## Smallwonders Sarea resinae

## Lawrence Millman

n a subfreezing February day in New England, I was examining the sticky, elongated flow of resin from a white pine canker. Mounting evidence suggests that resin protects a conifer from invasions by insects, mammals, and birds, along with fungi. But it can also serve as a substrate for opportunistic saprobic fungi such as the one I was looking for and, in fact, soon found — the small orange ascomycete *Sarea resinae* (former name: *Biatorella resinae*).

A particularly large specimen of *S. resinae* may be a millimeter in diameter, so you'll probably need a hand lens if you want to see the species in all its miniature glory. What you'll see is goblet-shaped when young and discoid when mature as well as fleshy and gelatinous when young, then coriaceous when mature. Lacking a stipe, it will be stuck in its substrate in a way that makes it look like a tiny orange eye peering at you. And, yes, winter is just as good a time as any to find it.

If you think *S. resinae* is small, then you ain't seen nothing yet. Cheek by jowl

with it in the resin are almost microscopic orange dots with papillate ostioles. These dots are *S. resinae*'s anamorph, *Pycnidiella resinae*, and they often occur by the dozens, all hoping to grow up and become teleomorphs. [Joseph Warfel notes: The one image shows size scale well with the tip of an insect "minuten" pin of 0.2mm/.008 in. diamenter. The higher magnification shot was taken at 20x.] By culturing the spores, mycologists David Hawksworth and Martha Sherwood confirmed the connection between the two states, as described in their 1981 paper in the *Canadian Journal of Botany* (59[3]: 357-372).

Here I might add that the two aforementioned Englishpersons are among the few mycologists who've studied *S. resinae*. But that doesn't



mean it's rare, only that it's been overlooked. On a recent foray in Maine, I offered a copy of my book *Fascinating Fungi of New England* to anyone who found a specimen, and within a very short time, five foragers found specimens on balsam fir resin. Note: One woman who found nine specimens of *S. resinae* wanted nine copies of the book, but I was adamant about giving her only one.

Thus the motto of this article would seem to be "Seek and ye shall find." On the other hand, I've constantly searched for other resin inhabitors like *Lachnellula* resinae var. resinae and Sarea difformis (probably a lichen), but I've always come up emptyhanded. Which just goes to show that no motto is all-inclusive with respect to the whimsies of Kingdom Fungi.

Photographs by Joseph Warfel