



southeast
asia
resource
center

TEL.: (212) 964-4124

Rumpf
1984?

198 BROADWAY ROOM 302 NEW YORK, N.Y. 10038

Greetings Dr. Meselson:

Enclosed are the materials you requested during our phone conversation today. Note the error in the New Scientist article in the last sentence: "95% of Lao people do not have malaria. The correct statement is that "malaria is epidemic here (Meuang Hom, Laos) --95% of the people get it." This was the information presented to us by Lao doctors and a medic. It is explained more fully in our article on page 11 of the enclosed Chronicle

Thanks for your assistance on ideas about a scientific delegation visit to Laos. They are most helpful.

Best wishes,

Roger Rumpf

P.S. Our new address is: 1241 Potomac Ave. S.E.
Washington D.C. 20003

MANHATTAN APPLIED research division

245 West 13 Street New York, New York 10011

March 29, 1984

Dr. Matthew S. Meselson
Harvard University
Cambridge, MA 02139

Dear Dr. Meselson:

I admit it: I was one of those who giggled when you asserted that the "yellow rain" in Southeast Asia was not chemical warfare but was the result of "massive defecation flights by wild honeybees."

Sure, I laughed then, but I guess the joke was on me. I was convinced by your account in the papers of being caught in a five minute shower of bee feces that left yellow spots all over you and your car; it sounds terrifying. But that's when I got my idea.

Couldn't such aerial bombardments of bee caca provide personal protection for city folks. I say that a hive in your apartment could be better than a dog in your yard. "Sic 'em!" you'd say to your bees if some burglar tried to get tough. Your hive would scramble and then dive at the scoundrel, bombing him with bee-do! That ought to scare him off, with no permanent damage or threat of litigation.

I'd appreciate any suggestions you have on the best breed of bees to work with, training tips, diet, etc. In fact, if you'd like to come on board as a partner with responsibility for technical matters, I'd be delighted. In any event, I'd very much like to know if you think this is a practicable idea.

How's this for a slogan: "Bees For Defense, But Not One Cent For Tribute!"

Yours,



Randy Cohen

YR

MOSCOW, Apr. 84

Dear Dr. Hudson,

I've promised to tell you about my trip to Southeast Asia. I hope you'll be able to decipher my handwriting and to understand my personal version of English.

I do not have the slightest idea, when our discussions about scientific program exchange will be finished; it seems to me a time consuming business. I therefore take the opportunity to send you this letter with West German Broadcasting Corporation's air freight via Cologne and New York.

In some respect the trip was a flop, too many people, mainly officials, were involved, too many speeches, too many dinners, governmental officials carried us around the country and translated to us what they wished us to learn to know, some areas seemed to be taboo. I finally escaped, pretending allergic manifestations. I collected some samples near Phum Tung, Kampuchea, and Xiengkhoang, Laos, Ban Vinnai, Laos. Not just arte legis, I'm afraid. But I brought the samples back to Switzerland, with the help of a former colleague of mine, who is now a member of the Corps Diplomatique. Another colleague of mine, who is doing his annual service in our army at the AC Spiez examined the samples. The results substantiate your theory about natural occurrence of the trichothecene toxins in this area. One sample contained a small amount of pollen grains and no mycotoxins (Ban Vinnai); the other samples contained bigger amount of pollen grains and small amounts of trichothecenes (2g contained T-2 < 2). That's a low concentration, but fungi may not grow equally every year. Although the conclusion is soft, I think, it substantiates

your theory. I'm sorry that I cannot say more, but this was the only information I could get, because the Swiss Military Department (i.e. less euphemistic for Dep. of Defense) decided not to publish these findings. There was a coalition between the conservative Secretary of Defense and the Socialist Secretary of Foreign Affairs, and both the groups wished to avoid further tension because of domestic policy problems. Monsieur Aubert promised to publish the findings immediately after the decision for a Swiss membership of the U.N. But that won't happen, the confederates won't join. So, please, take this information only for private use. Maybe I'll be able to collect new samples when I shall be visiting this area again, perhaps in autumn. I'll try to send them to you and give some to the Zürich Toxicology Institute where they have an expert on fusaria toxins.

