The committee on Nomenclature has attempted to define a number of soil terms of foreign origin which are being used extensively by American Soil Scientists. In many cases these terms are used rather loosely due to differences in opinion as to what the terms include. It is to be hoped that our work will help to standardize the use of these terms.

The definitions which are presented are not the ideas of any one person. They were formulated in the following manner: Tentative definitions were prepared and this first draft was sent to about thirty members of our association with request for criticisms. The committee wishes to take this opportunity of thanking this group of men for their aid in helping to formulate these definitions. With these criticisms at hand the present definitions were worked out.

An effort was made to define the terms as clearly and concisely as possible. In the case of the words “podzol” “chernozem” and “solonetz” short definitions are followed by typical profile descriptions.

The words “podzol”, “chernozem” and their derivatives are spelled with a “z” instead of an “s” in order to agree with a recent ruling of the Department of Agriculture.

The term “chernozemic” is a new word suggested by Dr. Nikiforoff. There seems to be a need for a term which will have the same relation to chernozem as podzolic is formed by adding “ic” to the word podzol. In the original draft the word chernozoic was used. This term met with such a barrage of criticism that it was deemed wise to change it to “chernozemic.” It is formed by adding “ic” to the word chernozem just as podzolic is formed by adding “ic” to the word podzol.

Definitions

PODZOL—(Rus. “pod” under + “zola” ash). A soil whose profile is characterized by a bleached siliceous ashy gray B horizon due to the loss of alkali and alkaline earth elements and sesquioxides, and a lack of dark colored organic constituents.

A typical podzol profile shows the following horizons:

A0—A forest floor of organic debris that is usually quite thick. It may show sub-horizons of organic debris in various stages of decomposition and is often more or less woven together by live roots.

A1—A thin horizon of mixed organic and mineral material of a dark dray to black color.

A2—An ashy gray horizon of mineral soil, strongly acid in reaction, sometimes laminated but usually with appreciable accumulations of sesquioxides but with a grayish-brown to yellowish-brown subsoil without appreciable accumulations of solum and sesquioxides. and alkaline earth elements and sesquioxides, and a lack of dark colored organic constituents. The B horizons are enriched with sesquioxides, colloidal clays.

PODZOLIZATION—A process of solution and leaching wherein the alkali and alkaline earth elements are leached from the solum and the colloidal clays and organic matter may be located from an upper or A horizon to the B horizon. The A horizon becomes highly siliceous while the B horizons are enriched with sesquioxides, colloidal clays.

PODZOLIC SOILS—Soils which show evidence of podzolization, but which may or may not have reached to a true podzol.

BLEICHERDE—(G. “bleich” + pale, bleached + “erde” —soil). The term used to designate the bleached, light colored A2 horizon of a podzol soil. It is relatively high in silica and lower in the alkali and alkaline earth elements, sesquioxides, colloidal clay, and organic matter than are the overlying and underlying horizons.

ORTSTEIN—(G. “ort” place + “stein” stone). Used to designate an indurated horizon or accumulation of a podzol soil.

ORTERDE—(G. “ort” place—“erde” soil). A horizon characterized by a very shallow accumulation in a podzol soil in which the components are not indurated.

CHERNOZEM—(Rus. “chernuii” black + “zemlya” earth). A soil whose profile is characterized by a deep A horizon of dark brown to black, a grayish-brown to yellowish-brown subsoil, appreciable accumulations of sesquioxides, and accumulations of calcium carbonate. Chernozems usually bear a cover of grass in regions of semi-humid to semi-arid climate. A typical chernozem shows the following horizons:

A0—A thin layer of mineral substances and organic matter forming a felt like mat. This layer is shelf forming to the rapidity of decomposition, the grazing of animals and fires.

A1—This horizon is dark brown to black in granular structure and contains a considerable amount of organic matter in a thoroughly decomposed and disseminated condition.

A2—A dark brown to black horizon with a granular to nut structure often becomes lighter towards the bottom of the horizon. The regular lumps or clods are brown or yellowish-brown. The horizon is usually more than eighteen inches thick.

The reaction is as a rule close to neutral.

B—An horizon characterized by a brown or gray color, with structure particles which consist of irregular lumps or clods; of basic reaction, containing accumulated calcium carbonate both in the form of light colored concretions and throughout the soil mass. The deeper horizons are usually more than eighteen inches thick.