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Title:	Biogenic Potassium Salt particles as Seeds for Secondary Organic Aerosol in the Amazon
Authors:	Sinha, B. (/jspui/browse?type=author&value=Sinha%2C+B.)
Keywords:	Isoprene Potassium Salt Terpene
Issue Date:	2012
Publisher:	American Association for the Advancement of Science.
Citation:	Science, 337 (6098), pp. 1075-1078.
Abstract:	The fine particles serving as cloud condensation nuclei in pristine Amazonian rainforest air consist mostly of secondary organic aerosol. Their origin is enigmatic, however, because new particle formation in the atmosphere is not observed. Here, we show that the growth of organic aerosol particles can be initiated by potassium-salt - rich particles emitted by biota in the rainforest. These particles act as seeds for the condensation of low- or semi-volatile organic compounds from the atmospheric gas phase or multiphase oxidation of isoprene and terpenes. Our findings suggest that the primary emission of biogenic salt particles directly influences the number concentration of cloud condensation nuclei and affects the microphysics of cloud formation and precipitation over the rainforest.
Description:	Only IISERM authors are available in the record.
URI:	<a href="http://www.sciencemag.org/content/337/6098/1075.full">http://www.sciencemag.org/content/337/6098/1075.full</a> ( <a href="http://www.sciencemag.org/content/337/6098/1075.full">http://www.sciencemag.org/content/337/6098/1075.full</a> ) 10.1126/science.1223264 (10.1126/science.1223264)
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