

for tomato-houses, but the minimum, 42.7 deg., is rather low. At times it was much too low, especially when the reading was 34 deg., but this occurred at the latter end of the season; in fact, it was the reading for the last two weeks which lowered the minimum average. For the earlier part of the season the reading was never lower than 40 deg. The average minimum temperature of 50 deg. in Mr. Maffey's house was more satisfactory, and was well above danger-point. It must, however, be remembered that Mr. Odering's house, owing to its situation, is much colder than Mr. Maffey's.

EELWORM.

Eelworm (*Heterodera radicicola*) is necessarily a dreaded enemy of tomato-growers. Many are the questions asked by growers of the Department as to some satisfactory means of control. Soil-sterilizing has been tried by a few growers. Others apply a solution of carbolic acid, and "rest" the soil for a season, in the interval growing cucumbers in troughs, the next season reverting to tomatoes. Some growers have laid down concrete floors, bring in fresh soil, and clear both plants and soil out at end of the season, again renewing the soil to a depth of 5 in. to 6 in. This latter method requires a reserve of fresh soil to draw upon, and also means extra labour, but it is satisfactory in controlling eelworm; moreover, it pays the grower for his extra trouble. Many growers, however, have not the necessary reserve of soil for this treatment, and sterilizing soil with the appliances at present available is too costly—too expensive in fact for tomato-culture when handling soil in large quantities. To sterilize small lots for propagating-boxes is simple enough, but to prepare several tons is a very different matter. With regard to dressing the soil with carbolic, and growing cucumbers in troughs, I should recommend growers to carefully read Bulletin No. 20, on eelworms, by Messrs. T. W. Kirk, F.L.S., and A. H. Cockayne, Government Biologist, especially page 4, paragraph relating to life-history, and also page 5.

What is required is a remedy by which old soil can be satisfactorily treated and freed from eelworm at little cost. A remedy of this description would revolutionize tomato-culture under glass. Mr. Odering's house was excellent for experimenting with remedies for control of eelworm. The house, as before stated, was divided into sections or plots. No. 1 was treated with 56 lb. apterite; No. 2 with 46 lb. vaporite; No. 3 with 2 oz. kainit per square yard; No. 4 with 2 oz. sulph. of iron per square yard; No. 5 with 1 oz. sulph. of iron and 2 oz. kainit per square yard. All dressings were lightly dug in. Nos. 6, 7, and 8 were reserved for testing of plants, the soil receiving no treatment.

The photographs of the roots of plants taken from each section will, I feel sure, illustrate the effect of the remedies, while a further com-