ERRATUM

Vol. 37 (2004) 63–85: **Zooxanthellae Regulation in Yellow Blotch/Band and Other Coral Diseases Contrasted with Temperature Related Bleaching: *In Situ* Destruction vs Expulsion**. By James M. Cervino, Raymond Hayes, Thomas J. Goreau, and Garriet W. Smith

The following are corrected figures:

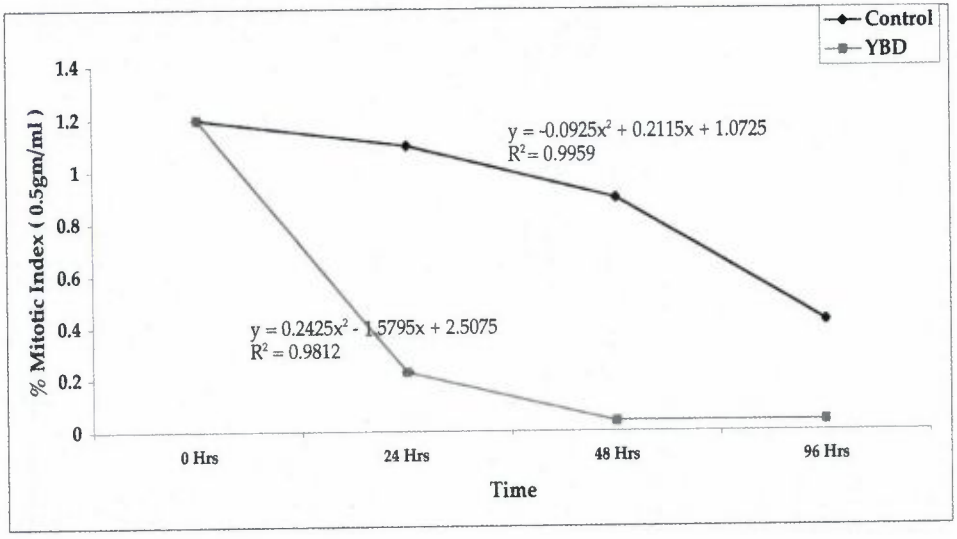


Fig. 2b.

Figure 2. a–d: M,STDEV, Pairwise Sample T-Test for P values. b: The rate of % MI between within 24 hours, show a decrease 81% when compared to controls, after 48 hours there is a 95% drop and at 96 hours it remains constant compared to non-pathogenic bacteria at about 97% (<p=0016).

See figure on next page.

Figure 4. a–e: Photographs were taken through the 100× objective lens with a film magnification of 300× of infected zooxanthellae with YBD bacteria. Symbiotic zooxanthellae degeneration and lysis is evident surrounded by bacterial mats. a: Vacuolation and swelling is extreme and also showing evidence of algicidal activity of alga (b). PCD like symptoms can be seen in approximately 30% of all zooxanthellae that are infected (c–d). e: healthy symbiotic zooxanthellae.