The samples I originally intended to send to you in Beirut have been analyzed by the Zürich Toxicology Institute. The samples collected by our correspondent contained soil from the Shatt-el-Arab, Iraq, where a chemical attack for pushing back Iranians was supposed to have taken place. No mustard gas residues were found. Two samples were taken from the marshy ground of the island the Iranians occupied. It was reported that by pushing them back Iraq has used chemical agents. I have watched all the pictures our correspondent had sent quite carefully, low motion, magnification, cutting, but I did not see any signs of blisters, but in almost all cases shotgun wounds which must have caused death. That means that the assumption reported Iraq could not have reached this military success * seemed to be false. Because sulfur, sodium bicarbonate was found in the samples I suspect that smoke was used first and later when Iranians got disorientated they were shot off like rabbits.

Not only because of these findings I question a disorientated they were shot off like rabbits.

Not only because of these findings I question a little bit the results of the experts UN report, March 26.

* without having used chemicals

Prof. Schlatter of the Tox. Institute Zürich told me that one expert of the AC Spiez lab. that examined the samples is not convinced that the samples were taken properly. I think the report contains too many night-bes. There are too many chemicals involved, and there are astonishingly few victims.

The UN report has been discussed by the German Parliaments Subcommittee of Disarmament and Arms Control on Apr. 11th; the conservative members immediately tried to relate the results of the report to the suggestion of negotiations between the FRG and the GDR about a withdrawal of US resp. USSR chemical weapons on their soil; arguing that one can't trust the USSR. They came around with the mycotoxin argument that Prof Heyndrickx (Shunt) has brought again in the Iran/Iraq-matter. Egon Bahr and I finally reached a patt voting. But together with the other members of the socialist and the "green" party we did not succeed to change the minds of the members of the governmental parties to rethink the FRG's NO to these talks. If you were interested in the letters of Julius Lebbach to Erich Honnecker and Helmut Kohl and their answers, I can send them when I ~~in back~~ be back from Moscow, although I do not know if German reading won't be too difficult. Anyway, I think it is a remarkable fact that Honnecker agreed to these talks. Kohl refused, those talks might endanger US-German relations and the negotiations about a comprehensive chemical disarmament treaty. Although I have learned a lot about chemical disarmament in recent months, since we met, I am still somewhat, sometimes unsure about my own judgement. I especially question my judgement, when the other Germans interested in chemical disarmament have reached the same conclusions, that is because they are either only historians or/and on the left wing of the socialist or "green" party. Additionally I sometimes feel that my knowledge on chemical disarmament is

better than that of the other Germans, and that I can better explain the main issues to politicians; but that again makes me questioning the validity of my judgment; I'm vacillating between self-confidence and doubts. Sorry, I bothered you with my personal problems.

You may be interested in the following. A group of Mannheim citizens have complained before the Karlsruhe constitutional court that they won't accept the health risks caused by US stockpiling of chemical warfare agents in a US Army depot north of Mannheim. The court has refused to deal with the complaint, but the argument - based on informations of the German government - is interesting. It leads to the conclusion that with a high probability chemical agents are stored there, but stored safe.

I have to come back to the Yellow Rain problem. Although I believe that you are right in assuming natural sources of biotoxines, I am not satisfied. For one thing, because the concentrations of my samples are rather low, but that may be due to seasonal fluctuations. But then, I wanted to know why the occurrence of mycotoxins has not been mentioned early. And I wish to learn what really caused the death of the victims. Prof. Prinz, who is credited to be an expert on Southeast Asian ecology, believes that the rapid change in ecology, the destruction of the natural environment might cause changes in the occurrence of microorganisms. If that is so further research must be done. In this field this research might be possible, but I don't think we can find out about the death cause of victims. Another chance to enlighten the different assumptions might be to re-question refugees with standardized methods, so that it will become easier to find incompatibilities.

