CHANGES IN HYDROGEN-ION CONCENTRATION
IN NUTRIENT SOLUTIONS
I. IN A CULTURE WITH WHEAT
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While the writer was engaged in a study of salt requirements of wheat plants in water cultures, he had the occasion to observe from various tests that there was a marked decrease in hydrogen-ion concentration in the solutions. Accompanied by this increase there was an equally marked consumption of nitrogen. In order to obtain a more detailed knowledge of the phenomenon, the present study was undertaken.

No attempt will be made to review studies made on cultural solutions, but the reader is referred to Tottingham's monograph which gives a very complete resume of earlier solution culture experimentation with plants. A brief treatise, however, will be made of the

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3Reference by number is to "Literature Cited," p. 583.