



## Supplement of

## **Complex plant-derived organic aerosol as ice-nucleating particles – more than the sums of their parts?**

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**Figure S1:** Overview of harvesting dust bulk sample from scanning electron microscopy – yellow dots highlight plant material (awns, plant cell remains, plant hair)



**Figure S2:** Scanning electron microscopy images of particles from the AIDA cloud chamber: (A1 and A2) harvesting dust, (B1 and B2) leaf litter, (C) rice protein, (D1 and D2) soy protein, (E) alginate, (F) pectin, (G) carnauba wax, (H) sugar beet soil dust; (I) high resolution helium ion microscopy image of an individual lignin particles



Figure S3: Size distributions for lignin (A) and leaf litter (B) in suspensions as measured with Bettersizer (Bettersize Instruments Ltd.)