

(Continued from last month)

When, however, we practise feeding during a dearth of pollen, the stimulative effect of feeding causes bees to look for substitutes for pollen, and to use substitutes and kinds of pollen that are possibly deficient, and which they would not use but for the stimulation of feeding. There are, however, other circumstances and cases in which pollen is plentiful but of low grade; this condition appears when the pollen is the product of flowers which have suddenly sprung up after rain, succeeding a period of hot dry weather. Under these conditions plants cannot elaborate the right percentage of protein. You will perhaps wonder where the practical use of all this comes in. In my opinion it comes in in this way.

1. If you feed for brood rearing, when things through dearth are at a standstill you must supply the nitrogen-that is, the flesh and tissue-forming protein-as well as the honey or sugar syrup, which are the heat-producing hydro-carbonates.

2. If you are feeding for stores to prevent starvation, feed all you are going to give in as short a time as possible, to give as little stimulation as possible.

3. When pollen and honey are being gather suddenly, after rain succeeding a drought, from some such annual plant such as native dandelion, shift your bees beyond the reach of it.

On this point our information is as yet very meagre, and the result of further analysis, which we expect today, will supplement it.

In conclusion, I should like to draw

your attention to the necessity of being extremely careful in the matter of samples for analysis. Don't jump to the conclusion that because a certain plant is in bloom and pollen is coming in that it is necessarily from that source. Go and see if any one of the bees on the bloom are gathering pollen, and whether the pellets on their legs are the same as your sample.

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In this connection I should like to ask is there any yellow box pollen? Has any bee-keeper seen bees gather it? I have never been able to, and it is a well-known fact that in some districts brood rearing comes to a standstil laltogether when there is no bloom. but yellow box.

I have only superficially touched this subject of the influence of larval food. There is still the possible inufinece of the greater or lesser inversion of the various honeys, percentage of water and protein to be considered, and the report of analysis of honey, also promised for to-day, may open a new line of experiment, but I think I have said enough to show you the importance of investigations and experiment and the necessity for your co-operation.

## ADDRESS BY DR. CHERRY.

Dr. Cherry, in giving his address, said that he wished to address them on two points-first, to recapitulate and to some extent to illustrate what he was speaking about last year, "the relationship of the food of the grub to the activity of the adult insect," and, secondly, "a few points in connection with diseases of insects, and in making it resistant to disease."

Regarding the Growth of the Grub, You remember that last year I pointalysis. ed out that, so far as we know, the led al whole of the provision for the building ses v up of the active tissue of the insect is ount made while the insect is in the conget a dition of the grub. It is while the grub have is actively growing that it has to lay turn ( up a sufficient amount of the active sim