Optimized Spectrophotometry Method for Starch Quantification

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Table S1. Calibration levels used for calibration curve of starch content.

Calibration level	Calibration concentration (µg/mL)	Volume added (mL)	Dilution from stock solution (1000 µg/mL)
1	1	0.01	1000x
2	10	0.1	100x
3	25	0.25	40x
4	50	0.5	20x
5	75	0.75	13.3x
6	100	1.0	10x

Table S2. Concentration of starch in bioaerosols (µg starch/mg dry weight) at 590 nm.

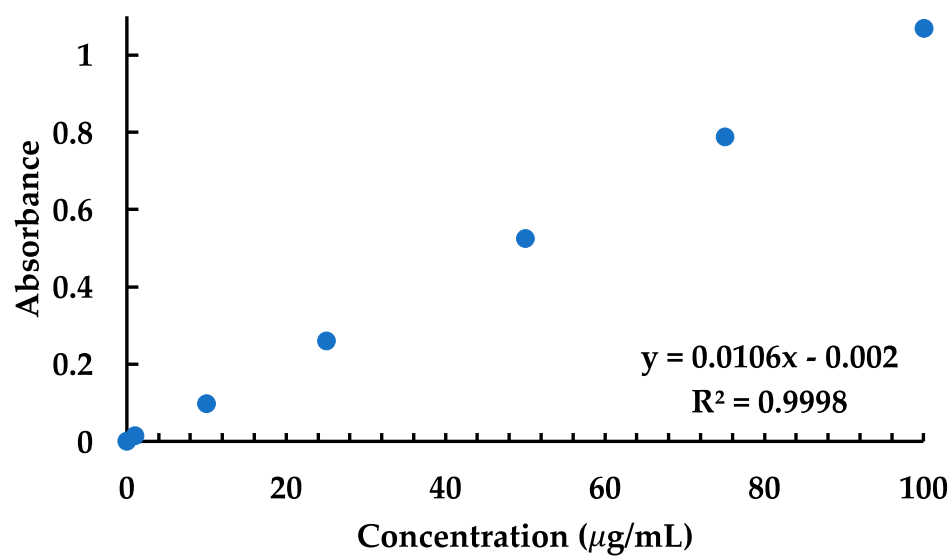| Bioaerosol type	Fresh concentration (µg starch/mg dry weight)	Heated concentration (µg starch/mg dry weight)
Pollen *(Pinus Contorta)*	0.52 ± 0.03	0.94 ± 0.06
Fungi *(Endocronartium Harknessii)*	3.51 ± 0.03	4.31 ± 0.06
Bacteria *(Bacillus subtilis)*	0.45 ± 0.03	0.45 ± 0.05
Microalgae *(Arthrospira Platensis)*	0.69 ± 0.02	0.64 ± 0.05

Figure S1. Calibration curve at 0.2% iodine reagent concentration (see table S1 for concentrations of calibration levels).
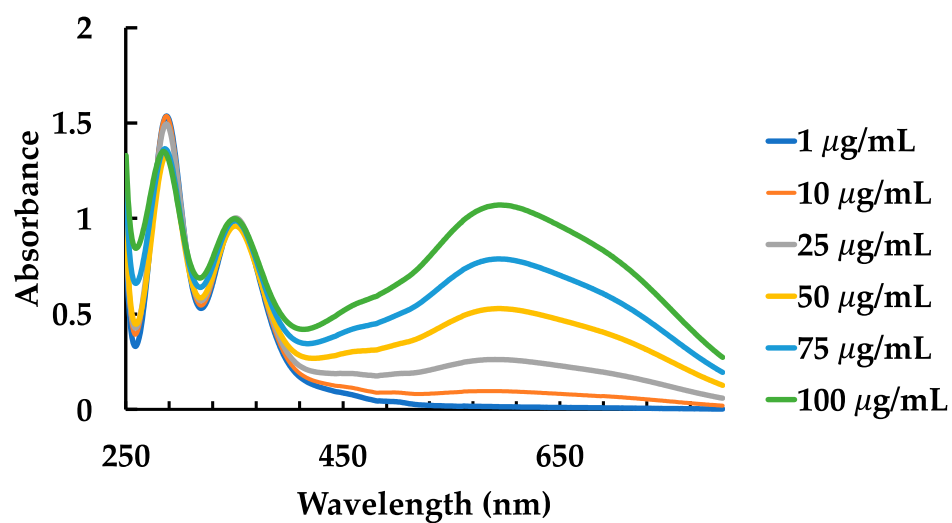

