

Octospora phagospora: a bryophilous fungus new to Britain

In this brief report, **Howard Matcham** describes how a routine day in the field led to an exciting new discovery.

In late March 2011, while looking at terrestrial bryophytes in winter-inundated, shallow depressions in secondary woodland, I noticed a minute (1 mm), orange discomycete growing on protonema of admixed acrocarps. Microscopic examination proved the fungus to be in the genus *Octospora* and probably growing on *Poblia lutescens*, although *Bryum rubens*, *Pleuridium acuminatum* and *Trichodon cylindricus* were also present in the collections of damp soil. I was able to run the species down to what I believed to be *O. melina* as asci were 8-spored, warted, with associated curved, clavate (club-shaped) paraphyses containing orange granules; it was under this name that I sent the collections to Brian Spooner, Head of Mycology at Royal Botanic Gardens, Kew.

Brian replied that this interesting species was in fact *O. phagospora*, new to Britain. This species is unique to the 20 or so species in the genus

in Europe in that on maturity the asci auto-digest four spores, leaving four spores remaining. After I had looked at the fungus under the microscope, I left the samples to dry before sending them to Kew, and during this drying period the fungus had become cupulate (cup-shaped) within the protonema and the asci had auto-digested four spores.

In Europe the fungus has been recorded as being host specific to *Poblia lutescens* and specimens are currently being looked at by Silvia Pressel at the Natural History Museum to ascertain the relationship of the fungus with protonema and to identify which moss species the relationship is confined to, if any. It is hopeful that these questions can be answered and eventually published.

Howard Matcham

e hwlmatch@yahoo.com

▽ Light micrograph showing groups of four ascospores in *O. phagospora*. Bar, 10 µm. Silvia Pressel

