

November 30, 1935

Mr. W. A. Ruth
Chief in Pomological Physiology
University of Illinois
College of Agriculture
Urbana, Illinois

Dear Mr. Ruth:

We were very glad to have had a visit with Dr. Shields and to have given him the benefit of such information as we could. I think I conveyed to him my skepticism as to the significance of the type of experimentation which is contemplated. This skepticism was founded not only on a profound distrust of animal experimentation of this type in providing a practical answer to the questions at issue, but also my recognition of the extreme difficulties which are associated with this type of work. It is my feeling that Dr. Shields will have to exercise a great deal of care in preliminary work on methods before he can expect to carry out the experiment as designed. He will find also that the study of animals, and particularly small animals, in this field will be attended by many obstacles which it is almost impossible to foresee. Even the most experienced man have great difficulty in devising and carrying out experiments which give conclusive results. I have recently been in intimate touch with a man at Yale who is undertaking a fundamental metabolic study of dogs to which definite quantities of lead are administered. His experiments will have a great advantage over those which you have contemplated in that they will not only determine the final quantity of lead in the tissues of the animals but will also determine the fate of the lead from day to day. I mention this only because this problem is under study in a number of places. The practical effect of such studies on animals is to point out the general physiologic mechanisms involved as a basis for later necessary studies on human beings. There is, of course, no justification for arguing directly as to the effects of human beings from the results of animal experimentation. I refer to these matters only because it seems to me highly desirable to proceed very slowly in such work in order to avoid the occurrence of ambiguous and perhaps misleading results.

Mr. W. A. Ruth

I think it wise to tell you that some matters have arisen in connection with other food materials which have given us a rather comprehensive program of experimentation in a field closely related to the interests of the fruit growers. Just how far this will go and how long it will last is not predictable, but it seems likely that we shall be involved in a rather extensive program of food study. It would be advisable, if possible, to coordinate this work in some measure with the tentative program of experimentation which I outlined to you. However, if this is to be done, it must be done promptly. Otherwise we may find ourselves so occupied that we will not be able to either take on additional work or to modify our experimental program to include the study of fruit. The latter is definitely on the card for our subsequent investigation in as much as it is one of the most important, if not the most important, aspect of the problem. However, if we are to consider it at once or soon, we shall have to come to some definite understanding about it in the immediate future.

I neglected to reply to your question as to the coating of your laboratory wall with some non-lead material. We are using in our hoods a white undercoat paint with a titanium oxide base which is then covered with a china wood oil and bakelite gum type of varnish. Our supply of this has been obtained through Dr. Howard Ecker of the Charles Moser Company of Cincinnati. We have found this quite satisfactory and I think you will find it both suitable and durable. Their address is 215 East 9th Street.

With kindest personal regards,

Cordially yours,

RAK:is

Robert A. Kehoe, M.D.

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