

Supplement of Atmos. Chem. Phys., 17, 8867–8885, 2017  
<https://doi.org/10.5194/acp-17-8867-2017-supplement>  
© Author(s) 2017. This work is distributed under  
the Creative Commons Attribution 3.0 License.



*Supplement of*

**Organic molecular tracers in the atmospheric aerosols from  
Lumbini, Nepal, in the northern Indo-Gangetic Plain:  
influence of biomass burning**

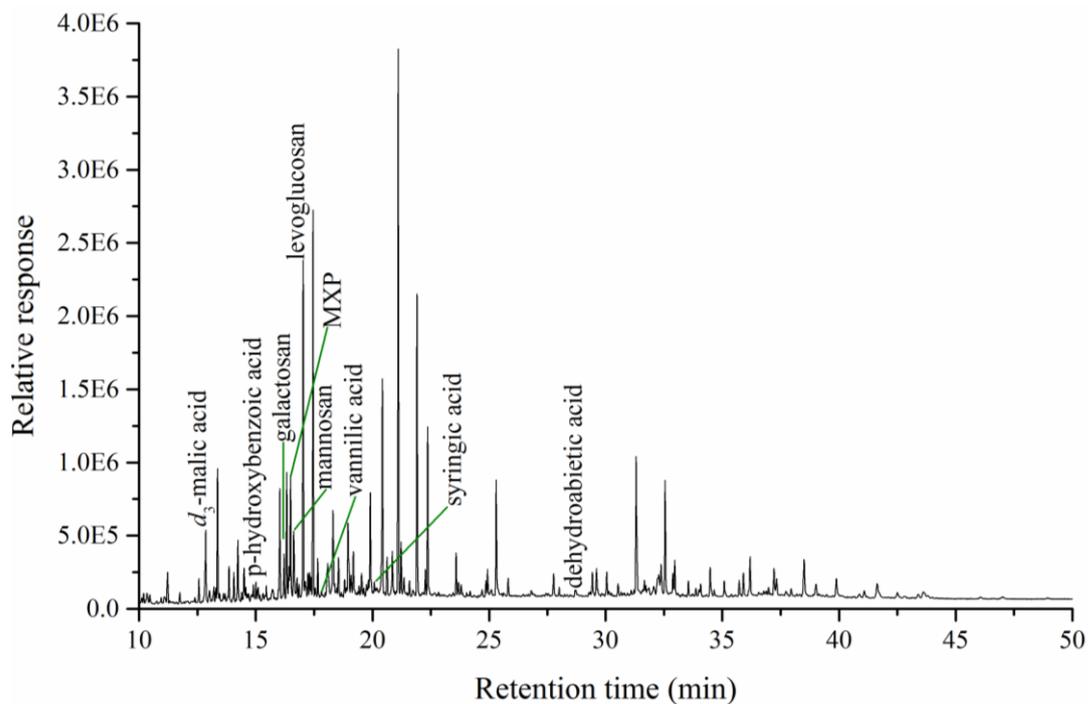
**Xin Wan et al.**

*Correspondence to:* Zhiyuan Cong (zhiyuancong@itpcas.ac.cn) and Shichang Kang (shichang.kang@lzb.ac.cn)