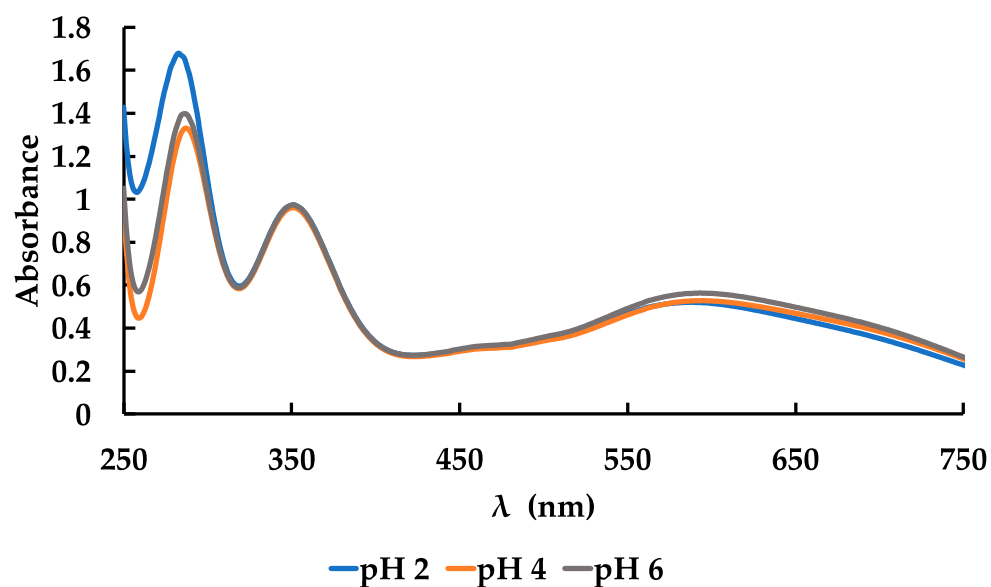**Figure S2.** Spectra of calibration levels at 0.2% iodine reagent concentration.

Figure S3. Full spectrum of calibration level 4 (50 µg/mL) at pH 2,4, and 6.
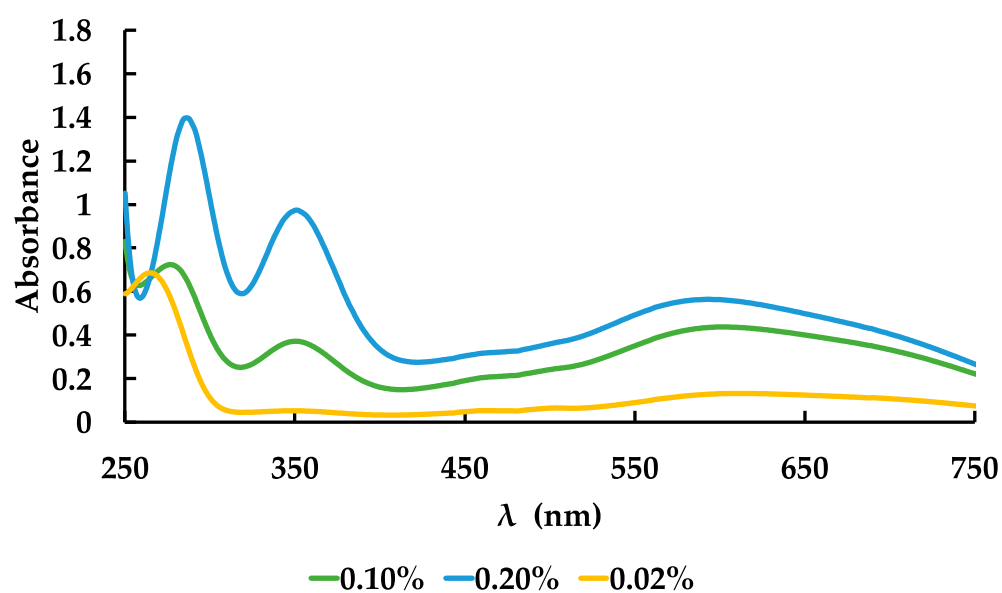

Figure S4. Full spectrum of calibration level 4 (50 µg/mL) at iodine reagent concentration 0.02, 0.1, and 0.2%.