I do not think that we will find out the truth. There and in the case of other allegations, I think, the investigation procedures are not adequate. I cannot think of one allegation in the past which has been proven or disproven without remaining open questions. I sometimes fear that practical

politicians need suspicious to feed the already existing fears among nations and between the military blocks. I believe, the most important thing of all will be to prevent politicians to build up images of the enemy and frighten the people with these monsters. Politicians - sometimes - I suspect, believe ~~it~~ and fear their self created pictures, what I think is an important force behind the continuing arms buildup. During the last past twenty years we had about twenty arms control agreements, but none of these really has diminished the destructive capability, this has only become more perfect and precise. I therefore think, that we have to concentrate our work on two main issues: (1) on the psychological mechanisms working among different nations and systems. If Lorenz is right that a group or nation can only live together happily with an enemy in common like coral fish or clams, then we'll have to transcend the thinking in political systems and to replace it with the knowledge that human beings are all belonging to the same group in spite of political differences. (2) I have got the impression that in decision-making in the field of military policy - as well as elsewhere - political decisions are made long after the scientific, technological facts are available and after the strategic decision is established as a fact. I think it is important that politicians get all help to evaluate scientific and technological knowledge which might be of military interest. Political decisions must be ahead of strategic decisions, otherwise policy cannot control the military, as it is suggested in Western constitutions. Both are, I suspect, educational tasks, and difficult, but worthwhile.

I'm sorry that my letter has grown..., but Moscow is somewhat boring in the evenings, I'm not permitted to visit Russian colleagues, and I won't like to see Swiss and Germans all evening.

If you like to contact me, although my letter does not leave open questions, I believe, please, address

to SÜDDEUTSCHER RUNDFUNK
SCHULFUNK
POSTFACH 837

D 7000 STUTTGART 1, FRG; they will know, where
I am, and ^{will} send my mail by air freight, which will not
be controlled.

yours sincerely

Ursel Wolff.

Ruedel - ew
mm 5/86

DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY
HARVARD UNIVERSITY



7 Divinity Avenue
Cambridge, Massachusetts 02138

April 4, 1984

Mr. Christopher Ruedel, Science Attaché
Embassy of the Federal Republic of Germany
4645 Reservoir Road, N.W.
Washington, DC 20007

Dear Mr. Ruedel:

Following our telephone conversation this morning,
I am glad to send you a collection of items dealing with
the problem of "yellow rain". I also enclose a photograph
showing spots of yellow rain from Thailand. Do not hesitate
to contact me if you have any further questions.

Sincerely yours,

Matthew Meselson
Thomas Dudley Cabot Professor
of the Natural Sciences

MM/db

Enclosures

HARVARD MEDICAL SCHOOL
DEPARTMENT OF BIOLOGICAL CHEMISTRY

E. R. BLOUT
EDWARD S. HARKNESS PROFESSOR
OF BIOLOGICAL CHEMISTRY

BOSTON
MASSACHUSETTS 02115

20 February, 1985

Professor Matthew Meselson
Department of Biochemistry
and Molecular Biology
Harvard University
Cambridge, Massachusetts 02138

Dear Matt:

I have read and reread the draft of your Letter to the Editor dated 15 February, 1985. I have also read the article by Rosen et al. in Nature (313, 271, 1985).

Your thesis, which you have previously stated, is very clear; namely, that yellow rain is probably the faeces of honeybees. Rosen et al. state that you do not directly consider the trichothecene argument. In other words, to me--an interested bystander--it appears that you and Rosen et al. are talking about different things. I gather that you don't believe their experimental evidence for the presence of trichothecenes in certain samples that they have examined. Or is it possibly that their samples have been contaminated in the laboratory?

In any case, I don't think your answer to them adds much to a scientific argument. To me, you are talking about two different subjects. Do you want to address the trichothecene query in your article, or do you prefer to wait and see whether the data that presumably now reside in certain government laboratories will be made public?

This may not be a very helpful reaction to your draft letter, but it is my reaction.

Warmest personal regards.

