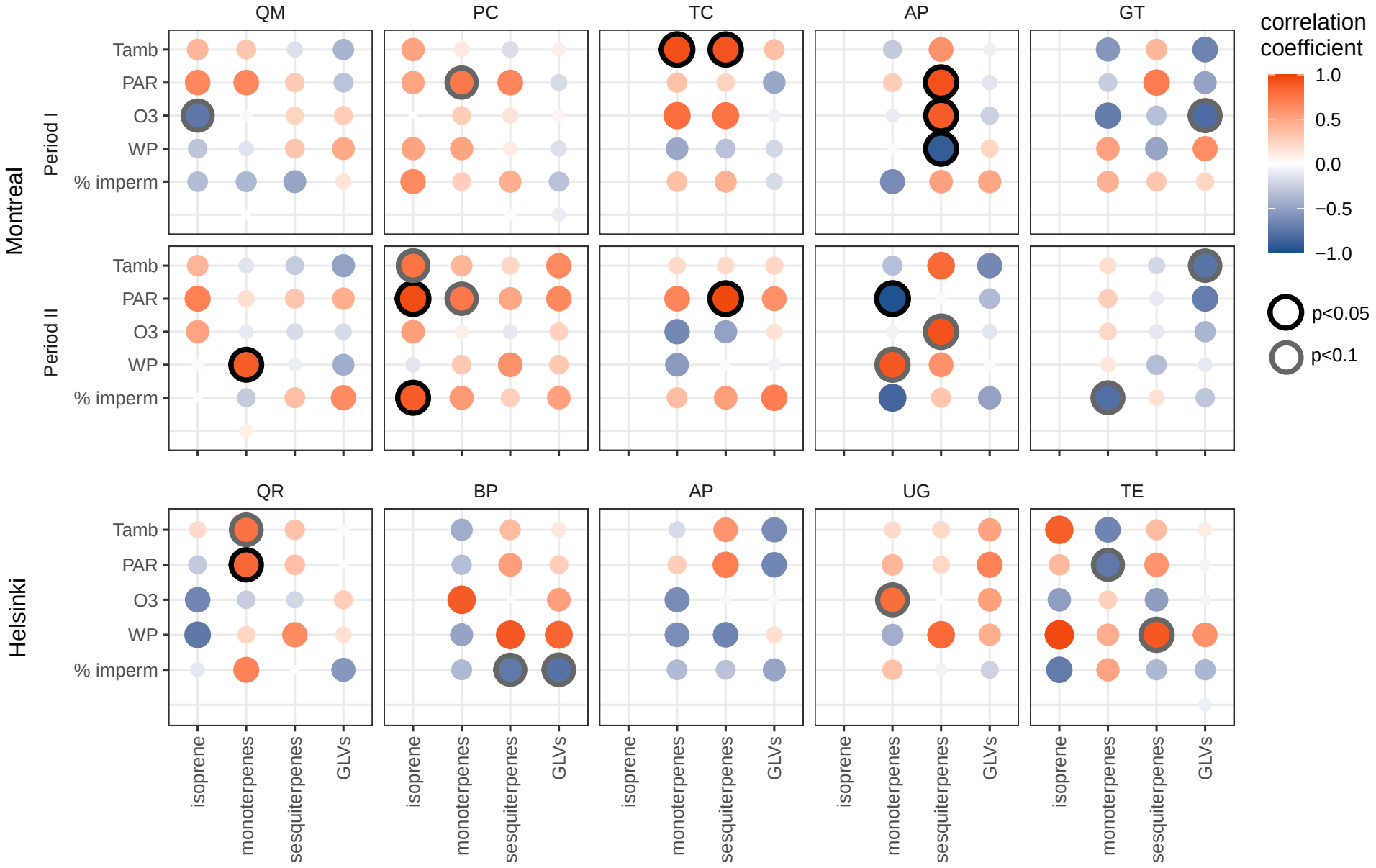

Figure R1: Pearson's correlations between the emissions potentials of compound groups and environmental (Tamb: ambient temperature during sampling, PAR: photosynthetically active radiation during sampling, O3: ambient ozone concentration during sampling, % imperm: degree of surface impermeability within a 10-m radius around the tree (Helsinki) or mean surface impermeability of the city block (Montreal)) and physiological (WP: shoot water potential) factors that may be sources or indicators of stress. Correlations performed separately by species, city and measurement period.

