## smal Wonders

ONYGENA

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## Photography by Joe Warfel

nce upon an earlier time I gave a talk on keratininhabiting fungi to the New York Mycological Society and, following this talk, I led a foray in some nearby woods that suddenly was interrupted by the screams of a female forager. Had she been attacked by a rapacious mycophile or perhaps a rare East Coast Sasquatch? Not at all. Her screams were actually shouts of delight upon finding one of the species, *Onygena corvina*, I'd been talking about. The scream-inducing fungus was growing on the feather shaft of a dead red-tailed hawk.

Keratin is a protein that most fungi can't digest. Most, but not all. Onygenales are ascomycetes that happily digest nails, hair, fur, feathers, skin, and their kin. *Onygena corvina* can be found not only on dead birds' feathers, but also in nests, on owl pellets, and on old wool. I once found a gregarious fruiting of it on some woolen matting in an abandoned herring factory in Iceland. The 19th century English mycologist Rev. Miles Berkeley found it in Sherwood Forest on a beleaguered woolen garment belonging not to Robin Hood, but (the Rev. Berkeley surmised) a gypsy.

Sometimes called the "feathered stalkball," *O. corvina* usually fruits in late winter. It has a 1-2 mm furfuraceous (scaly) cap and a stalk that reaches a height of 6-20 mm ...

a size almost too large for a "small wonder." The ascospores are 6-8 by 2.3-3.0  $\mu$ m and brownish in color, usually with two guttules — they're launched when their cleistothecial cap decides to dehisce (i.e., distintegrate). The entire fruiting body has a somewhat nasty smell that serves as an attractant to insects, who arrive to vector the spores. (Note: the host is too far gone to have any smell at all.)

"Corvina" refers to birds known as corvids, although *O. corvina* almost never seems to fruit on defunct ravens, crows, or jays. A related species, *O. equina*, does in fact grow on the moldering hooves of equines as well as those of cows and other mammals. *FUNGI* contributing editor Andrus Voitk sometimes finds it on the rotting hooves of moose in Newfoundland. Rumor has it that *O. equina* also grows on the shed antlers of moose and deer, but that's not true, since antlers aren't composed of keratin. The species does fruit on the shed horns of various bovids, though.

If you're a mycophage, the answer to your question is simple: whatever way you prepare them, you can't eat either of these Onygenas. But certain other Onygenales are dermatophytes, which means that they can eat you, albeit restricting themselves to your skin. These species, which include athlete's foot (*Tinea pedis*) and ringworm (*Tinea* sp.), will probably not make you too happy if you find them deriving their carbon and nitrogen from your very own person. Yet if you happen to see an *O. corvina* fruiting on (for instance) an owl pellet, there's a good chance that you'll find yourself screaming with delight.



