

of the St. Lawrence Lowland, are common. Along the southwestern coast of British Columbia, under warm, humid climatic conditions, brown soils occur which have a close resemblance to the brown podzolic soils of Eastern Canada. They are indicated on the map as Pacific Coast Soils.

The fertility of the soils in the Cordilleran Region varies greatly. This, together with the range in climatic conditions, permits a great diversity in the types of agriculture which can be practised in British Columbia.

The Precambrian Region.—The soils on the Precambrian Shield are greatly influenced by the thin covering of unconsolidated soil material over hard bedrock and by the nature of these materials. Large areas of rock outcrop occur frequently on the Shield, while peat and swamp fill many of the depressions. As a result of the influence of climatic conditions the associated soil pattern of this broad region may be roughly divided into two.

In the southernmost part, in addition to the rock outcrop and peat, brown podzolic and podzol soils occur on the upland. This area also contains the smooth plains of the northern Ontario and Quebec Clay Belt and of the Lake St. John District in Quebec. The clay soils in the latter district are mainly of the dark-grey gleisolic types and resemble those of the St. Lawrence Lowland. The better-drained soils of the Ontario and Quebec Clay Belt resemble in general the grey-wooded soils. A large percentage of the soils in this belt are poorly drained and have a thin covering of peat. Most of the agricultural development on the Shield is found in the two clay plains and along the southern rim of the Shield, particularly in the river valleys.

In the northern forested part of the Shield and in some of the forested areas underlain by other rock formations, the percentage of peat and swamp in the landscape is greater than in the southern part. In this area a large percentage of the soils is underlain by perma-frost. These sub-arctic soils may thaw out to various depths during the growing season. The agricultural development in this region is limited mainly to gardens in the more favourable locations.

The Tundra Region.—To the north of the forested region lies an extensive belt of treeless tundra. The sub-soils in the tundra are permanently frozen and only the surface thaws out to shallow depths. Very little weathering has taken place in these soils. The tundra soils may vary considerably depending on the kind of mineral material from which they have formed. Those found on the Shield are invariably coarse textured and acid, while those found on Palæozoic limestone are heavier and invariably neutral or alkaline.

There is no agricultural development on the tundra but some districts are utilized for reindeer grazing.

Subsection 3.—Protection and Grading

Unlike manufactured products, even close scrutiny of most agricultural products is no clue to their purity as food, or their value to the farmer for further production. Obviously, products that are eventually used as food must be pure and healthful and must live up to standards of quality established for them. On the other hand, if agriculture is to be on a sound basis, the things farmers buy—seeds, feeds, fertilizers and pesticides—must also carry some guarantee that they will be as represented. Much of the research and experimental work would go for naught if legislation were not provided to see that the end-product of such work was satisfactory. In