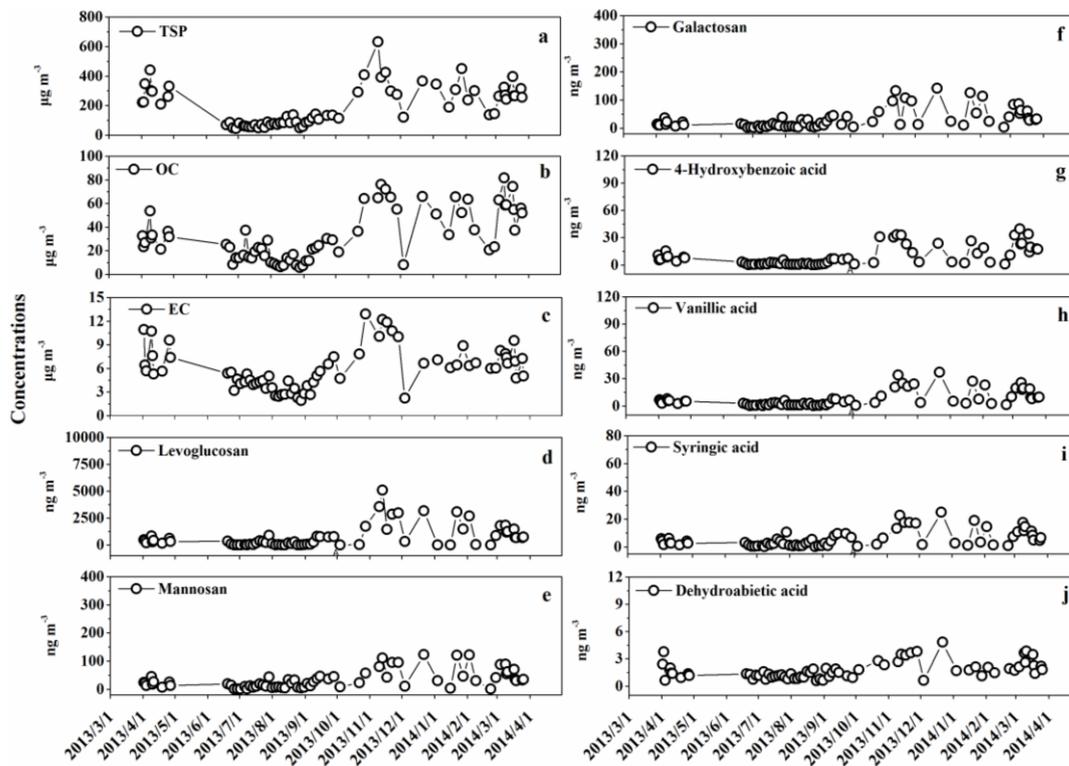
The copyright of individual parts of the supplement might differ from the CC BY 3.0 License.

**Table S1** Recovery ratios of target compounds and internal standards.

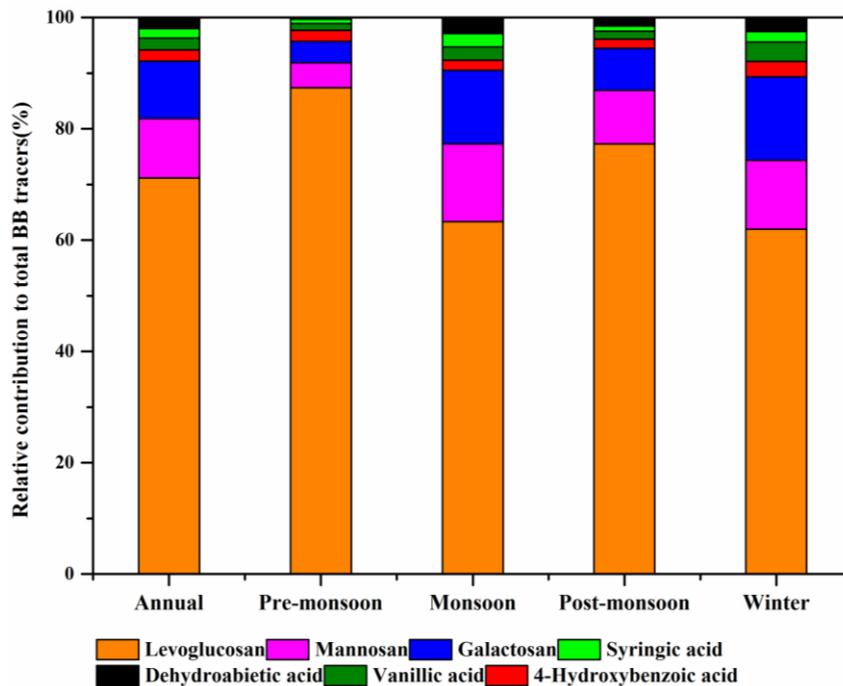
Compounds	Addition (ppb) (n=6)	Recovery (%)
Levogluconan	20	81.6 ± 10.4
Mannosan	20	80.7 ± 11.7
Galactosan	20	76.3 ± 9.43
p-Hydroxybenzoic acid	20	80.8 ± 9.78
Vanillic acid	20	79.4 ± 11.5
Syringic acid	20	78.6 ± 14.2
Dehydroabietic acid	20	85.4 ± 13.4
Methyl-β-D-xylanopyranoside	20	90.1 ± 13.2
<i>D</i> <sub>3</sub> -malic acid	20	70.5 ± 14.6



