

sulphate can be so charged, but sodium cyanide is an expensive source of nitrogen.

Potassium cyanide will work as well as sodium cyanide but one must use a third more of it. Moreover, it is more expensive than the sodium salt. On the other hand, it is even more valuable as a fertilizer as it contains potassium as well as nitrogen.

AMOUNTS NECESSARY

The dosage will depend on the thoroughness of eradication desired. Professor Woodward recommended 600 pounds of the cyanide and 900 pounds of the ammonium sulphate to the acre. Usually that amount has been found to reduce the nematodes to a point where they will not become sufficiently abundant to do serious damage for nearly a year. But to secure complete eradication a dose of at least twice that strength is necessary.

It is evident that the thoroughness of eradication will depend upon the evenness of the distribution. Perhaps, if the material could be distributed with absolute uniformity throughout the soil, 600 to 800 pounds to the acre would suffice for complete eradication; but absolute uniformity is not practicable for field work. Complete eradication has been secured, even on beds in the open, from doses of twice that amount. Beds in greenhouse benches six inches deep, treated with 900 pounds sodium cyanide and 1350 pounds ammonium sulphate to the acre, remained free from nematodes, indicating complete eradication. Beds treated at the rate of 400 pounds cyanide and 600 pounds sulphate to the acre were much freer from nematodes than check plots. But plots treated with less than 300 pounds to the acre showed little improvement over untreated plots.

In order to produce plants reasonably free of nematodes as in the case of plants to be set in a field already somewhat infested, it is generally recommended that 600 to 800 pounds of cyanide and 900 to 1200 pounds of ammonium sulphate to the acre be used. If nematodes appear at all in such seedbeds, they will be in isolated spots which can be rejected at planting time. If, on the other hand, the desire is for plants that can be depended upon to be absolutely free, as for setting in uninfested ground, application of at least 1200 pounds cyanide and 1800 pounds ammonia sulphate to the acre should be applied.

METHOD OF APPLICATION

The proper quantity of sodium cyanide is first dissolved in water and the solution is then poured over the ground, which