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LETTERS

Name that organism

In a recent Letters column (SN: 11/5/77, p. 291), Ernest H. Runyon takes you to task for speaking of blue-green algae. He says they are bacteria in the Kingdom Procaryotae. Please don't feel the sting of chastisement, since this is simply the opinion of Mr. Runyon, shared, of course, by a few other authorities such as Bergey's Manual, 8th edition, 1974, to which he refers.

It is certainly true that the blue-green algae and the bacteria have enough in common to place them in the same group, probably a kingdom, if it is your bent to divide the world of living things into more than two kingdoms. Virtually all authorities have agreed that bacteria and blue-green algae are procaryotes, whereas all other organisms are eucaryotes. The procaryotes have no organized nuclei nor other cellular organelles such as chloroplasts and mitochondria. But most of us would feel that this doesn't make the blue-green algae into a bacteria any more than it makes the bacteria into blue-green algae. There are certainly plenty of good reasons for separating these two groups as separate divisions within their procaryotic kingdom. And why should anyone get disturbed about the use of common names? Blue-green algae have been called blue-green algae for centuries, just as Douglas fir has been called a fir although it is a false hemlock! Other major groups of algae (the greens, browns, reds, diatoms, etc.), though they all have true nuclei, also differ greatly among themselves. No one has suggested that only one of these groups should be called algae. The point is, names are highly arbitrary and artificial to begin with, and the only thing that dictates what is "correct" and "incorrect" is majority usage. So far, most authorities have not accepted the proposal cited by Mr. Runyon.

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Dodo apocrypha

All too often "sad, romantic" tales turn out to be apocryphal. This unfortunately is true of the story regarding the proposed link between *Calvaria major* and *Didus ineptus* (SN: 8/27/77, p. 138).

The Tambalacoque tree indigenous to the island of Mauritius did not depend upon the dodo for its survival. First, as pointed out by Hill in *Annals of Botany* (1941), the tree was found in the moist mountainous localities, while the

dodo kept to the coastal regions. The famous bones now in the Port Louis museum, for example, were discovered by Clark in 1865 in a low-lying marsh called Mare aux Songes.

Second, the seeds found in this marsh are less than half the size of those of the *Calvaria major*, perhaps instead belonging to *Calvaria globosa*, *Calvaria hexangularis* or *Sideroxylon longifolium*. Third, as demonstrated by Gardner at the Curepipe Forest Nursery, the seeds of *Calvaria major* germinate easily in moist localities typically in four to six months.

The reported decline in the number of *Calvaria* trees is related to its very slow growth and the large-scale deforestation which followed the conversion of the lands to sugar cane production starting as early as 1810. The giant tree with its iron-hard dark yellow timber may still be found in regions of Macabé, Brise Fer and the Black River forests.

Dr. Temple's article in SCIENCE does raise some interesting issues. It is quite possible that the dodo's gizzard may have played a role in softening the hard endocarp of seeds of trees other than *Calvaria major*. A related flightless bird, the solitaire of the island of Rodriguez is known to have had a large stone in its gizzard, for example.

Dr. Temple, by the way, is well known on Mauritius because of his valuable contribution to the preservation of some of the rare birds remaining in that country. Amongst these is the famous Mauritian kestrel (*Falco punctatus*), of which a mere handful remain.

Berthold K. P. Horn
Cambridge, Mass.

Superluminal speed ghosts

I take exception to the remarks of D. Lynden-Bell of the Institute of Astronomy in Cambridge, England, about the appearance of objects going faster than the speed of light (SN: 12/10/77, p. 390). When I stand on a line and watch two cars speed away from me, in opposite directions, at 100 kilometers per hour, I know the relative speed, measured from one car to the other, is two hundred kilometers per hour. On a universal level, it seems that our physical scientists are still conjuring up more theories that host superluminal speed ghosts. If, from our celestial vantage point, we measure the velocity of object 0-1 as being .8c, while object 0-2, traveling in the opposite direction to 0-1, is measured at .7c, then their velocities, relative to each other, ARE 1.5c and their velocities relative to the natural universe remain less than c; that is, according to the Basic Laws of Physical Reality.

We should start reflecting upon the "visual" composition of 0-2, as "seen" from 0-1, rather than speculating and echoing upon old values, and theories, that get dimmer in the light of two plus two IS four.

Ronald B. Gitchell
Meeker, Colo.

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