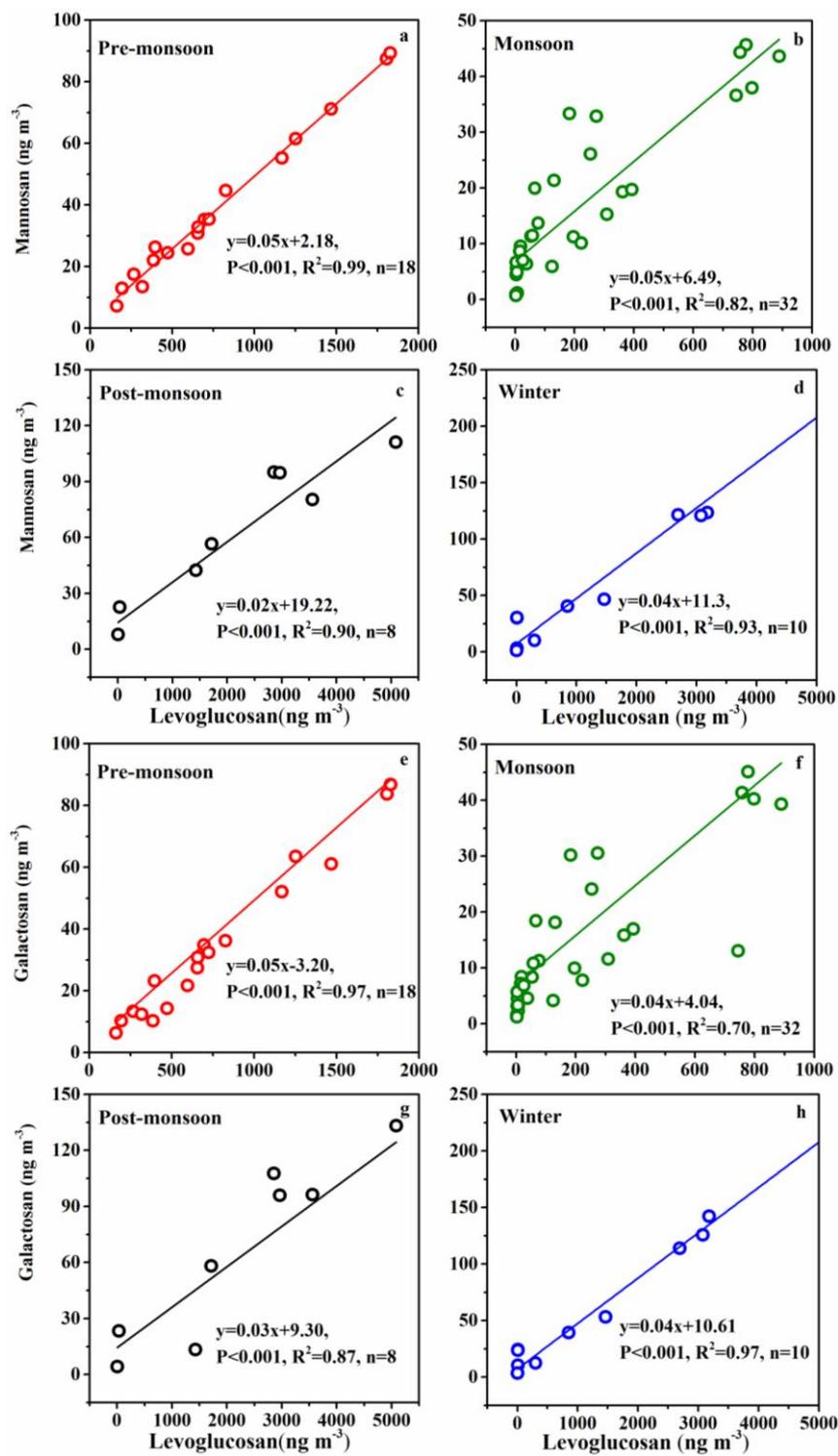
**Fig. S1.** Total ion chromatogram of organic tracers in a typical aerosol sample from Lumbini in southern Nepal.