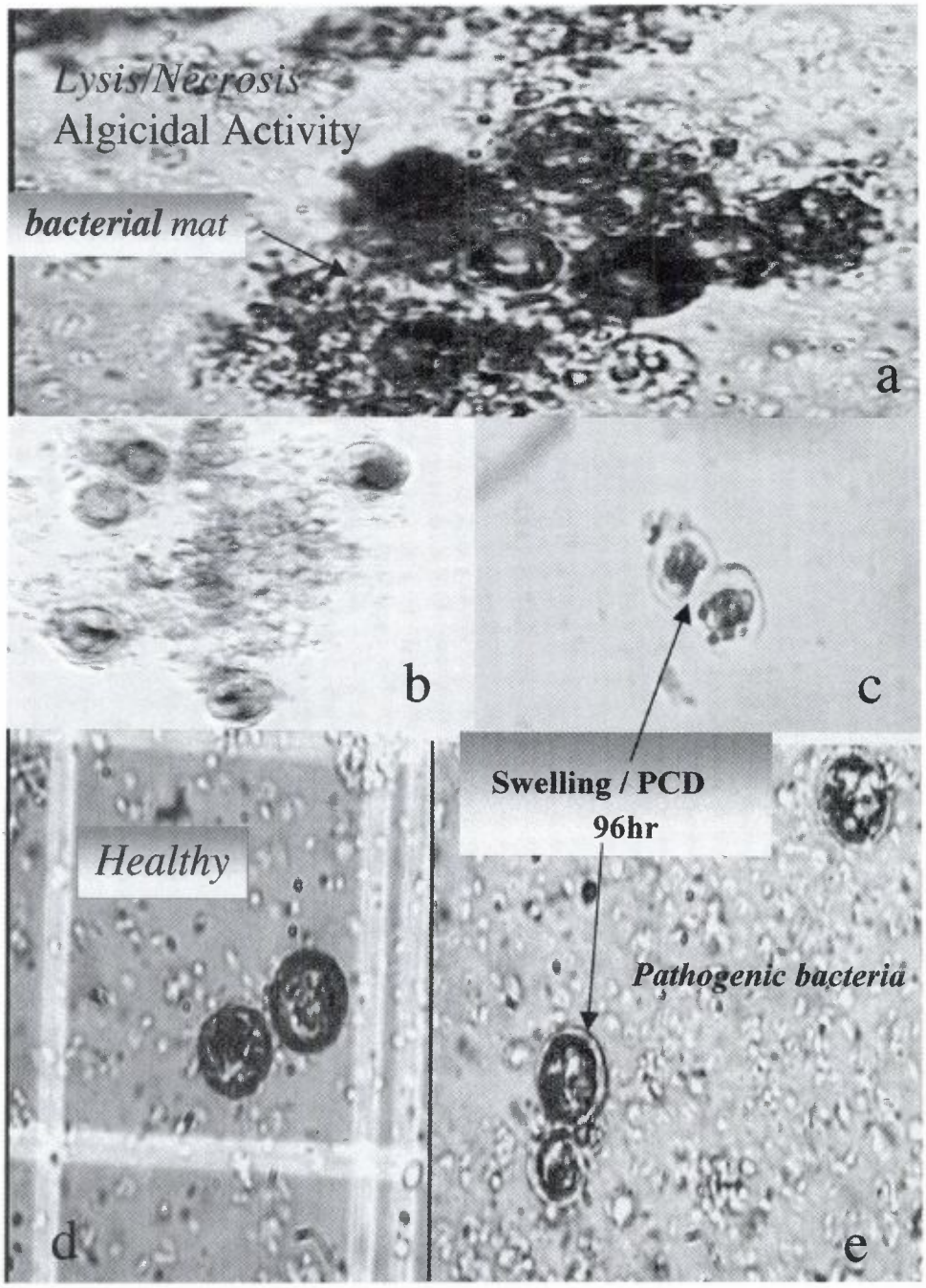
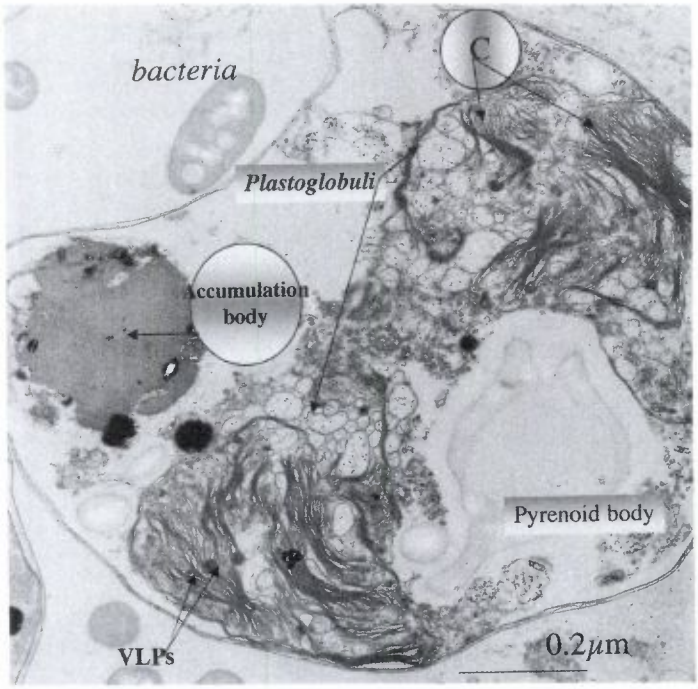
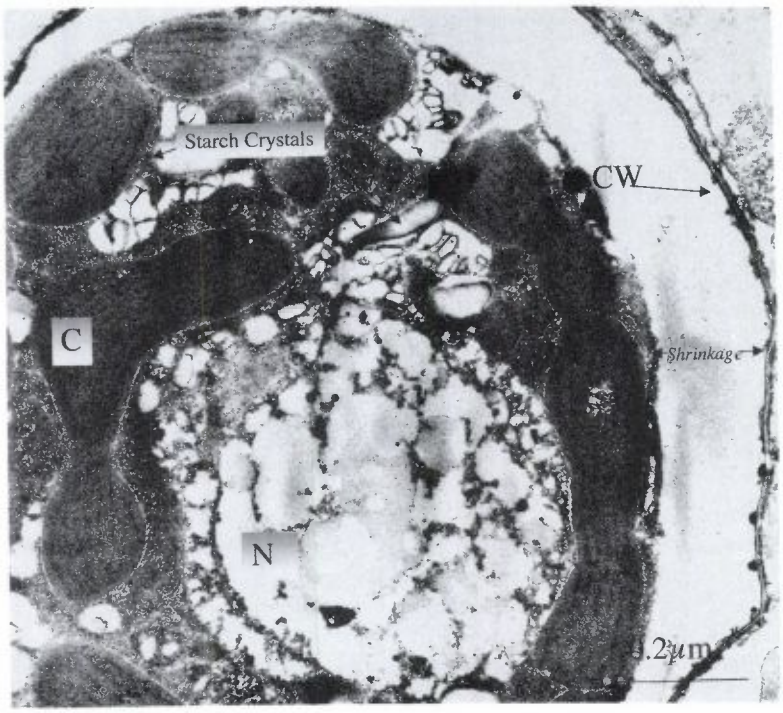