Yours sincerely,



Elkan R. Blout

ERB:jb

To. Blout

DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY
HARVARD UNIVERSITY



7 Divinity Avenue
Cambridge, Massachusetts 02138

April 4, 1985

Dr. Elkan R. Blout
Harvard Medical School
Department of Biological Chemistry
Boston, Massachusetts 02115

Dear Elkan:

Thank you very much for giving me your comments on our draft letter to Nature. As you said, the draft certainly did not constitute a clear response to the argument of Rosen et al. I have revised the first paragraph to focus directly and exclusively on the assumption underlying the argument of the other authors.

In the remainder of our letter we summarize the evidence that yellow rain is bee feces. Even though this is a largely separate point, we thought it useful to summarize the evidence in the letter since it is an important part of the whole story and also since there has been confusion in the press regarding our conclusions.

Thanks for the help.

As ever,

M. A. S.

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
1515 Mass. Ave NW
Wash DC 20005

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 mycotoxins at the ppm level would be no mil. sig whatsoever.*

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,

Richards

April 6, 1984

14 Wootton Way, Cambridge CB3 9LX, England

Dear Matt,

Thank you very much for your call and for sending the photographs so promptly. They are exactly what I wanted. They arrived today and are already on their way to Nick Polunin, the editor of Environmental Conservation in Geneva. Whether my paper will appear in the next (summer) issue or not until later in the year seems to be uncertain. In any case I will send you a reprint, though I doubt whether there is anything in my paper which you do not know already.

I have asked Polunin to return the photographs and I will send them to you in due course. Thank you also for your papers which I shall read with interest.

I am glad you had an interesting trip to Thailand. It is possible that Anne and I will be visiting Petersham in August or September and if we do, I will certainly look you up. If you ever come to Cambridge, remember that we always have a meal and generally a bed available.

*Anne joins us by best wishes
yours ever*

Paul

P. W. Richards

April 12, 1984

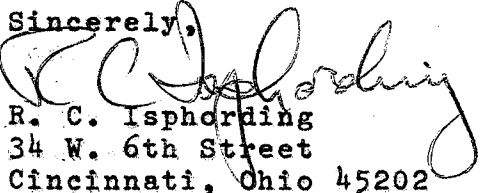
Dr. Matthew S. Meselson
Harvard University
Boston, Mass.

Dear Dr. Meselson:

I am completely astonished that the CINCINNATI ENQUIRER through an editorial by Mary McGrory - It says, "you feel that the 'yellow rain' used in Afghanistan and Southeast Asia is really not a chemical, but the excrement of honeybees."

I would appreciate it very much if you would send me a copy of your findings. I must admit I find it very difficult to believe that tens of thousands of honeybees in unison somehow communicate with one another and tell each other in unison to go to the bathroom. Your findings will be quite interesting.

Sincerely,


R. C. Isphording
34 W. 6th Street
Cincinnati, Ohio 45202



Reagan As A Dove On Chemical Warfare

WASHINGTON: What is it, a cloud, a UFO? No, it's a dove. It's Ronald Reagan making his maiden campaign flight as a peace candidate.

His "bold" initiative on restricting chemical weapons is vintage Reagan arms control. That is, it is a fishy proposition, to be sold by a suspect salesman and wrapped around a scheme to make more of the weapons that the treaty being sought is supposed to reduce.

Followers of the MX controversy are familiar with Mr. Reagan's "just one for the road" philosophy. He was palpitating to negotiate on nukes, he told the country boys in Congress. All he needed was the go-ahead on the most expensive and destabilizing weapon of all to go barreling to the bargaining table. The talks are, of course, now suspended.

THE APPOINTMENT of Vice President George Bush to present the issue to the disarmament conference in Geneva is also in the great Reagan tradition of picking a negotiator whose record suggests that he is only kidding as he opens his samples case.

Bush voted twice to put production of nerve gas over the top in the Senate. He cast the tie-breaking vote on July 13 last year and again on Nov. 8. Just on the face of it, he is not a fanatic in the cause of ending chemical warfare.

In Reagan terms, this absence of zeal in the matter at hand is a valuable credential. Our chief negotiator in Geneva on strategic weapons, Gen. Edward L. Rowley, is a testy hard-liner who conveys the impression that the last thing in the world he wants is a deal with the Soviets.