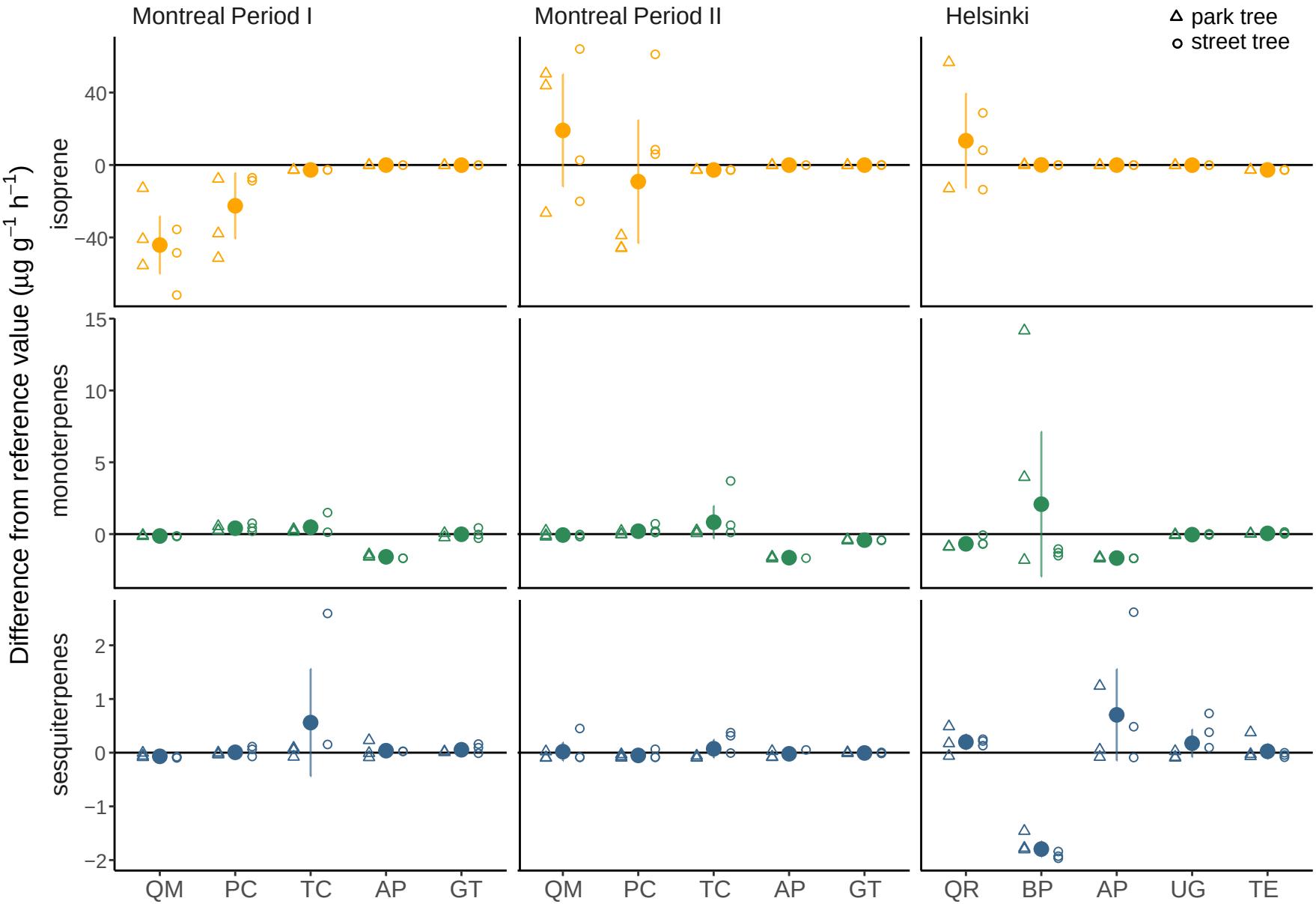

Figure 3 alternative version. The difference between the isoprene, monoterpenoid, and sesquiterpenoid emission potentials measured from urban trees and the reference values (mean value of the emission potentials collected from the emissions databases), separately for species in Montreal in June (period I) and August (period II) and in Helsinki in July. The filled dots indicate the mean difference across the trees (n_{obs} = 4–6) and the error bars show the 95% confidence intervals (some are smaller than the dot diameter). The open triangles show the difference for each park tree and the open dots for each street tree. Species: AP, *Acer platanoides;* GT, *Gleditsia triacanthos*; PC, *Populus x canescens*; QM, *Quercus marcrocarpa*; TC, *Tilia cordata*; BP, *Betula pendula*; QR, *Quercus robur*; TE, *Tilia x europea;* UG, *Ulmus glabra*.