11 I.—9.

weakness of the pines or to defects of situation, &c.; whether the trees about Wellington will suffer from a second attack and succumb; whether the insect will make periodical visitations, and such like questions, cannot, I apprehend, be properly answered as yet. The answers received by the Committee from other persons will, doubtless, help towards a better knowledge of this pest; as far as my own experience goes the number of trees which have recovered has been far greater than the number of those which have been killed by *Kermaphis*.

## III.—Question 9. Other Blights.

Arbor-vitæ, about Christchurch and (I think) about Wellington, is attacked and much injured by a green aphis, of which I have not as yet been able to examine the winged state. In the public domain, Christchurch, several trees have had to be cut down on account of this blight. I should think that the kerosene and soapsud spray would be a very effective remedy in this case as in others.

Pittosporum engenioides and P. tenuifolium, two of our handsomest garden ornaments, are much subject to attacks from an insect, probably of the genus Trioza, which, in its early stages, is almost indistinguishable from scale, and in its full-grown state is a winged fly. The damage done is not very great, and kerosene spray would be effective.

Cupressus macrocarpa is subject to some disease of which I can give no certain account. The tree seems to wither away, generally branch after branch, and die. I have failed in every endeavour

to find an insect likely to cause this result. Further investigation seems necessary.

Many of our native trees and plants are infested by insects very closely resembling, in their earlier stages, scale-insects, but becoming when full-grown small four-winged, floury flies. These are species of *Aleurodes*, the "white-fly" of gardeners. The ordinary remedy suggested above against scale, applied before the flies are hatched, will be useful. These insects are seldom on the bark of the plant.

The black fungus, which so often covers many plants, e.g., camellia, orange, lemon, &c., has been referred to on the sheet of questions. It is strictly a result of the presence of scale or aphis,

and the remedy for it is to destroy the insects.

Wellington, 27th July, 1885.

[Extracts from the Colonist, Nelson, New Zealand, Thursday, October.]

THE BLIGHT QUESTION.

## Report of Committee.

The following is the report of the subcommittee elected to make inquiries and report upon the blights, which are proving so disastrous to fruit-growers and others, and the best means of dealing

with these pests.

The Committee having circulated questions on various kinds of blight, specifying codlin-moth, scaly-blight, acacia-blight, pine-blight, and other blights, the Committee received answers from not more than six parties: Messrs. Wiesenhavern, Newman, Rout (Stoke), Hale (Waimea Road), Sheather, and Lowe, but as all of these were directly interested in the matter their evidence is of more than usual value, being practical and experimental, not speculative or theoretical.

The first on the list was the codlin-moth, and the questions on it were as follows, with the

answers so far as they were given :-

1. When did you first notice its appearance?

Mr. T. M. Lowe: Codlin-moth well known to fruit-growers in England. I first observed it in Nelson in 1878.

Mr. John Hale: I have observed it for the last six years. Mr. J. H. Newman: As soon as I came here, a year ago.

2. In what forms or stages have you seen it?

Mr. Lowe: Deposits its eggs on any part of the apple or pear, when the fruit is about the size of a marble. Begins to bore into the fruit in its pupa state till it reaches the core. It then retires and suspends itself from a thread until it reaches a place of concealment, either in the bark or just under the surface at the bole of the tree, where it remains unless disturbed until the following spring.

Mr. Hale: I have noticed it in the state of the moth, maggot, and chrysalis, on apple-trees and quince, in and about Nelson up to Wakefield. I knew such forms to be seen as the maggot in the apple up to the middle of January and earlier, now. It remains in maggot state till spring during October, Nevember, December and January, betching, and goes straightway into the moth

October, November, December, and January, hatching, and goes straightway into the moth.

Mr. Wiesenhavern: In answer to this and the question as to the best remedy, the following answer is given: Codlin-moth (Tortrix pomonana): This beautiful little dark moth, with many waving cross-stripes on its upper wings and a large bronze shining spot on each end of them, is difficult to catch, as it conceals itself during the day, and moves only at night to deposit its two hundred and fifty or three hundred eggs on the half-grown fruits. The small maggot eats into the fruits, causes it to ripen prematurely and to fall, and in this way destroys in many cases more than half or the whole of the crop. The habit of this grub to leave after maturity the fruit—mostly at night by its own thread—and to reascend the tree for the purpose of wintering in crevices of the stem and lower branches, has given a great help to combat its ravages. The usual remedy to catch the moth by large lanterns, lamps, or even by the windows of hothouses, prepared for the purpose, have done some good. Wrapping hay, straw, or rags round the tree to intercept the grub, have been practised in America with more or less good results. It was through Professor C. Becker, of the Girl's College, in Juterbog, near Potsdam, who for years made a study of the most destructive insects of the orchard, that paper-bands were first introduced. He found that these bands offered a more convenient retreat and a perfect trap for the maggots and other insects. To make doubly