

Marshall

4 April, 1984

Matthew Meselson  
Harvard University  
Cambridge, Mass 02138

Dear Matt:

Thanks for the photos of Yellow Rain. Colin and I decided at the last minute that we couldn't use them because, in black and white, the spots wouldn't look like much. We substituted a picture of you we seem to use once every 6 months.

After I wrote a piece about Iraq and about your bees, I saw the Wall Street Journal. The editorial seemed to absurd that I couldn't resist writing a letter about it. I don't know whether I'll send it, but perhaps you would look it over to see whether there are any bad mistakes in it.

Thanks again,

regards,



Eliot Marshall  
Science  
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encl: slides + WSI letter

\_\_ April 1984

Editor, The Wall Street Journal  
22 Cortlandt Street  
New York, NY 20001

Dear Mr. Bartley,

I want to register disappointment with the Journal's efforts to interpret the chemical war in the Persian Gulf.

The Wall Street Journal has played an important part in the debate over mycotoxin weapons. However, your editorialist seems to have become so intent on scoring points that he has lost touch with the substance of the issue. Every scrap of new material is cited as proof that the Soviets are on the attack with mycotoxins. The unbalance is evident in two recent editorials on Iraq's use of chemical weapons, on 12 and 30 March.

The important news is that there is hard proof that Iraq is making and using nerve gas. But your editorialist goes off on a different tack, making assertions for which his own opinion is the chief evidence. ~~For one thing, this~~ ~~confuses~~ what ought to be ~~seen as~~ a clear-cut case against the Iraqis and could make it harder to mobilize opinion against the violations that have been proved.

In the 12 March editorial, the Journal reached three conclusions: tha  
t mycotoxins are being used in Iraqi weapons, that they have been blended with mustard gas, and that they were supplied by the Soviets. All of this is based on one thing, a Belgian toxicologist's report that mycotoxins were found in the blood, feces, and urine of Iraqi soldiers. I know of no one, other than the Belgian, who says that there are mycotoxins in the Iraqi weapons. The Belgian report should be ~~read~~ with caution because people can be poisoned with mycotoxins by eating moldy food. Also, when mycotoxins are found in parts-per-billion amounts, as in this case, there is always the possibility that a mistake has been made in the lab. This is important, because, insofar as there are quarrels about the presence of mycotoxins, it means the labs are dealing with trace amounts.

The United States has no evidence of mycotoxin weapons in Iraq. The United Nations looked for some and couldn't find any. The Swedish scientist who ran laboratory tests on the mustard gas from the Iraqi bomb has said it contained no detectable mycotoxins and, furthermore, that it would be self-defeating to mix mycotoxins and mustard gas, for the mycotoxins could be rendered ineffective. A U.S. chemical weapons expert independently told me the same thing.

As a non-scientist, I am inclined to believe that if the Swedes found no mycotoxins, there were no mycotoxins.

Your editorialist contradicts this. In the 30 March piece he says there were mycotoxins, only the Swedes couldn't find them. My point

is not that he disagrees with the experts, but that he does so on the basis of a technical rationale of his own invention. There would be no mistaking the quality of his opinion if he had said something like: "Swedes are careless researchers, and anyway, they don't like to offend the Soviets." But that's not what he wrote.

He disbelieves the Swedish laboratory because he thinks its instruments are too weak. This is personal opinion dressed up as expert insight. Assume that the Swedes can detect mycotoxins only if they are present at levels of 5 parts per million or more, as the editorial says. Since the Swedes tested the Iraqi bomb material for mycotoxins and found none, your editorialist thinks the bomb must have contained mycotoxins in undetectable amounts, less than 5 parts per million. That supposition is hard to make sense of, *since, as the Swedes in an Australian Def. Dept. report indicated, at the ppm level would be no mil. of substance.*

It's hard to understand because people can eat mycotoxins in amounts of 5 parts per million without getting sick. And people do eat them, for these toxins are common in moldy food. Why, then, would a nation as desperate as Iraq put a pinch of food poison in a lethal gas bomb? Why would Iraq bother with mycotoxins at all, having blatantly violated the Geneva Protocol by using something far more destructive, the nerve agent Tabun?

On the other hand, if the weapons are heavily loaded with mycotoxins (that is, in the multiple-kilogram quantities needed to kill scores of soldiers) why have the U.S., the U.N., and Iran been unable to find a single one containing a detectable level of mycotoxin? Yet in a short visit this March, a U.N. team did find over a dozen lethal gas bombs.

It really is hard to understand. But if one insists that trace amounts of mycotoxins are being put in the bombs -- as your editorials do -- I can imagine only one rationale. Iraq spiked its bombs with a tiny level of mycotoxin (undetectable by Swedish labs) as a bluff, to fool other, better-equipped labs into thinking Iraq is supported by the Soviets in this business. It doesn't make sense. But, then, the bluff could have fooled your editorial writer.

An alternative approach to the Journal's would be to wait until there is evidence that mycotoxins have been used in Iraqi weapons, and then look for the supplier. As it turns out, that is the post-Haig policy of the U.S. Government.

regards,