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Leaf cutter ant-fungi relationship and natural halocarbon emission

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Leaf cutter ant has been shown as a new missing source of biogenic halocarbons. Fungus carried by ant may emit CH_3Br , CH_3I , CH_3Cl , $CHCl_3$ significantly which contribute in their source strength and also reflect in their global atmospheric budget. The study suggests that the mixing ratios of CH_3Br , CH_3I , CH_3Cl , $CHCl_3$ in ant colony is higher than the Bristol background area by a factor of 1.5-2.5. The sampling was carried out at different time, location and also in different size and age of ant colony to clarify the exact source strength of biogenic halocarbons. Different analytical methods were adopted for the analysis of the ant colony sample and the precision shown to be +/-5%.