It has been shown in the accompanying paper (7) that, besides ammonium sulfate, several of the new nitrogenous fertilizers cause soil acidity. Since these acid-forming fertilizers are gradually being used in greater amounts, it seems important to study methods by which the acidity which results from their use can be corrected, and to determine the amounts of materials that would have to be used. Various investigators (1, 3, 5) have reported work on the amounts of lime necessary to correct the acidity developed by ammonium sulfate, but no work has been published on the amounts necessary to correct the acidity formed by the new, acid-forming nitrogenous fertilizers. Besides liming, other methods appear practicable as means of correcting the acidity formed. These are, briefly, the uses of various fertilizer combinations in which the acids developed by the acid-forming fertilizer are neutralized by the basic action of other fertilizers used in the combination.

The objects of this investigation were as follows:
1. To determine the proportion in which various acid-forming and physiologically basic fertilizers can be used without changing the reaction of the soil.
2. To determine the amount of lime necessary to correct the acidity developed by various acid-forming fertilizers.
3. To determine the amount of basic slag necessary to correct the acidity formed by various acid-forming fertilizers.

The methods used in this study were similar to those employed in the first part of this investigation described in the preceding paper. The two studies were carried on simultaneously in the greenhouse and with the same soils, namely, a Cecil clay loam and a Norfolk sandy loam. The rate of fertilizing, the crops grown, and the methods used in determining the H-ion concentration and exchangeable...