Bearing on the question of supplying organic matter by means of green manures, cover crops, and crop residues, are data from Ohio, Connecticut, Massachusetts, and the United States Department of Agriculture. These were briefly reviewed. Benefits have resulted where tobacco rotated with wheat and red clover, but for shorter rotations, even where clover was used, the results have not been so favorable. At the Massachusetts Station results for 1924 and 1925 show a depressing effect on yield from the use of timothy as a cover crop.

"It is quite evident that attempts to supply through other means the organic matter furnished by stable manure, but missing in commercial fertilizers, have not been promising. This raises the question, Is the organic matter of manure essential to good yields and high quality of tobacco?"

CRITICISM

B. G. Southwick, discussing the above paper, stated it contained a very good summary of the literature but did not answer the question, "What are we going to do about it?" More information is needed as to the importance of organic matter in growing tobacco, the advantages and disadvantages of legumes as green manures, and a substitute for timothy as a cover crop to prevent blowing.

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CONCENTRATED FERTILIZERS: WHAT ARE WE TO DO ABOUT THEM?¹

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(Abstract)

In recent years chemical engineering has made available for use as fertilizer materials certain compounds, rich in plant nutrients, which were formerly too expensive for such purposes. The question as to possible injury to the plant by these concentrated fertilizers, singly or mixed, has been very definitely raised. The two possible causes of injury, plasmolysis or "burn," and poisoning were discussed in their theoretical and practical aspects. "Burn" caused by too great concentration of soluble material in the immediate vicinity of the root is regarded by many as the more serious possibility; whereas,

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