxidants in the atmosphere. Land use change can cause changes in the emissions of isoprene and terpenes.

We conducted a study to investigate the impact of land use change, the conversion of forests to pasture at two sites within the Amazon basin.

Isoprene and monoterpenes emissions are characterized for over 90 plant species. The tendency for forest vs. pasture species to emit these compounds is compared. The impact of landscape emissions is discussed and results are

compared with previous results in Amazonia

and other regions

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