Supplementary Information

Airborne Prokaryotic, Fungal and Eukaryotic Communities of an Urban Environment in the UK

Hokyung Song [1,2], Nicholas Marsden [1], Jonathan R. Lloyd [1,*], Clare H. Robinson [1], Christopher Boothman [1],
Ian Crawford [1], Martin Gallagher [1,*], Hugh Coe [1], Grant Allen [1] and Michael Flynn [1]

[1] Department of Earth and Environmental Sciences, The University of Manchester, Manchester M13 9PL, UK; hk.song15@jejunu.ac.kr (H.S.); nicholas.marsden@manchester.ac.uk (N.M.); clare.robinson@manchester.ac.uk (C.H.R.); christopher.boothman@manchester.ac.uk (C.B.); i.crawford@manchester.ac.uk (I.C.); hugh.coe@manchester.ac.uk (H.C.); grant.allen@manchester.ac.uk (G.A.); michael.flynn@manchester.ac.uk (M.F.)
[2] Subtropical/Tropical Organism Gene Bank, Jeju National University, 102 Jejudaehak-ro, Jeju-si 63243, Jeju-do, Korea
* Correspondence: jon.lloyd@manchester.ac.uk (J.R.L.); martin.gallagher@manchester.ac.uk (M.G.)

Notes about fungal species found as spores on filters at The Firs

From Legon N. W. & Henrici, A. (2005) *Checklist of the British & Irish Basidiomycota*. Royal Botanic Gardens, Kew.

Fruiting season taken from Phillips R. (1981) *Mushrooms and Other Fungi of Great Britain and Europe*. Pan Books Ltd., London.

Daedaleopsis confragosa – on dead wood of deciduous trees in parkland and woodland. Very common and widespread but less so northwards. Fruiting season all year. We found higher abundance in February than November.

Phlebia radiata – On decayed wood of deciduous trees. Especially frequent on *Fagus* and *Prunus avium*. Very common and widespread. Fruiting season all year. We found higher abundance in November than February.

Clitocybe nebularis – On soil in woodland, associated with a wide range of deciduous trees and also conifers. Very common and widespread. Fruiting season late summer to late autumn. We found higher abundance in November than February.

Cylindrobasdium evolvens – Resupinate or effuso-reflexed basidiome. Very common and widespread. Causes “Fish-Eye Disease” in stored apples. Fruiting season all year. We found higher abundance in February than November.

Mycena metata – On soil and needle litter in conifer woodland, often associated with *Pinus* species. Occasional but widespread. No information on fruiting. We found higher abundance in November than February.

Lepista nuda – On soil or decayed leaf litter in deciduous or conifer woodland, amongst grass in parklands and gardens, and on woodchips, compost heaps, piles of decayed grass clippings. Very common and widespread. Fruiting throughout the year and often well into winter (we found greater abundance on the filter in November). Fruiting season autumn to early winter. We found higher abundance in November than February.

Lepista flaccida – On loam soil or on leaf and needle litter in deciduous and conifer woodland. Very common and widespread. Fruiting season summer to early winter. We found higher abundance in November than February.

Ganoderma australe – Parasitic then saprotrophic. Wide range of deciduous trees in woodland, parkland and urban areas. Very common and widespread. Likely fruiting season all year. We found higher abundance in February than November.

Heterobasidion – Parasitic then saprotrophic. Virulent root pathogen. Known on a wide range of conifers, but also on deciduous hosts. Very common and widespread. Fruiting season all year, perennial. We found higher abundance in February than November.

Hypholoma fasciculare – On decayed wood of both deciduous and coniferous trees. Very common and widespread. Fruiting season all year. We found higher abundance in November than February.

Trechispora byssinella – On decayed wood and leaf litter of deciduous trees and on living mosses. No information on fruiting. We found higher abundance in November than February.

Antrodia xantha – On decayed wood of conifers, usually on large fallen trunks, logs or stumps. Occasional but widespread. Likely fruiting season all year. We found higher abundance in February than November.

Trametes gibbosa – On fallen, decayed wood of deciduous trees. Very common and widespread. Likely fruiting season all year. We found higher abundance in February than November.

Resinicium bicolor – On decayed wood of conifers. Very common and widespread. No information on fruiting. We found higher abundance in February than November.

Flammulina velutipes – Saprotrophic or weakly parasitic. On dead or dying wood of deciduous trees or shrubs. Very common and widespread. Fruiting mainly during winter (we found greater abundance on filter in February). Fruiting season late autumn to spring; can survive being frozen solid and on thawing produces more spores. We found higher abundance in February than November.

Pleurotus ostreatus – weakly parasitic then saprotrophic. On living, fallen and decayed wood of both coniferous and deciduous trees. Very common and widespread. Fruiting season all year. We found higher abundance in November than February.

Hyphodontia pallidula – Usually on decayed wood of conifers. Very common and widespread. No information on fruiting. We found higher abundance in February than November.

Collybia butyracea – On soil amongst litter under coniferous, and less often deciduous, trees. Frequent and widespread. Fruiting season autumn to early winter. We found higher abundance in November than February.