

Altho the results already obtained need to be checked by further trials, they appear very promising. The destruction of nematodes has appeared to be nearly as thoro as with the summer fallow method and the soil is left in better condition. Velvet beans are superior in three respects to cowpeas. They furnish better shade, have never been observed to harbor root-knot, while even Iron or Brabham cowpeas sometimes do so, and there is no danger of getting any susceptible plants in the plot thru impure seed. They are, however, more troublesome to cultivate because of their vines. It is hoped that the new bunch variety may prove more satisfactory in this respect.

FLOODING

Nematodes can be greatly reduced in number, if not completely eradicated, by flooding. Indeed, in some fields usually flooded during part of the summer, as with some tomato fields on the lower East Coast, nematodes are seldom noticed. There is much yet to be learned as to the length of time a field should be covered with water, especially at different seasons, and as to the resistance of the eggs to water. Generally a week or two is considered necessary. Of course, comparatively few fields are so situated as to render flooding practicable.

STERILIZATION OF THE SOIL BY STEAM OR HOT WATER

In northern greenhouses where the protection from frost sometimes enables nematodes to become troublesome, it has long been the custom to sterilize the soil by turning live steam into it. The beds are covered with straw, mats, building paper, or other material, and the steam then turned on. A raw potato is placed on top of the bed furthest from the pipes. When the potato is thoroly cooked the sterilization is considered complete. When steam is available this is undoubtedly one of the quickest, most thoro and cheapest methods of eradicating nematodes.

Hot water also is an efficient killing agent. The soil is saturated with boiling water to the depth of two feet. But much the same objection would apply here as in case of the steam treatment. Unless one is equipped with apparatus for quickly and cheaply heating water this method is slow and expensive, considering labor.

STERILIZATION BY THE USE OF CHEMICALS

There are a number of chemicals that can be used to exterminate root-knot in the soil. The objection to most of them is