Figure 4. See legend on previous page.



a)



b)

Figure 5. See legend on next page.

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Figure 5. a–b: Shows a transmission electron micrograph (TEM) image of symbiotic exposed to YBD bacteria. TEMs of zooxanthellae *in situ* indicate the same general morphology as seen in light microscopy, but reveal far greater detail. a: Image shows degradation of cell wall that appears to be evident along with vacuolation and cytoplasmic shrinkage. The chloroplasts are disorganized to the outer margin of the cell; however, they appear intact. There are numerous non-membrane bound vacuoles that appear within the nucleus and cytoplasm of the zooxanthellae. Some of these are filled with an electron dense substance, but many are empty or filled with fluid. b: The core of the algal cells is severely vacuolated. The pyrenoid body is apparent and normal in structure. However, in some cells, the pyrenoid is fragmented into separate segments. Algal swelling is primarily attributable to the expansion of the accumulation bodies separation of the algal surface membranes from the peripheral cytoplasm containing chloroplasts. N=nucleus, C=chloroplasts, S=starch crystals, CW=cell-wall.

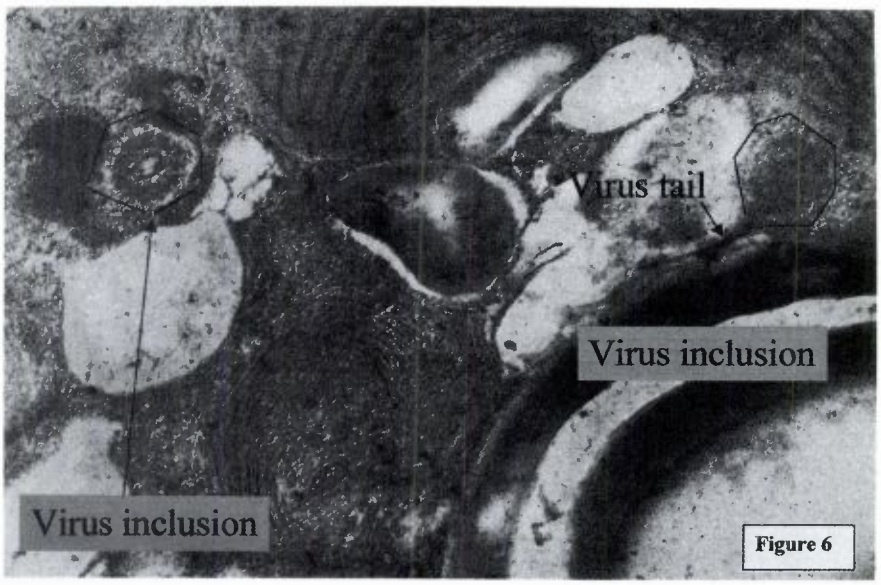

Figure 6. Viral-like particles (VLPs) are observed in several algal cells. These particles are approximately 0.10–0.15 μM in diameter. They have a central dense core and a peripheral envelope or coating. They resemble published profiles of immature and mature virons. Their contribution to the disease process is not established. However, the presence of VLPs may indicate that the algae are subjected to genomic or metabolic stress from yet another unanticipated source.