

verruculosa were in error and what they provided was actually a measurement for the whole 2-celled ascospore and not just its dark cell. This means that the only real difference between the varieties is the greater ornamentation in var. verruculosa.

2nd addendum to the annotated literature: The following paper made me think again about the identification of the variety: Udagawa, S. & K. Furuya. 1972. Notes on some Japanese Ascomycetes X. Trans. Mycol. Soc. Japan 13: 49-56. In this paper they describe and illustrate Apiosordaria verruculosa var. maritima and compare it with a herbarium specimen of A. verruculosa var. verruculosa that they borrowed from Toronto (and also photographed). After viewing their photos (microscope and SEM) of var. maritima, I questioned my own var. maritima because theirs is essentially smooth without any spines or warts on the SEM and only the faint elevated spine?, wart? on their drawing and microscope photo of the var. maritima. I then looked again at Nils (1967, 1972) and also found Jensen's original 1912 article among my reprints. Nils is the key because he has reexamined the material deposited by Apinis and Chesters (Holotype of the var. maritima) and he states that the wall of the dark cell is definitely not smooth but consists of closely spaced spines up to 1.5 μm long while the type var. verruculosa has less closely spaced blunt spinose warts up to 3 μm long. Furthermore he finds no real difference in size of the spore or other feature – the varietal differences being solely that of differences in ornamentation. Although Udagawa and Furuya place their specimen in var. maritima, it certainly doesn't show closely spaced spines up to 1.5 μm in height and may represent a closely related but different species. Although I would like to compare my specimen with the type variety to be sure, for now I believe that mine meets Nils view of Apinis and Chester's variety maritima.

CBS culture collection deposit: An axenic PCA culture of A40 strain #3 (formerly referred to as colony #3, of the 5 colonies initially transferred from the hydrogen peroxide-treated ascospore plate). An Email from Dr. Shu-hui Tan on 11 Feb. 02 gives the CBS accession number as **CBS 110042**.

Genetic potential: According to von Arx & Gams, W. 1966. Uber Pleurage verruculosa und die zugehörige Cladorrhinum-Konidienform. Nova Hedwigia Zeitschrift Fur Kryptogamenkunde. XIII: 199-208, A. verruculosa is heterothallic.

Single ascospore cultures: