

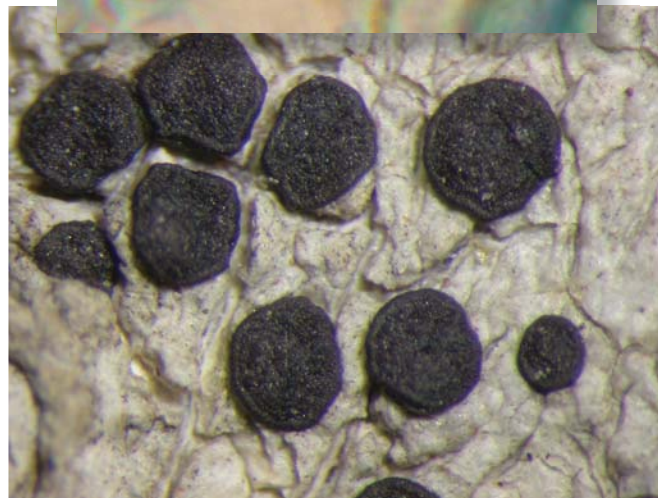
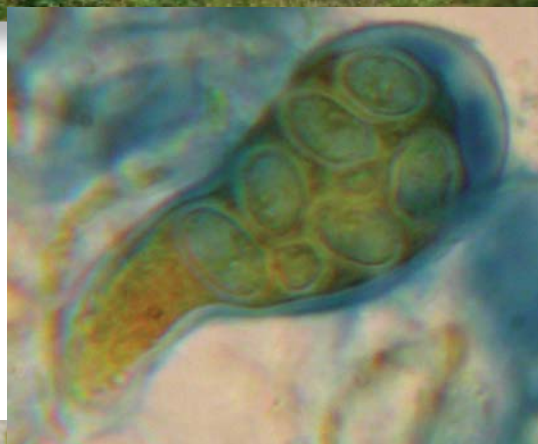


Crustose Lichens: Identification Using Morphology, Anatomy, and Simple Chemistry with Irwin M. Brodo

August 22 - 28, 2010

Although the lichens of Maine's coastal rocks and forest are a conspicuous component of the vegetation, it is usually the larger lichens, the foliose and fruticose species, that attract one's attention. This seminar will concentrate on the less conspicuous, but equally diverse and important, crustose lichens. Collections will be made from bark, wood, rocks and soil, and they will then be identified in the laboratory. Updated keys to genera of crustose lichens from "Lichens of North America," will be used, as well as other modern keys from the world literature. Techniques for sectioning, staining, and interpreting the tissues of crustose lichen fruiting bodies will be introduced, with special attention being devoted to staining various ascus types with iodine. Thin layer chromatography will be introduced and used to demonstrate how to analyze the chemistry of some crustose lichens, especially sterile species, as the interest of participants and time permits. Techniques for testing lichens with para-phenylenediamine, hypochlorite solution (bleach), potassium hydroxide, nitric acid, and iodine will be discussed and used regularly for identifications.

Dr. Irwin M. Brodo (ibrodo@mus-nature.ca) was the research lichenologist at the Canadian Museum of Nature in Ottawa for 35 years and remains a Research Associate there. He is the author of over 80 research papers on lichens, most of them on the taxonomy of North American species, but also including studies of ecology, air pollution, and general lichen biology. Together with photographer/naturalists Sylvia and Stephen Sharnoff, he has written an encyclopedic reference book entitled "Lichens of North America" illustrated with over 920 color photographs. The book was published in October 2001 by Yale University Press and is in its fourth printing.



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