

1 **Supporting Online Material**

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3 **Autofluorescence of atmospheric bioaerosols –**
4 **spectral fingerprints and taxonomic trends of native pollen**
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8 Christopher Pöhlker^{1*}, J. Alex Huffman^{2*}, Jan-David Förster¹, and Ulrich Pöschl¹
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14 ¹*Max Planck Institute for Chemistry, Biogeochemistry Department and Multiphase Chemistry*
15 *Department, P.O. Box 3060, D-55020 Mainz, Germany*

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17 ²*University of Denver, Department of Chemistry and Biochemistry, 2190 E. Illif Ave., Denver,*
18 *Colorado 80208, USA*
19

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21
22 ^{*}*Corresponding authors: a.huffman@mpic.de, c.pohlker@mpic.de*
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27 fluorescence spectroscopy, fluorescence microscopy
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Supporting figures:

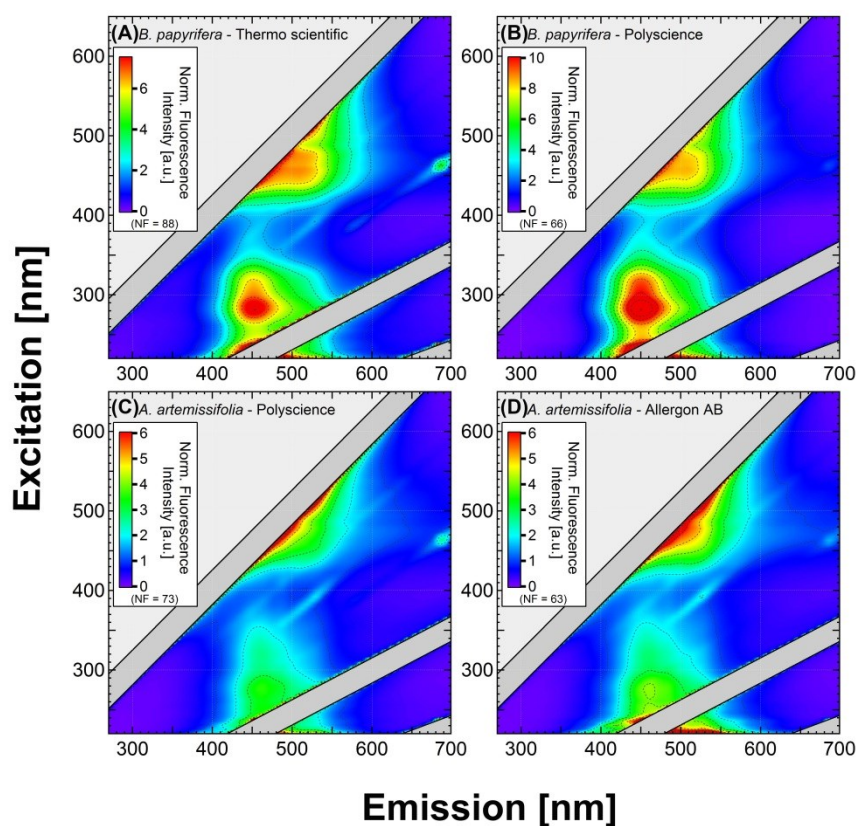


Figure S1. Comparison of EEMs of pollen purchased from different vendors: *B. papyrifera* purchased from Thermo Scientific (A) and Polyscience (B). *A. artemisiifolia* purchased from Polyscience (C) and Allergon AB (D). Fluorescence signatures in EEMs are shown to be identical, irrespective of commercial source.

