

## 1. INTRODUCTION

### (a) Aims of Study

The serpentine leaf miner (Idriomyza sp.) is recognised as one of the more important pests of tomatoes in Trinidad,<sup>6</sup> Florida<sup>21</sup> and California.<sup>16</sup>

In Trinidad, at present, Idriomyza is widely controlled, along with all other pests of tomatoes with parathion or arsenical compounds. Alternatively, a "cocktail" of various insecticides is used, which may include parathion in more than one formulation. Plants are usually sprayed weekly but little attention is given to the correct dosage rates, or to the dangers of spraying too close to harvesting. Ripe fruit may be harvested as little as three days after spraying and may bear a recognisable insecticidal deposit. Fortunately, the Trinidadian housewife is in the habit of washing all her vegetables, otherwise these practices could have very serious consequences.

The object of this experiment was to find a systemic insecticide that could be applied to the soil at transplanting and keep the plant free from infestation by the leaf miner for at least two months. Application of the insecticide in this way would minimise the danger both to the operator, and to the consumer.

This is only a preliminary work, and the conclusions are intended to form a basis for further research, not as present recommendations for field use.