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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

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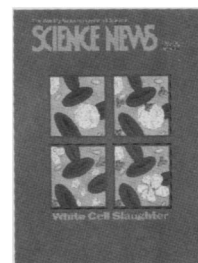
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Cover: White cells play a crucial role in fighting infection. However, these same immune cells can cause disease when they're out of control. A new drug selectively destroys white cells and may offer therapeutic benefits to people suffering from ailments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



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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

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