

few plants in more or less limited areas, and epidemics such as are to be seen in cultivated plants in gardens could seldom occur. When these plants were brought into the garden and crowded together in large areas, the parasites causing the diseases were brought with them. Here they found conditions ideal for their development. The plants touched each other. Some of the spores developed on one plant were almost sure to find moisture and lodging conditions favorable on many of the other plants. A light breeze blowing through the garden scattered them throughout the crowded plants. The fact of the crowded condition under which ginseng must be cultivated is therefore one of the chief factors favoring such diseases as *Alternaria* Blight and the Mildew.

The ginseng hunter, when he began to consider ginseng cultivation as a means of increasing his income, took note of the fact that the ginseng plant required shade. This he provided at once, at first by the crude frame of brush covers and later developed the modern types of lath shading now generally used. He thus provided one of the important requisites of nature, shade, but he entirely overlooked two other very important factors, which failing to consider, has brought him no end of trouble in the way of disease. Seldom did he consider the necessity of providing artificial drainage for his gardens. The slope of the land or the character of the soil were considered sufficient to remove the excess water. He failed to consider that the steep hill-sides where the ginseng naturally grows were covered with forest trees whose roots pumped up water to be evaporated from the leaves above and thus kept the soil free from excess water. The result has been heavy loss in the wet seasons, especially in heavy low land soils, from the soft rot. Repeated experiments with the tile drainage in lands where the Soft Rot flourished have brought about almost entire freedom from the disease. It is only in recent years that the ginseng grower has found out that there is very little soil that does not require tile drainage. The root diseases here indicated have been the price paid for failure to provide proper drainage.

The development of Fiber Rot or Rust which has become so destructive in the past few years appears to be due very largely to the failure on the part of the growers to consider the character of the soil in which the ginseng naturally grows. This Fiber Rot or Rust is