

nature. Owing to the very fragile character of the specimens some kind of small box, such as pill boxes or cardboard slide boxes, is almost essential to ensure their safe conveyance home. Material from the same "colony" only, should be placed in one receptacle to avoid the mixing of spores which would otherwise ensue and render identification difficult. This applies most strongly to specimens which to the naked eye appear alike, as when microscopically examined these may be found to be different species. The remaining space in the box should be packed with a little tissue or other soft paper, or failing this, with leaves, to prevent damage to the material by shaking. The conditions most favourable for a plentiful crop of slime-moulds are moisture and warmth. Frequent showers during warm weather furnish ideal conditions. During the hot, dry weather towards the middle of last summer very few specimens were to be found, while in autumn they once more became abundant. The species in the subjoined list recorded from King's Mt. were all collected in October, and so late as October 28, a species not previously met with was collected, somewhat damaged, but still readily recognizable.

It was at first intended to give a somewhat more extended account of the structure and habits of the members of the group, but on account of their diversity this would necessitate a much longer article than has been thought desirable, and without numerous illustrations would probably not give much help to those unfamiliar with the plants. A series of specimens, however, illustrating all the species here mentioned and some others, has been placed in the Herbarium of the Division of Botany at the Central Experimental Farm, and will be very gladly shown to anyone sufficiently interested to pay the Division a visit. Such an examination of actual specimens will give a much better conception of these organisms than any amount of written description.

A word may be added on the economic importance of the group. As regards most of the species this is quite negligible, but a few are parasitic in higher plants and one is the cause of a very serious disease of cultivated crops. This organism is *Plasmodiophora brassicae* Wor. which attacks a large number of wild and cultivated species of cruciferous plants, its hosts being, perhaps, limited to representatives of this family. Attacked plants first show a peculiar malformation of the root, and later the affected part rots, the plant being stunted in its growth or killed. This disease has received in English the names "club-root", "clubbing", "finger-and-toe", and "anbury", and in French that of "maladie digitoire", designations for the most part denoting the abnormal form of the root. It is only