

Little black spots on leaves and twigs

To anyone interested in mushrooms and toadstools, the fungi which cause 'little black spots' are a race apart. Examine them closely, though, and you enter a remarkable, beautiful and rewarding world.

In Britain the most conspicuous and, perhaps, most common is *Rhytisma acerinum*, the sycamore tarspot fungus. I was going to say it is the most easily found, but this is only true in autumn when its big black colonies on green attached leaves of sycamore occur almost everywhere on the British Mainland, wherever the air is unpolluted. It's not so easy to find after leaf fall though (Fig. A), when the minute asexual stage fruitbodies appear in the top of these black patches, and by the following spring, perhaps late April to early June, you have to search fallen leaf debris diligently to find the beautiful multiple fruitbodies of the sexual stage opening with many slits (Fig. B). We know a lot about the distribution of the sycamore tarspot fungus but much less is known of its far less abundant relative on willow, *Rhytisma salicinum*. Although this fungus may occur in great numbers, you are more likely to see only a few black patches, maybe between ten and one hundred if you're lucky, on leaves of a single tree. Even then, you're only likely to find this fungus in northern and western parts of Britain, and many surrounding willows will have no spots. It too is most conspicuous on living leaves in autumn (Fig. C), and your best way to see the rarely observed sexual stage fruitbodies is to note a heavily infected tree one autumn in a sheltered spot where fallen leaves will accumulate and re-visit it the following late April to late May.

These two tarspot fungi have complex multiple fruitbodies, making them large and distinctive, but their smaller relatives are no less interesting. Find a cluster of pine trees and examine fallen needles at any time from January to June and you are

likely to see *Lophodermium pinastri*. Because this fungus inhabits a long thin leaf which doesn't break up quickly during decomposition, it has no need to produce a large black patch like the *Rhytisma* species. Instead it marks off its bit of dead leaf with thin black zone lines. The minute asexual fruitbodies, and larger black sexual stage fruitbodies can usually be found between these lines (Fig. D), and with a bit more patience and luck, you may also find them occasionally on cone scales of the pine (Fig. E). More of a challenge comes when you start looking for *Lophodermium acupariae*, which lives on dead fallen petioles of rowan. Hunt between April and June for its little sexual stage fruitbodies aligned with the axis of the petiole and opening with longitudinal splits (Fig. F), but patience and perseverance are necessary, as most petioles seem to end up at the bottom of gorse bushes or nettle beds! This fungus is little known in Britain south of the Lake District, and even in Scotland records are few, so if you find it, please let me know!

Not all tarspot fungi have sexual stage fruitbodies opening with long thin splits. In *Coccomyces dentatus*, a common species on dead fallen leaves of oak, chestnut and, occasionally, beech or exotic members of the Fagaceae (as in Fig. G), the rather angular fruitbodies open by several radial splits. This should be looked for in August and September. A rare treat indeed for the diligent black spot hunter would be the beautiful elongated fruitbodies of *Lirula nervisequia* (Fig. H), recorded so far only once in Britain, from north-east Scotland. It occurs on dead needles of spruce attached to living twigs and surrounded by other living needles, but only on young miserable-looking trees which are suppressed through lack of light.

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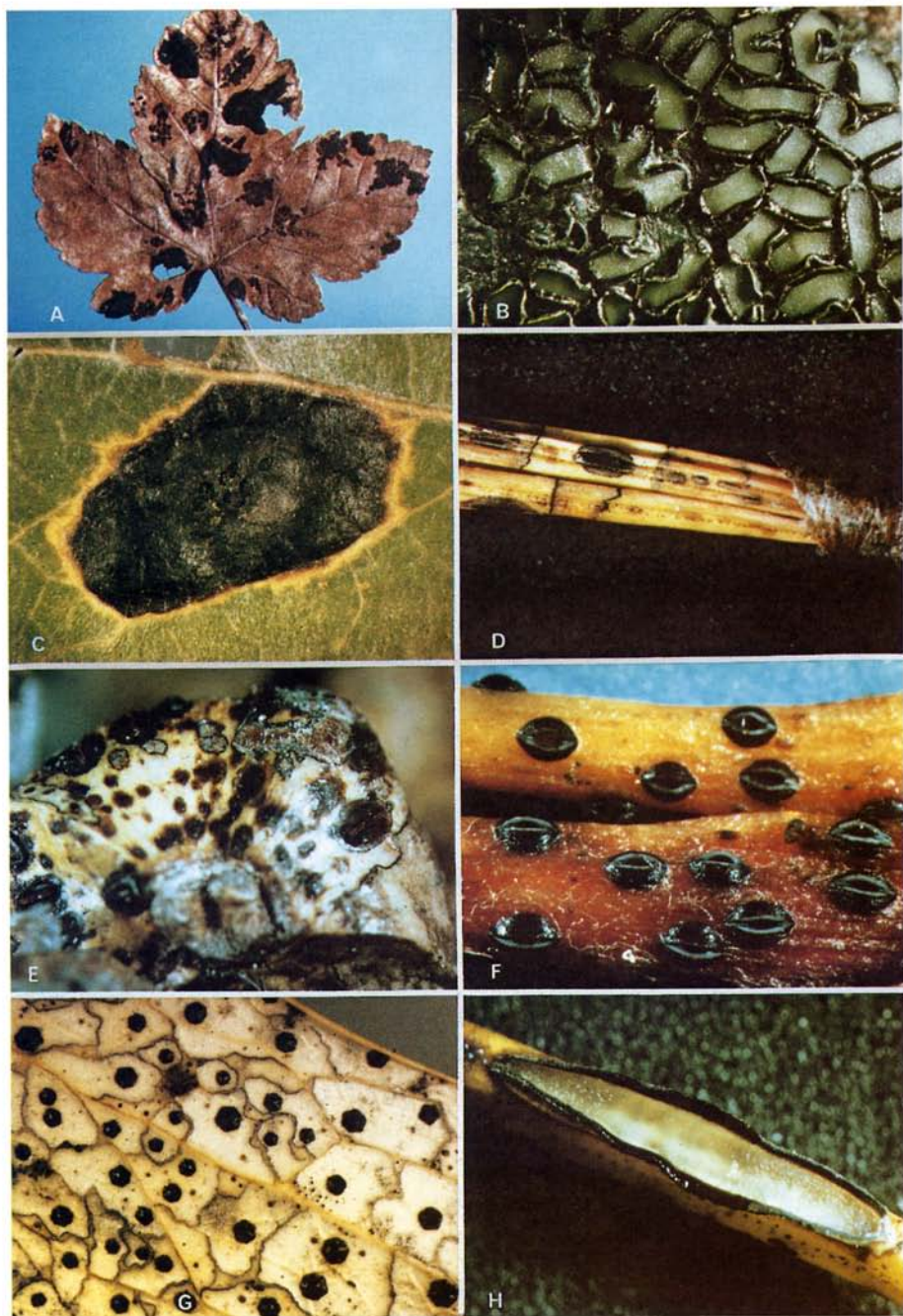


Fig. A: *Rhytisma acerinum* on dead fallen leaf of sycamore. B: *Rhytisma acerinum* sexual stage fruitbodies opening by splits. C: *Rhytisma salicinum* tar spot on living leaf of willow. D: *Lophodermium pinastri* on fallen needle of scots pine. E: *Lophodermium pinastri* on scale of fallen cone of scots pine. F: *Lophodermium aucupariae* on fallen petiole of rowan. G: *Coccomyces dentatus* on dead fallen leaf. H: *Lirula nervisequia* on dead attached needle of spruce.