

13 July 1971

Mr. Peter Pringle
Spectrum
The Sunday Times
Thomson's House
200 Gray's Inn Road
London WC 1

Dear Mr. Pringle,

Thank you for your letter of July 8 describing your plans to visit Angola to investigate the use of herbicides in the conflict in that country.

I have seen a variety of evidence that convinces me that herbicides have indeed been used to destroy crops in MPLA controlled areas of Angola. The chemicals have been sprayed by aircraft. Of this much I am essentially certain.

I do not have any solid information regarding the chemical nature of the herbicides used, let alone their origin. I am aware that MPLA authorities believe the herbicides to be 2,4-D, 2,4,5-T, cacodylic acid, and picloram. However, I am unaware of any solid evidence for these identifications. The few photographs of treated cassava that I have seen suggest some type of plant desiccant, quite possibly cacodylic acid. It would be most interesting if you could identify the chemicals in use. The most direct approach, of course, would be to obtain information, either officially or unofficially, from Portuguese personnel in Angola or to see the labels of the herbicide containers. Portuguese officers in the field have been willing to talk with outsiders. Perhaps some of them would be willing to talk with you.

If you should reach any areas that have been sprayed, you might look in particular to see the reaction of cassava leaves and leaves of other vegetation to spraying. If they become highly twisted while still on the plant and while still green with possible streaks of red and yellow, 2,4-D or 2,4,5-T would be indicated. If instead the leaves simply dry out and turn brown, that could be cacodylic acid. I do not know what response to expect from picloram. Chemical analysis of soil samples could certainly detect picloram even months after spraying. I am not certain whether the other herbicides could be detected long after application, but they could be if fresh samples were available. Of course, you have the problem of verifying the authenticity of the samples. Certainly, if you yourselves witness a spraying and can collect a few ounces of surface soil or sprayed vegetation, there would be no difficulty whatsoever in establishing the nature of the chemicals in use.

I wish you luck on your trip and would greatly appreciate hearing of the result.

Sincerely yours,

Matthew Meselson