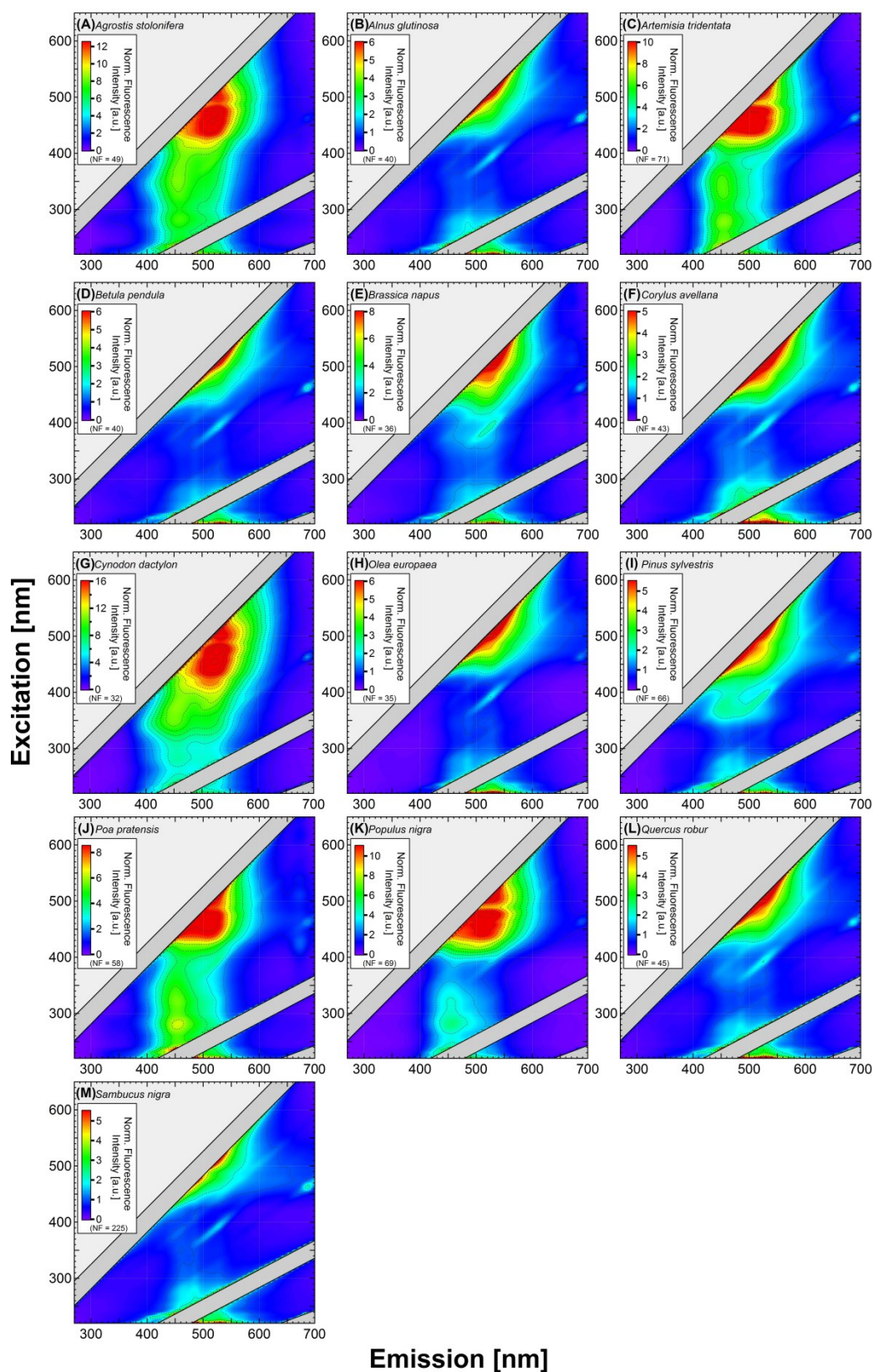


Figure S2. Excitation-emission-matrices (EEMs) of pollen in dry and native state. Intensity color code has been adjusted to fluorescence intensity of individual samples. All EEMs are normalized and a normalization factor (NF) is reported in each panels (Sect. 2.3). *Agrostis stolonifera* (A) pollen was treated with acetone for dewaxing after harvest. However, the corresponding EEM does not show substantial alterations.

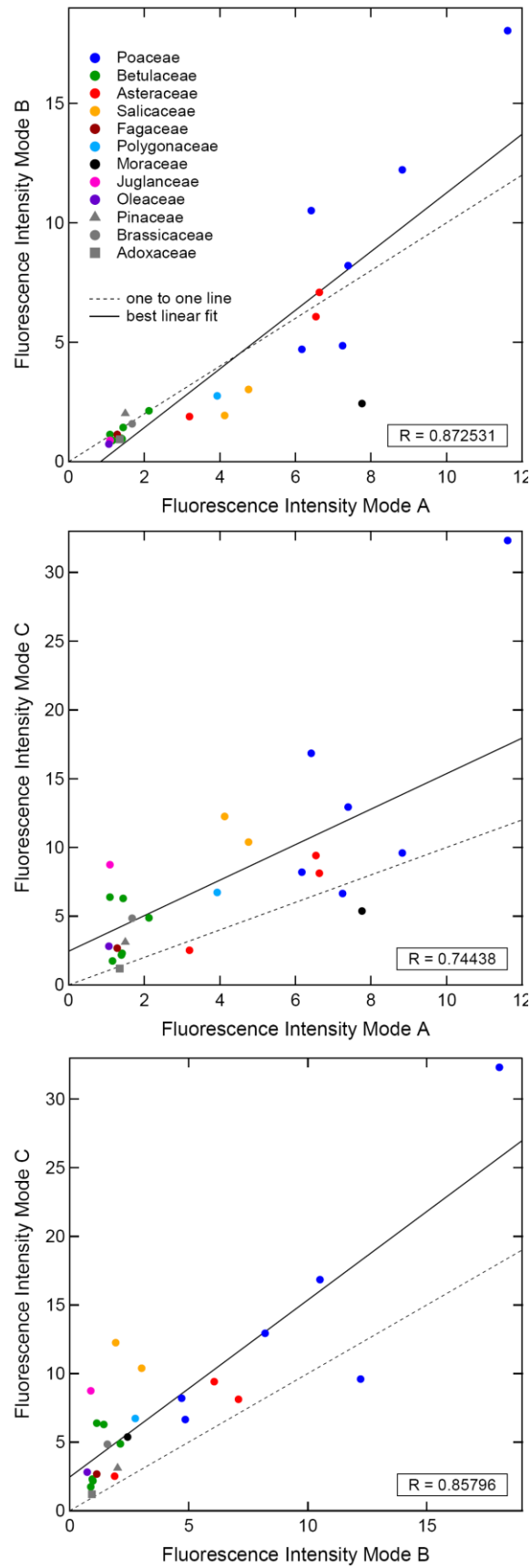


Figure S3. Scatter plots showing positive correlation between fluorescence intensities of main fluorescence modes A, B, and C (Fig. 5). Color code represents pollen families.