SOIL SURVEY EXPERIENCES IN VENEZUELA

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A year recently was spent studying soils in Venezuela as a staff member of the soil survey branch of the Food and Agriculture Organization of the United Nations. The purpose of the study was to assist the Venezuelan government in the various aspects of its soil survey program. Included in this assignment was the classification of important Venezuelan soils into Great Soil Groups. This aspect of the work is considered below.

Studies of soils in the field were made in all but two of the 21 states and districts of Venezuela in company with experienced soil scientists of the Centro de Investigaciones Agronomicas and other federal agencies. Soil profiles were described, micromonoliths prepared and samples taken of genetic soil horizons for characterization in the laboratory. A report and map were prepared of the major soils of Venezuela.

Venezuela has great variety in the environmental factors affecting soils. Climates range from tropical rain forest and savanna to dry steppe and desert climates. Small areas of temperate and cool climates occur in the Andes. Vegetation ranges from rain forest to cactus; relief is mountainous to nearly level; parent material includes igneous, metamorphic and sedimentary rocks and their weathered products. In places these factors have been in operation for very long periods of time to result in highly weathered and leached profiles.

The soils studied were placed into 18 Great Soil Groups. The zonal groups include: Desert, Reddish Chestnut, Brown Forest, Gray-Brown Podzolic, Red-Yellow Podzolic, Reddish-Brown Lateritic and Laterosols. The intrazonal groups used are: solodized Solonetz, Alpine Meadow, Bog, Lateritic Humic-Gley, Low Humic-Gley, Planosol, Ground Water Laterite, Rendzina, and Gramusol. Only one Azonal group, the Regosols, was described.

The criteria used in classifying the soils included morphological and laboratory data. In many cases the classification is tentative until soil surveys can provide a means for studying the soils in detail.

Soil classification in a relatively little-known area such as Venezuela is difficult, using the present U.S. Soil Classification system. This is primarily because the soil groups are not quantitatively defined. The proposed 7th Approximation will do much to correct this situation and should prove extremely useful to the soil classifier operating in an area new to him.

PERSONAL NEWS NOTES

George McCormic transferred from Illinois to Michigan where he became Assistant State Soil Scientist for the Soil Conservation Service.

Lacy Harman, former Assistant