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Rarely reported fungal spores and structures: an overlooked source of probative trace evidence in criminal investigations

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**Abstract:** The value of pollen and plant spores as trace evidence has long been established, but it is only in the last eight years that fungal spores have been analysed routinely from the same palynological samples. They have greatly enhanced the specificity of links between people, objects, and places. Most fungal species occupy restricted ecological niches and their distributions can be limited both spatially and geographically. Spores may be dispersed over very short distances from the fungal sporophore<sup>1</sup>, and their presence in any palynological assemblage may indicate a restricted area of ground, or the presence of particular plants (even specific dead plant material). Fungal spores can represent primary, secondary, or even tertiary proxy evidence of a location, and can indicate the presence of a plant even though the plant is not obvious at a crime scene. In some cases, spores from fungi which have rarely been reported, and are considered to be rare, have been of particular value in providing intelligence or evidence of contact. Ten examples are given from case work in which rarely reported or unusual fungi have proved to be important in criminal investigations.

**Keywords:** fungi, mycology, palynology

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<sup>1</sup> Spore bearing structure

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