A REPLY TO DR. J. G. LIPMAN.

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The phase of this discussion which Dr. Lipman has first taken up in the communication printed above is that of originality in initiation of the investigation.

In Bulletin 253 of the New Jersey Experiment Station, page 8, and also in his article printed above, Dr. Lipman states that he discussed this subject at Cornell University in the autumn of 1906 in the presence of the writers, which may be taken to intimate that we took advantage of his ideas. If we did so there were only two ways in which we could have secured help from his suggestions: (1) by having our attention called to the possibility of the investigation; (2) by utilizing his methods for its solution.

It was previous to 1906 that a study of this subject was undertaken at Cornell University. Professor John L. Stone began, as early as 1904, to make careful observations on the occasional better growth of non-legumes when grown with legumes than when grown alone. That he was actively engaged in a study of this subject is evidenced by the following letter:

"ITHACA, N. Y., July 9, 1904.

"Dear Sir: Since coming from your place I have thought considerably about the evident effect of the peas upon the oats growing in your fields. I wish you would make a more careful examination than we did while there, to determine whether the peas near the house are actually much better stocked with nodules than those further away to the east. It is contrary to our expectation that the peas should by any manner of means supply the oats with any nitrogen at this time, but the growth of the crop certainly does indicate that it does. I was talking the matter over with Professor Cavanaugh and we may conclude to ask for samples of the soil from each end of the field to see if one is more abundantly supplied with plant food than the other.

"Very truly yours,

"(Signed) J. L. Stone."

From that time on the subject was frequently discussed at this experiment station, and moreover, we not only did not get the inspiration for the investigation from Dr. Lipman's lecture, but the subject was first brought to Dr. Lipman's attention by Professor Stone some