The present system of soil classification depends largely upon color. The official series descriptions furnished by the U. S. Bureau of Soils gives the colors and color limits of the various soil horizons and these in turn must be interpreted and applied by the field men. The task is rendered all the more difficult since soil conditions are variable. The moisture content which has a decided effect upon soil color is subject to wide fluctuations. Therefore it is doubtful whether the different field men will have the same conception of a given series description or whether the same man can consistently hold a given type within given limits during a season or from season to season.

Realizing these difficulties, work was started to see if the present system could not be improved to meet the demands. These investigations have not been carried far enough to justify any definite recommendation. It is deemed advisable, however, to outline the present scheme in hopes that it will stimulate interest and open up new lines of thought.

The soil colors picked out by the color committee to serve as a nucleus around which to build all future work are excellent. Still in their present form they are of little value to the field men. They require a set of color standards fixing the color limits of the various series. These standards should give both the color terminology and the actual colors of each horizon. The air dry sample would be ideal for comparison but soils are scarcely ever observed in this condition in the field. Since such is the case it would seem advisable to show the 3-foot soil section in an air dry condition and with 10, 20, and 30 per cent of moisture. The field man could then estimate the amount of moisture and by comparing with his table easily classify his soils. It should be much easier and more accurate to determine the moisture content than to estimate what color a soil containing say 20 per cent of moisture would be if in an air dry condition. The latter leaves too much to the imagination. The chance of error is much greater.

The character of the soil work requires that such a set of standards be compact and easy to carry at all times. Something small that can be slipped into the pocket. Vials of soil are excellent for use in the room but too bulky to handle. The reproduction of the 3-foot soil section in oils or water colors would prove most valuable. This would enable the standards to be prepared in the form of a small loose leaf book, say 3 inches by 6 inches. Each leaf could be devoted to a series giving not only the official series description but small plates showing the actual colors of the soil horizons in an air dry condition and with 10, 20, and 30 per cent of moisture. In this way only the series required at any time need be carried. The chief objection to this scheme is the reproduction of soil colors. However it is felt that this difficulty will soon be overcome. In fact it is not unreasonable to believe that the required soil colors could be reproduced at the present time by some artist.