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Letters

Reindicting some chlorine uses

Let me comment on Charles J. Sterner's response to the indictment of chlorine in the environment ("Defeminizing hormonal horrors," SN: 4/2/94, p.220). He says, "If we abolish the use of chlorine, then plague, pestilence, and famine will sweep across the world." But plague, pestilence, and famine already affect large areas of the world and probably will continue even if we increase chlorine use.

Chlorine is a by-product of caustic soda production from electrolysis of aqueous sodium chloride. We find uses for it to avoid buildups of hazardous waste. Thus it is cheaper than hydrogen peroxide, which is a more environmentally friendly bleach and disinfectant.

As for the use of chlorinated hydrocarbons in agriculture, this always has been a stopgap measure and a substitute for good agronomy. It

This Week

- 372 Homosexual Mating Tastes Go Mainstream
- 372 Fossils widen range of biological burst
- 373 Homing in on our sneeze and wheeze genes
- 373 Threat from passive smoking is upgraded
- 374 Teams hunt for vascular and heart genes
- 374 Detecting the magnetic force of protons
- 375 Star hunt: Hubble looks at the heavyweights
- 375 Agricultural lands upset predatory insects

Research Notes

- 381 Physics
- 381 Chemistry
- 383 Computers
- 383 Astronomy

Articles

- 376 Talking Back in Time
- 378 Traitorous Lymphocytes

Cover: White cells play a crucial role in fighting infection. However, these same immune cells can cause disease when they're out of control. A new drug selectively destroys white cells and may offer therapeutic benefits to people suffering from ailments that range from a type of cancer to autoimmune disorders. (Illustration: Dan Skripkar)



Departments

- 370 Books
- 371 Letters

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has followed in the wake of ecological imbalance, inadequate fertility management, and soil erosion. Its continued use ensures that if we survive it *will* be at reduced population levels. The only thing that stops us from converting to ecological methods in agriculture is that so few people know enough about how to proceed.

While it can be argued that inappropriate chlorine chemistry has killed millions, ignorance is killing far more.

Hugh M. S. Lovel
Union Agricultural Institute
Blairsville, Ga.

TB mummy not likely Norse

It is certainly possible that "genetic traces of TB infection in a thousand-year-old mummy from Peru provided 'final and unequivocal evidence' that Europeans did not introduce the disease into the Americas" ("Pre-Columbian mummy lays TB debate to rest," SN: 3/19/94, p.181). It is also possible that this is just

another piece of evidence for pre-Columbian ocean crossings.

Norse and Mediterranean peoples had ships perfectly capable of crossing the oceans 1,000 years ago. Indeed, the latter had such vessels 2,000 years ago!

Richard Stepp
Professor of Physical Science
Humboldt State University
Arcata, Calif.

The researchers say there is little evidence of pre-Columbian crossing in that part of the world.

— D. Christensen

Concrete error

In your discussion of depression and 20th century abstract expressionist painters ("Creativity's melancholy canvas," SN: 5/7/94, p.302), the artist Robert Motherwell was misidentified as David.

David Gitin
Monterey, Calif.

JUNE 11, 1994

371