Aspicilia moenium in the Western Hemisphere

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On September 8, 1988, Einar Timdal and I were walking down a short zig-zag trail that leads from the University of Colorado campus down to Boulder Creek. The trail is dilapidated, but a crumbling rock revetment prevents the slope from caving in over the walkway. Suddenly he stopped, and with his penknife he extracted a few bits of mortar and exclaimed, "This is my *Aspicilia excavata*, which Göran Thor and I described in 1986 from Norway. This will be the first from America!" I am afraid that the specimen looked too puny for me a to get a clear idea of its salient characters, but relying on his determination I reported it (Weber 1990). In 1992, Thor & Timdal (1992) found an earlier name for it in *Endocarpon*, so the *Aspicilia* became *A. moenium* (Vainio) Thor & Timdal. The species remains little known, from Finland, Norway, Sweden, and Austria.

Recently, while preparing a self-guided tour of the lichens of the University of Colorado campus, I decided to list the lichens on a retaining wall running north from the northeast corner of Clare Small Building, which houses the COLO herbarium. The buttress at its maximum height is about twelve feet tall, and narrows down at a 45 degree angle to zero. An iron railing is cemented along the top. This wall was built at the same time as the building itself, in 1928, in order to prevent washing of soil from the sides of the new building. A maximum of 68 years has elapsed for lichens to have reached their present development. Lichens occupy a zone beginning with the horizontal surface of the buttress, down the west side in a band about 1-2 feet wide. Below this point the surface has been sandblasted to remove graffiti. The upper surface is dominated by *Xanthoria elegans*. On the vertical surface, in decreasing proportions there are specimens of *Aspicilia cf. desertorum*, *A. cf. calcarea* (totally pruinose), *Caloplaca citrina, C. saxicola, Candelariella rosulans, Acarospora cf. smaragdula*, both naked and pruinose forms, *Lecanora garovaglii, L. muralis*, and *L. dispersa*.

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As I analyzed this community I discovered an extremely minute lichen that was quite unfamiliar to me and unique in its appearance. It consisted of separate squamules only 0.3-0.5 mm high and wide, resembling very truncated tubes, like extremely short gray smokestacks tilted to one side, with an ascending upper lip exposing a coal black underside (dark soredia). It occurred to me that this might very well be a colony of *Aspicilia moenium* in extremely good condition, much better than the eroded-looking, oxalated whitish fragments that I had seen earlier. Referring back to the photograph and description in the original paper, I found that my hunch was correct.

A discovery of this sort on a part of a University building raises ethical problems. How to obtain a voucher specimen of this wonderful find on a buttress that bears no visible scars up to the present time? To judge from other cited specimens, the preferred habitat has been on mortar of old Christian churches. Fortunately, in this instance I have had the cooperation of the staff of our Facilities Management Department, who extracted a nine centimeter diameter core. The lichen, as in most collections, is sterile.

My main reason for publishing this note is to alert lichenologists in North America to the likelihood that this species is neither rare nor restricted in its distribution, but probably has subtle ecological requirements of exposure, light, and moisture. At the present time, the Boulder, Colorado campus is its only known Western Hemisphere station. If one could duplicate exactly the conditions in which the Boulder population occurs (either on smooth concrete or hand-applied chinking between granite boulders), *Aspicilia moenium* might prove to have a wide or uninterrupted range across North America. Its apparent restriction to mortar raises the question of its origin here. From where might it have arrived, and by what means? Is there any known occurrence of the lichen on a natural substrate?

Literature Cited

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