Tomato Plants Growing in a House 60 x 200 feet, owned by R. H. Ellis, Leamington, Ont.

7. The sprayings made early in the season seem to cause greater injury than the later sprayings.

8. The various sulphur preparations, even when used at very weak strengths, caused serious burning of the foliage. It is remarkable that the self-boiled lime-sulphur which may be safely used on the tender foliage of the peach, causes serious injury when used on melons and cucumbers. On the other hand, Bordeaux mixture that causes serious injury when used on the peach is the best fungicide for melons and cucumbers.

We have already reported our work with the spraying of celery at Macdonald College. Spraying makes all the difference between success and failure with that crop. Celery is commonly attacked with an early and a late blight. Sometimes both are working on the same plant at one time. These diseases are held in check by Bordeaux mixture. The diseases are very persistent so that the plants must be kept covered with the spray from the seedling stage to the harvest.

The writer carried on a set of experiments in New Brunswick seeking to control the Tomato Leaf Spot. Leaf Spot may be controlled by Bordeaux mixture. If amount of fruit is the only consideration spraying would abundantly pay. We have demonstrated to our own satisfaction that leaf spot tends to hasten fruiting, however, so that where a premium is placed upon earliness, nothing is gained by spraying. The problem seems to be: Does a limited amount of fruit pay as well or better than a larger amount later on?

The most of what we have said is concerning plant disease. Remember that all remedies used in dealing with these maladies are preventive. They cannot cure. In spraying we simply cover our plants in an armor of copper or iron and thus shut out the spores of plant disease. If we spray a plant after diseased, we simply shut the disease in, where it flourishes until the host plant is exhausted.

Bacterial plant diseases, such as cause soft rots, cannot be easily controlled. They are within the tissue and cannot be reached by sprays. Treating a plant so affected would be like spraying a patient suffering from consumption with tuberculin. Mechanical methods, such as digging out the plants and burning them must be employed. The plants cannot be saved, but such drastic methods may hinder the spread of the disease to the remainder of the field.

Plant lice cannot be poisoned. They do not eat, and, therefore, cannot be reached by a stomach poison. Lice suck up their food. They are usually very difficult to control. We may only hope to reach them by means of a contact poison, that is, one that will kill the insect by coming in contact with its body.

The biting insects are legion and have been met by every one. They eat foliage and can, therefore, be poisoned. For these insects arsenic in some form is used and is effective. To sum up, we have: Fungous diseases, bacterial diseases, biting insects, sucking insects. Fungous diseases, controlled by sprays; biting insects, controlled by arsenical poisons; sucking insects, controlled by contact poisons. A description of all these maladies attacking the garden cannot be given at this time.

The best we know for the treatment of vegetables is given in the accompanying spray calendar:

Spray Calendar (Vegetables)

What to Spray	For what to Spray.	With what to Spray	1st Spraying	2nd Spraying	3rd Spraying	4th Spraying	Remarks and Conclusions.
Asparagus	Rust and Beetles	Arsenate of Lead. Bordeaux	After cutting season is over.	As required			A sticker may be necessary.
Bean	Anthraccanose	Bordeaux	As required				Seldom pays
Cabbage	Cabbage Worms	Paris Green or Arsenate of Lead	On appearance of Butterfly	Every 10 days, as required			Sticker necessary Treatment for root maggot not satisfactory
Cauliflower	Cabbage Root Maggot						
Celery	Early and Late Blight	Bordeaux	Seedling Stage.	Every 10 days			Plants must be kept covered.
Cucumber and Melons	Bacterial Wilt	Bordeaux					
	Cucumber Beetles	Various powders	Seedling Stage.	Every 10 days, as required			Plants attacked by Wilt should be burned
Onion	Onion Maggot	Found nothing satisfactory					Various compounds have been recommended for pouring in soil. Not effective
Potatoes	Early and Light Blight Beetles	Bordeaux. Paris Green or Arsenate of Lead	When first necessary	10 Days later	10 Days later		Don't use Lime-Sulphur
Squash	Cucumbers and Squash Bug		Seedling Stage.	Every 10 days, as required			
Tomato	Leaf Spot. Early and Late Blight	Bordeaux	Seedlings	Every 10 days, as required			Does not pay for very early fruit
Radish	Club-root Maggots		Applications of lime to soil are useful for club-root. Rotation necessary. Do not rotate with cabbage, turnips or cauliflower				