IT COULD be, of course, that Bush shares his mother's repugnance for poison gas — she scolded her boy for his votes. But as an advocate he is so flawed as to cause worldwide skepticism about the President's intentions.

Usually when a person is about to make a fresh approach to an adversary, he checks his gun at the door. Mr. Reagan, characteristically, did not. By way of warming up the Russians, while not actually mentioning them by name, he referred to what he regards as the fact that they used chemical weapons in Afghanistan and in Southeast Asia.

THE CHARGES on Soviet use of "yellow rain" are in dispute. The foremost authority on chemical warfare, Dr. Matthew S. Meselson of Harvard University, says that the fatalities came from nature — the excrement of honeybees — not from Soviet planes.

But Mr. Reagan, as always, fears more than rejection by the Soviets: right-wing suspicion that he has gone soft.

The proposition, the manner of its presentation and the choice of spokesmen seem to reflect the President's desire to get into the act more than a sudden craving for talks. The debating Democratic presidential candidates have lately grabbed the limelight with cries for peace and an end to the arms race. Sen. Gary Hart and Walter Mondale have striven mightily to detail their differences, but they are as one on disarmament, and the Rev. Jesse Jackson is in the "Amen" corner.

The present poison-gas "deterrent" is sufficient to wipe out every human being on earth in the most ghastly way imaginable. Mr. Reagan's contention that the Soviets have more and that he needs, as always, "a bargaining chip" may lack election-year appeal.

If Mr. Reagan follows the MX pattern, he will try to pick off an opponent of chemical warfare, turn him or her around, and hope for a bipartisan stampede.

IN THE case of Rep. Ed Bethune, R-Ark., who is running for the seat of Sen. David Pryor, who led the fight against nerve gas in the Senate, it will be a wasted effort. Although a loyalist on the MX and the B-1 bomber, Bethune cannot be shaken in his arguments against resuming production of weapons that our allies have said they will not accept.

Peace through poison gas may just not fly for the unaccustomed dove in the White House.

• *Mary McGrory is a Washington-based syndicated columnist.*

uff Greenfield

yr inquiries

sent 5/25

R-3 Box 3070
Winthrop, ME 04364
April 23, 1984

Professor Matthew Meselson
Harvard College
Cambridge, MA 02138

Dear Professor Meselson:

Thank you for shedding light on the
"yellow rain" issue.

I have been trying to collect Boston Globe
articles on the issue in a running battle with
writers of letters to the editor of the Kennebec
Journal and need more information.

Could you send me a reprint of the most
recent Globe article (I have the March 5 article)
and a report of your recent research in Thailand.
Also, how about a reprint of Lois Ember's article
appearing in ~~American~~ Chemical and Engineering News.
If it is impossible for you to send me a copy of the
Ember article, could you send me the address of the
magazine so that I could write for a reprint?

Thanks for anything you can do for me and
I wish you success in your search for the truth.

Peace,
Tom Sturtevant
Tom Sturtevant

Carnegie Endowment for International Peace

April 23, 1984

Professor Matthew Meselson
Department of Biochemistry
Harvard University
7 Divinity Avenue
Cambridge, Massachusetts 02138

Dear Matthew Meselson,

I very much enjoyed the talk with you yesterday about your yellow rain work, the pleasant lunch, and the chance to talk to your alert and well-informed students. I was impressed, as on the last occasion. I will send you a note later with some suggestions on readings. In the meanwhile, you might want to look at Richard Betts on surprise attack and Canby on military reform - I enclose a xerox of each.

With best regards and hopes for the vigorous continuation of your very important projects.



Jonathan Dean
Resident Associate

P.S. I am enclosing a record of my out of pocket expenses; I think we can forego an honorarium; you can apply the money more usefully.

*I have -
Diane*

Enclosures

EDGAR T. MEAD

BOX 12 KING ROAD
ETNA, NH 03750

Dear Dr. Maselson:

I hope you will again stretch our beliefs and tell us that all that "green stuff" from Vermont is nothing more than spores from White Pine Trees and not sent to us from the Soviet.

Imagine, those naughty refugees blaming the poor little Soviet Union.....

Yours,

May 4, 1984



XR