

Comment

A ROSE BY ANY OTHER NAME

Is taxonomy a necessary evil for the biodeterioration specialist? Old names, names we grew up with scientifically, are hard to give up. How long should the practitioner wait before abandoning old friends? I must confess I was provoked into writing this comment out of a feeling of frustration and annoyance after reviewing two manuscripts on distillate fuel microbiology. Now I feel very comfortable with *Cladosporium resinae* and I am totally distressed by *Amorphotheca resinae*. Whatever reasons provoked Parbery to look into the sex life of this poor benighted creature and find its perfect stage, it affects not one of the activities of *Cladosporium resinae* that interest me. And to add further to my distress, *Hormoconis*! My erudition at this stage in my career does not include cataloguing changes in names that have no practical significance for me.

In this same manuscript, I was introduced to *Yarrowia tropicalis* (*née Candida*). At the time of writing, I have not found out who Yarrow is or was and how to pronounce *Yarrowia* (my apologies to David Yarrow). This can be a problem. One of my favourite organisms, *Pasteurella pestis*, is now *Yersinia pestis*. I do not deny Yersin his due but I became quite attached to the old name. Most knowledgeable microbiologists are familiar with Yersin and his work and would pronounce his name *Yersan*. But who, may I ask, would say *Yersania*?

When I began my microbiological studies, the pneumococcus was

scientifically *Diplococcus pneumoniae* (at least in the United States). Now it is *Streptococcus pneumoniae* and I think it has lost something in that. There was distinction in the *Diplo*..., especially with the capsule immunology and the demonstration of transformation; now it is only an alpha-strep with an interesting past. *Staphylococcus aureus* had it but almost lost it since *Bergey's Manual* (7th edn.). It became *Micrococcus pyogenes* var. *aureus*. Thank God, it is back to *Staphylococcus*. All teachers of microbiology are lost without the generic/post-fission morphology relationship.

Let me shed a tear for *Pseudomonas oleovorans*, that oil-eating pseudomonad so aptly named by Lee and Chandler. After many years of distinguished presence in metalworking fluid and enzymology laboratories, it disappeared to be replaced by the less descriptive *Pseudomonas putida*. How sad!

We honour people, places, diseases and sometimes the biology of microorganisms in bestowing *names*. And sometimes it is not deemed such an honour! Some 20 years ago, the senior senator for the state of Washington, Warren Magnuson, actually placed a bill for consideration into the legislative hopper of the United States Senate requesting a name change for the genus *Salmonella*. He claimed that all this talk of salmonellosis was demeaning his state of Washington, the salmon capital of the world. The bill did not get out of committee. When the cause of the high mortality, low morbidity pneumonia outbreaks at the American Legion convention in Philadelphia in 1976 was found to be a previously undescribed Gram negative bacterium, it needed a name. It got one — *Legionella pneumophila*. The genus/species derivation is obvious. But the commander of the American Legion officially protested, to no avail. I could think of several alternative diseases with which the Legion would be less enthusiastic.

The *Legionella* genus designation represents at best a compromise among the devotees of the legionellae. There have been strong voices for at least one additional genus in this group. But the political and scientific clout of the Centers for Disease Control (CDC) staff won the single genus designation. The American Legion need no longer take umbrage; they have created a home for some 25 species, giving fame and notoriety to a handful of CDC staffers and a number of unlucky locations that suffered outbreaks. So fatty acid chromatographs and DNA probes to the contrary, clinically-, culturally- and environmentally-related isolates are all called *Legionella*.

There are significant name changes which reflect meaningful and practical findings. Presently, five or more genera cover the dissimilatory sulphate reducers. An early designation combined both a cellular

inclusion and physiological function into *Sporovibrio desulfuricans*. This became (1) *Desulfovibrio desulfuricans*, plus (2) *Clostridium nigrificans*, which finally is *Desulfotomaculum nigrificans*. The diverse morphological and nutritional group have dissimilation of sulphate and an anaerobic ecological niche in common. The recognition of the diversity has helped the biodeterioration expert and the nomenclatural additions have added clarity.

I have to wonder what role an editor should play in enforcing adherence to official binomials. Specialists in applied microbiology would be hard pressed to keep up with the name changes adopted by appropriate international groups in bacteriology and mycology. How soon should we jump on the bandwagon? *Yarrowia* indeed! Long live *Pullularia pullulans*! A rose is a rose is a rose.

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