FURTHER IMPROVEMENTS IN THE WORK OF THE SOIL SURVEY

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It should be recognized distinctly by those interested in or directing the work of the soil surveys that there are several purposes for which such surveys may be made. Moreover people using such surveys are apt to overlook this fact and to judge the survey entirely by the degree to which it meets their individual needs.

The purpose of soil surveys may be classified as follows:

(a) For the direct help it permits experiment stations and extension workers to give the farmer.

(b) For the use of loaning institutions and assessors.

(c) For the direction of further research, both along soil lines and other lines based on soil.

(d) For general purposes including (1) encouragement of settlement, (2) educational work, and (3) by implement manufacturers, etc.

The relative importance attached to these different purposes by those in charge of the survey of any state or section will determine to a considerable extent the character of the work done. It is difficult and perhaps impossible to satisfactorily meet all purposes of the soil survey in one general plan. The basis of classification and the relative importance attached to different characteristics vary considerably with the purpose for which surveys are made. In the classification and system of mapping which have been evolved by the Bureau of Soils during the past twenty years, there are two fundamental bases of classification: first, that of texture; and second, that of geological origin leading to the establishment of Series. The first basis, that of texture, is necessarily fundamental in all soil classification. The second, that of geological origin, is helpful for increasing our knowledge of the relation of soils and crops and of various phases of soil fertility, but its importance may be overestimated as a basis of classification for the expression of our present knowledge of soil management. During late years it has lead to a very considerable multiplication of types frequently differing little in agricultural value from those already established.