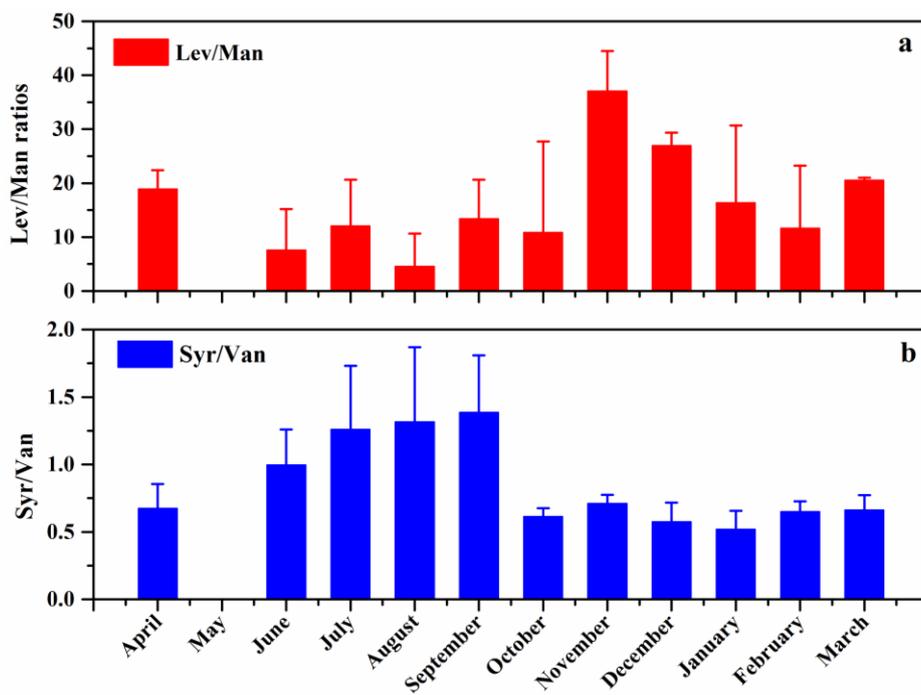
**Fig. S2.** Temporal variations in the concentrations of TSP, OC, EC, and organic tracers in Lumbini aerosols.



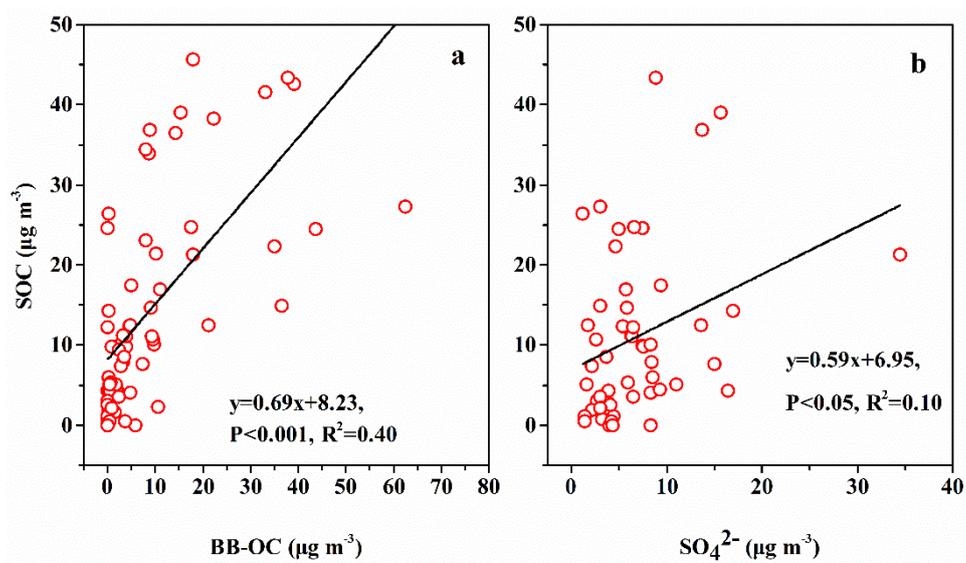
**Fig. S3.** Seasonal contributions of individual biomass burning tracers to total measured biomass burning tracers in TSP at Lumbini.



**Fig. S4.** Correlations between levoglucosan and mannosan, and levoglucosan and galactosan during different seasons.



**Fig. S5.** Monthly variations of levoglucosan/mannosan (Lev/Man) and syringic acid/vanillic acid (Syr/Van) mass concentration ratios (The data of May, 2013 was missing due to the equipment breakdown).



**Fig. S6.** Correlations between SOC and BB-OC, SOC and  $\text{SO}_4^{2-}$  during different seasons in Lumbini aerosols.