THE FUNCTION OF ORGANIC MATTER IN THE SOIL

CHAS. E. THORNE

The term "organic matter," as used with reference to the soil, is applied to materials of vegetable and animal origin which have become incorporated with the soil. Such materials, as well as the organisms from which they are derived, consist of three different groups of elementary substances: (1) Nitrogenous compounds, in which nitrogen is found in the comparatively inert form of organic nitrogen, or in that of ammonia when carried in fermenting manure; (2) the various mineral elements found in plant or animal; and (3) the carbonaceous matter—starch, sugar, fat, etc.—which goes to make up the complete structure of the living organism.

No fact has been more generally observed throughout the humid regions of the Temperate zones than that soils rich in organic matter are more productive than those in which such matter is relatively deficient. This observation has led to the advocacy of the plowing under of green crops and crop residues, and to the assumption that

1Contribution from the Department of Agronomy, Ohio State Agricultural Experiment Station, Wooster, Ohio. Received for publication May 3, 1926.

2Consulting Chief in Soil Fertility.