

measured at various intervals. The results show that dried blood reached its maximum decomposition first, followed by animal tankage and cotton-seed meal, respectively.

The study of soil bacteriology at present consists mainly of either measuring the number of bacteria in the soil, or the kind and intensity of functions of the bacteria. The former study is usually designated as *taxonomic* and the latter as *physiological*.

The taxonomic method is at present not much used in the bacteriological studies of soils, because it has failed to furnish very satisfactory results. The physiological method, however, has proven more successful, at least from the practical standpoint, and is consequently more widely employed.

As already stated, the physiological method aims to measure the kind and physiological efficiency of the organisms by measuring the product of their action upon nitrogenous substances. The products resulting from the decomposition of the nitrogenous materials consist principally of ammonia, nitrite, nitrate amino compounds, etc. Unfortunately the present methods for measuring these end products are for the most part unsatisfactory.

From the results obtained thus far by the freezing-point method on the decomposition of organic materials in soil, it seems possible that this method may be used to great advantage in conducting physiological studies. It is true that the method gives only the total amount of the decomposed soluble material and tells nothing as to the composition of the product. But is not the amount of ammonification, nitrification, etc., taken as criterion of the decomposibility of the substance and the physiological efficiency of the organisms? So may the total depression be taken to represent the same criterion. The decomposition products will undoubtedly exert a solvent action upon the mineral constituents of the soil, and thus influence the total depression. There are evidences, however, which go to indicate that this influence is small (aside from the chemical combination) and consequently the error would be comparatively insignificant. On the other hand, the study will be only comparative.

It appears that the freezing-point method may be used to great advantage in making comparative studies of the decomposibility of various organic substances, in the same kind of soil, or the decomposing power of different classes of soil on the same organic substance, or of the same soil differently treated, etc. Such studies can be conducted very conveniently, under the most natural conditions, and the results thus obtained will doubtless lead to very important and true conclusions concerning the availability of various nitrogenous materials, decomposing power of soils, etc.

Studies along these lines are now being conducted in the laboratory.

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THE SYNONYMY OF *OXYURIS VERMICULARIS*, THE PIN WORM OF THE HUMAN INTESTINE

In 1758 Linnæus described the pin worm of man under the name of *Ascaris vermicularis*. In 1803 Zeder transferred it to the genus *Fusaria* (*Ascaris* renamed). In 1819 Bremser placed it in *Oxyuris* (type *O. equi*). Baird in 1853¹ published a manuscript name of Leach's *Enterobius vermicularis*.

The species has been generally called *Oxyuris vermicularis* until Stiles in 1905 gave it the generic name of *Oxyurias*, overlooking Leach's name. Now Seurat in 1916² proposes the name *Fusarella*, evidently being unaware of the generic names it has received subsequent to *Oxyuris*.

The species clearly does not belong in the same genus with *Oxyuris equi*, and as *Enterobius* is the earliest generic name available, the name of the species is *Enterobius vermicularis* (Linnæus, 1758) Leach, 1853.

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¹ "Catalogue of the Species of Entozoa, or Intestinal Worms, Contained in the Collection of the British Museum," p. 108.

² *Compt. rend. Soc. de biol., Par.*, Vol. 79, p. 67.