The purpose of this paper is to discuss some of the principal chemical and morphologic relationships between types and phases of the Rosebud and associated soils within a study area of nine square miles in southeastern Kimball County, Nebraska. The distribution and general characteristics of the Rosebud soils in Nebraska and adjoining states are briefly discussed for purposes of orientation and comparison. The morphology, chemical properties, and areal distribution of the different types and phases of these soils have significant relationships to the climate, vegetation, and surface features under which they have developed, and to the use-suitability of the land. These relationships are of practical importance and are included as a part of this discussion.

Location and Orientation of the Area

The index map (Figure 1) shows the geographic location of the study area in relation to the Brown, Dark-Brown, and Chernozem soil zones in western Nebraska and adjacent areas of South Dakota, Wyoming, Colorado, and Kansas. The extensive areas having soils without normal profiles in this region are the Nebraska Sandhills, the Black Hills, and the Rocky Mountains. The boundaries of these areas are approximately indicated by Marbut (2), who classified the soils extending from the Rocky Mountains...