

Fig. S1 Selected photographs of pre and after burning plant material from Siberia in a muffle oven at 250, 300, 350, 400 and 450 °C. Note that some of plant material turned to ash at lower temperature than others.

Pinus sylvestris needles



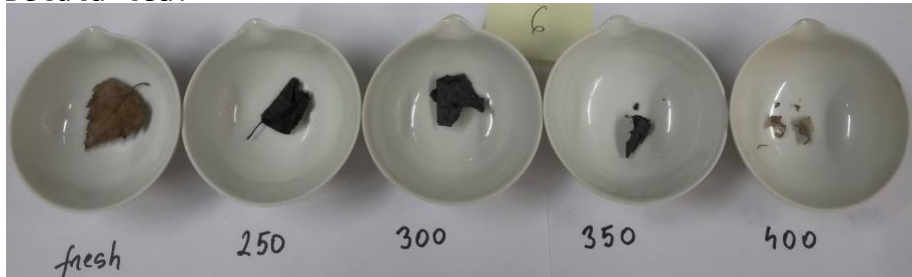
Pinus sylvestris twig



Pinus wood



Betula leaf



Sphagnum



Polypodiaceae



Equisetum



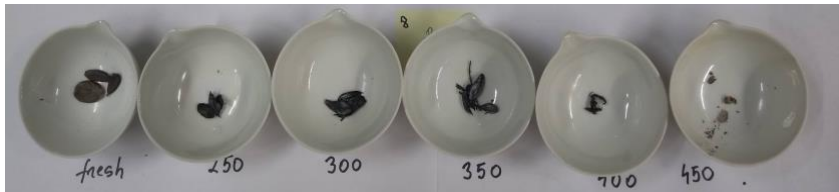
Oxycoccus



Carex



Vaccinium



Polytrichum



Fig. S2 The median lengths (μm) of charred particles produced from (a–d) individual taxa and (e–g) fuel types by burning at temperatures of 250, 300, 350, and 400 $^{\circ}\text{C}$, respectively. Box plots represent the distribution of data as follows: the horizontal line in each box denotes the median, the upper quartile is the median value of the upper half of the data points, the lower quartile is the median value of the lower half of the data points, whereas whiskers represent the minimum and the maximum values. Abbreviations of plant material burned are given in Figure 1.

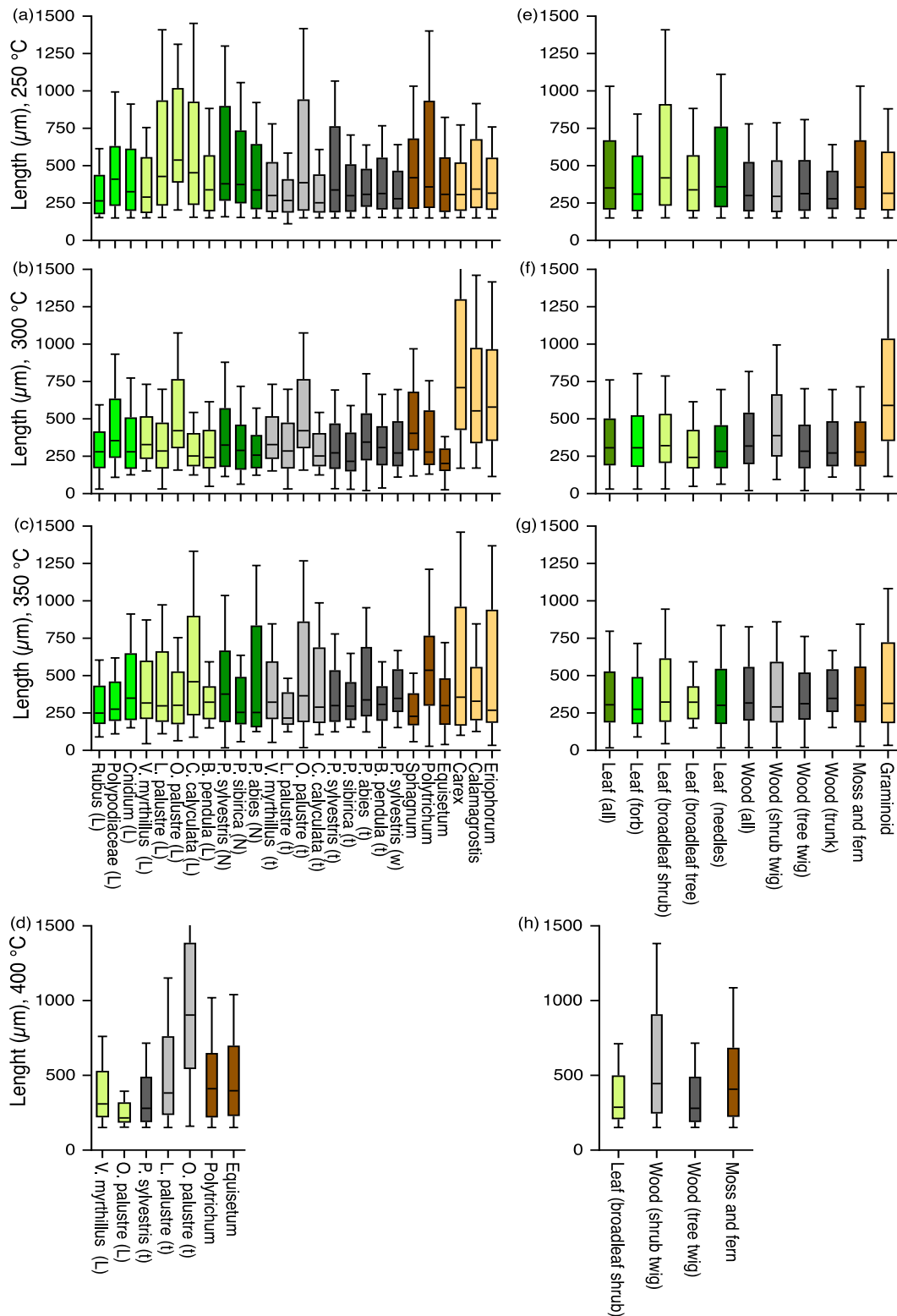


Fig. S3 The median surface areas (μm^2) of charred particles produced from (a–d) individual taxa and (e–g) fuel types by burning at temperatures of 250, 300, 350, and 400 °C, respectively. Box plots as in Fig. S2. Abbreviations of plant material burned are given in Figure 1.

