

was accordingly repeated on the same day, but by 27th November a fairly widespread infestation of the new leaves was apparent, the eggs probably having been deposited prior to 21st November.

The spray was repeated on 5th and 22nd December, 14th January, and 3rd February, but with very little result during December and January, and during these months there was little new growth or formation of serviceable leaves. After the final spraying on 3rd February, however, some midge-free leaves developed during the ensuing week, but no further observations were made that season.

During the same season a number of adult Bon Chretien and Beurre Bosc pear-trees were sprayed with the Black Leaf and molasses mixture, the dates being 1st and 21st November and 6th December. The spraying on the first of these dates was productive of some result, as the new growth was fairly free from midge infestation till 10th November. Thereafter the midge appeared to gain ground, and the two last sprays had little, if any, effect.

SEASON 1923-24.

During the season 1923-24 only the Black Leaf and molasses mixture was used—applied about every third week. As before, the young trees were kept almost free from midge infestation till the last week in November, after which the spray showed little effect, and was not repeated after December.

SEASON 1924-25.

It was thought that possibly a better result might be obtained with more frequent sprayings, so during the spring of 1924 the new block of pear-trees was treated with the Black Leaf and oil mixture once a week. The dates of the sprayings were 6th, 13th, 21st, and 27th October, 1st, 10th, 17th, and 24th November, 1st, 7th, 15th, 22nd, and 29th December, and 5th January.

This season the midge infestation was noticed first on the Beurre Diel leaves about 13th October, the leaves beginning to blacken about the 18th. By 27th October the young pears sprayed with the mixture were quite free from midge, except a small tree, planted this season, which stood apart and was overlooked in the spraying on 13th October. During the first three weeks of November this freedom continued, only one or two leaves—which perhaps had not been well sprayed—showing infestation. The trees by now had made a reasonable growth and had a good crop of leaves. Some continued wet weather about the middle of November may have weakened the spray deposits on the twigs, for on 26th November slight infestation was found on all the trees.

It may be doubted, however, whether rain alone was the cause of the spray losing its effect, for on 4th December, only three days after the last spraying, a female midge was found depositing eggs on a bud. The weather had not been wet, and the question arises whether the increasing temperature may not have been responsible for the failure, nicotine being a volatile substance. However this may be, from December onwards the spraying failed to control the midge, thus repeating the experience of the two previous years.