VALUE OF THE FIELD STUDY OF SOILS.

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Only within recent years has a systematic study of the characteristics and properties of soils in the field been undertaken, but enough has already been accomplished to show the value of this line of investigation. More than 800 different types, each possessed of characteristics peculiarly its own, have already been discovered in the progress of the soil survey work, although only a relatively small percentage of this country has been covered at the present time. The existence of such a great number of types calls attention to the need of a study of the differences which are here represented, in order that their influence upon the growth of plants may be determined. That these variations do have a marked influence is becoming more and more evident as these investigations are pushed forward. One great need today is the more general recognition of the individuality of soils; a fuller realization of the true meaning of soil differences. The soil survey is emphasizing the great variety of our soil resources.

Much valuable time and money have been wasted trying to draw definite conclusions from experiments conducted upon entirely dissimilar soils. Many of the contradictory and seemingly inexplicable results obtained by different investigators, or even by the same investigator, are undoubtedly due to fundamental soil differences which would have been evident from a comparative field examination. Hilgard has said: "The history of plat experiments shows so common and unpardonable neglect to ascertain definitely the fundamental physical and chemical conditions, that their general unsatisfactoriness is easily accounted for upon that score alone." While a field study will not furnish all of this information, much of it cannot be secured in any other manner.