

parent materials and on drainage conditions. Grey-brown podzolic and brown forest soils are found on calcareous materials, mainly in the western section of the area, while brown podzolic and podzol soils occur on the lighter non-calcareous materials. The latter types are found on most of the sandy materials. In addition to the above, black muck and peat soils are found in many of the poorly drained depressional areas.

The fertility of the soils in this transitional area varies greatly. The grey-brown podzolic and brown forest soils are moderately fertile and well supplied with lime, while the brown podzolic and podzol soils are considerably less fertile and moderately-to-strongly acid. The dark-grey gleisolic soils are very productive when properly drained and managed, while the black muck soils are highly productive when devoted to special garden crops. Many of the poorly drained sandy soils and shallow soils over bedrock are not suited for agricultural development. The crop adaptability of the different soils also varies considerably and consequently different types of farming can be practised in this Zone.

Podzol Zone.—This Zone of soils extends through the Maritime Provinces (not including Newfoundland) and eastern Quebec. It covers an area of over 50,000,000 acres of land. The soils in this area have developed under a humid climate and under a coniferous or a mixed-forest cover.

The dominant well-drained soils in this Zone are podzols which, under forested conditions, have a light grey or white leached layer near the surface immediately below the leaf mat. This layer in turn is underlain by a yellowish or reddish brown subsurface horizon. Under cultivated conditions the surface soil is generally reddish or greyish brown. The imperfectly and poorly drained soils in this Zone are either more leached than the well-drained soils, in which case they have a thicker light-grey horizon near the surface, or they may be less leached in which case they have a dark surface soil. Many of the poorly drained depressions have a covering of peat, while black muck seldom occurs in this Zone.

The natural fertility levels of the podzol soils are not very high and the reaction of these soils is moderately-to-strongly acid. Good farm practices involving the use of lime, manure and fertilizers, as well as suitable rotations are essential in order to maintain the soil in a good state of productivity. Mixed farming is generally best suited to the soils in this Zone, although commercial potato-growing and orcharding are well adapted in certain areas. A considerable percentage of the soils in the Podzol Zone are marginal and sub-marginal from an agricultural standpoint.

The Cordilleran Region.—In the Cordilleran Region the largest part of the land area consists of rough mountainous land. However, comparatively small areas of agricultural or potentially agricultural land are found scattered in some of the valleys and on the smoother plateaux. Within the Cordilleran Region climatic conditions and the natural vegetation vary greatly. The geological soil parent materials also vary greatly. As a result a wide range of soils may be found in this Region which cannot be shown on a small-scale map.

In the drier valleys of southern British Columbia, brown, dark brown and black grassland soils, respectively, are found as one proceeds up the valley slopes. Grassland types of soils are also found on some of the dry uplands. On many of the higher places podzolic soils are common and grey-wooded and degraded black soils are dominant on the smooth plains of the central interior. In the lower Fraser Valley imperfectly drained dark-grey gleisolic soils, which resemble those