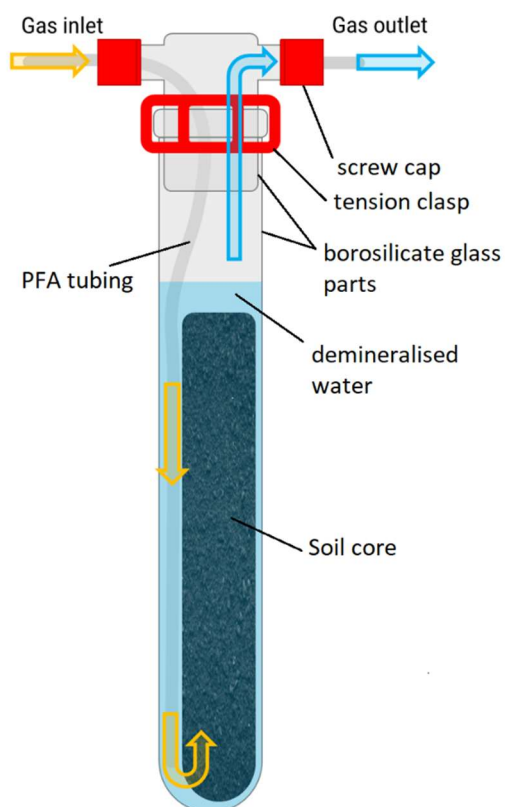


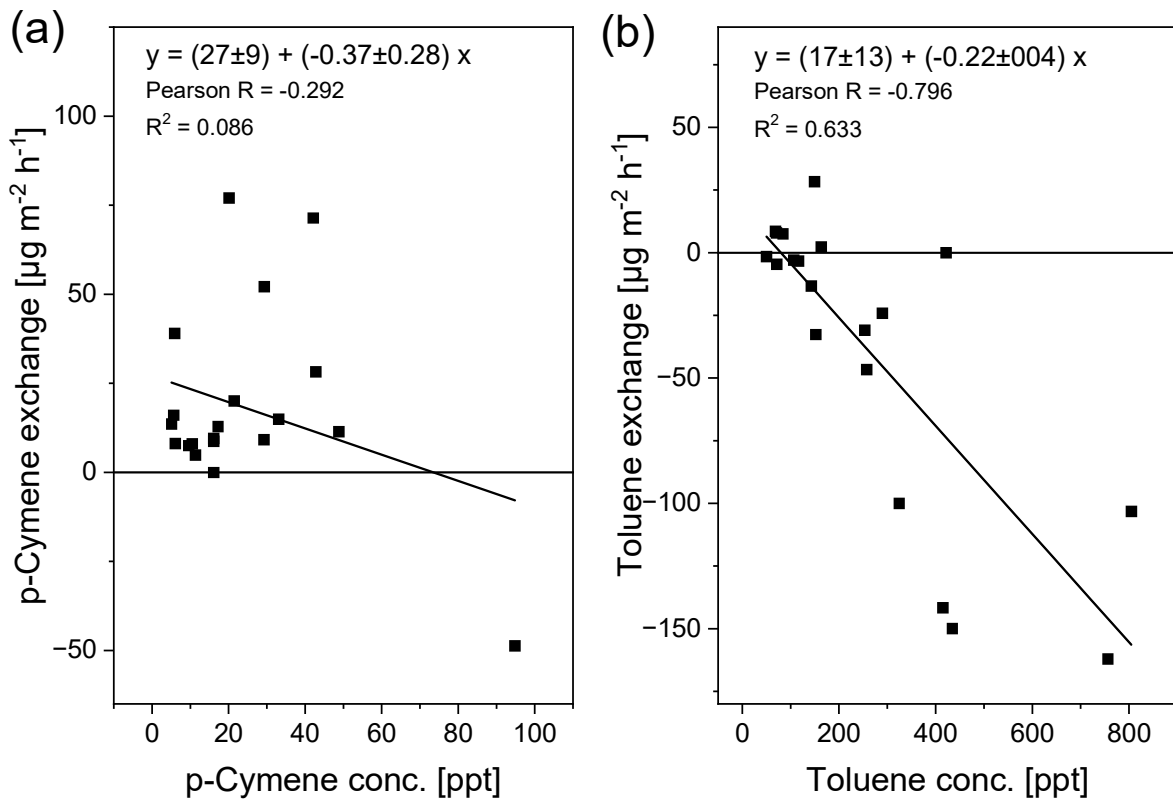
Supplemental Figures

Supplemental Figure S1



Supplemental Figure S1. Experimental system to analyze VOC emissions from soil cores collected in the field. The soil cores were placed into the glass tube and submerged with demineralized water, leaving a headspace between 35 and 65 mL. During experiments the tube was flushed either with synthetic air (normoxic condition³) or nitrogen (anoxic conditions) at a rate of 220 mL min⁻¹. The gas was channeled through perfluoroalkoxy alkane (PFA) tubing to the bottom of the glass tube and gas bubbles rose along the soil core ensuring efficient gas exchange (yellow arrows). At the gas outlet a T-piece was installed which was connected to an air sampling tube with an air sampling pump sucking air at a rate of 180 mL min⁻¹ and to a 1 m long 1/8" PFA tubing (to release overpressure) (both not shown in the scheme).

Supplemental Figure S2



Supplemental Figure S2. Dependence of p-cymene (a) and toluene (b) exchange from ambient (sub-canopy) concentrations of these VOCs. Data were obtained in summer and autumn 2024 at undisturbed plots of the ECOSENSE forest. Results of linear regression also shown in Figure 7.