

Interactive comment on “Fungi Diversity in PM₁ and PM_{2.5} at the summit of Mt. Tai: Abundance, Size Distribution, and Seasonal Variation” by Caihong Xu et al.

Anonymous Referee #1

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The reviewer appreciate the responses made by the authors. As the investigators did, impactors have to be coated by oil or grease to prevent from bounce of giant particles.

The reviewer appreciate the additional experiment done by the authors about DNA extraction efficiency. However, the efficiency reported in the response seems to be recovery efficiency of DNA associated purification and elution steps, and not efficiency of DNA extraction from fungal cells. In this case, the authors had to spike fungal spores, not naked fungal DNA or PCR amplicons, as an external control. Usually, 70

The reviewer is also curious about the concentrations reported in the abstract. The authors reported that the fungal abundance was 9.4×10^4 and 1.3×10^5 copies m⁻³ in PM_{2.5} and PM₁, respectively. However, this is against basic law of physics. The

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concentration has to be higher in PM_{2.5} than in PM₁ because PM_{2.5} is inclusive of PM₁.

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2017-204, 2017.

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