Brunigra Soils, a New Name for Prairie Soils

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The name "Prairie soils" for the Great Soil Group has never been satisfactory to an important number of the soil scientists who work with the soils. The term "prairie soils" has a long established precedent, both in popular and technical literature (1, 2), as a general term referring to soils developed under grass vegetation. This term, "prairie soils," has been applied to some of the Rendzinas, Wiesenböden, or Humic-Gley soils, and Planosols, as well as to the Chernozems, Chestnut, and Brown soils, all in addition to the group of soils first called "Prairie soils" by Marbut (3).

Because it is impossible in speaking to distinguish between "Prairie soils" and "prairie soils" the usefulness of both terms is reduced. Considerable confusion has resulted in the lecture rooms, and the usage of one name must be dropped if the confusion is to be eliminated. Since the term "prairie soils" is firmly rooted in the common language of the midwestern farmers and has long precedence even in soils literature, it seems best to retain the term as a general one for all soils developed under grass, and select a new name for the Great Soil Group of Prairie soils. The name "Brunigra" has therefore been coined as a substitute for Prairie soils, as defined by Smith, Allaway, and Riecken (4). The derivation is from the words "brun" for brown and "niger" for black. The name reflects the very dark brown or very dark grayish brown color of the A horizons.

As defined by Smith, Allaway and Riecken (4), the Brunigra soils would include those soils having the following properties:

(a) A dark colored surface horizon 6 inches or more in thickness in virgin soils with Munsell color values in the immediate vicinity of 10YR, 2/2, 3/2, or 3/1 when moist, with organic carbon contents between the neighborhoods of 0.5% and 6%, depending on natural drainage and texture, and carbon nitrogen ratios of approximately 11, ±2 in A horizons.

(b) Subsoil colors of brown, yellowish brown, or grayish brown if parent materials are not red, frequently with mottles or incipient gleying.

(c) An exchange complex having H⁺ but in no horizon does the H⁺ greatly exceed the combined Ca⁺⁺ and Mg⁺⁺.

(d) Horizons which are not sharply separated but have diffuse or gradational boundaries with transitional horizons usually several inches thick.

It will be noted that nothing is said about the presence or absence of a zone of carbonate accumulation since, as was pointed out by Smith, Allaway, and Riecken (4), the zone of carbonate accumulation is present in some Brunigra soils and absent in others. The above definition of Brunigra soils includes some soils such as Moody, Hastings, and Holdredge, which have been considered to be Chernozems. This problem will be discussed elsewhere.

It is not proposed that the name "Reddish Prairie Soils" be affected by the proposal to change the name "Prairie Soils."

LITERATURE CITED