

Ex No. 6

Date:

COMPATIBILITY OF PESTICIDES WITH OTHER AGRO CHEMICALS AND PHYTOTOXICITY OF INSECTICIDES

Objective:

To get acquainted with the compatibility and phytotoxicity of pesticides

Compatibility of spray chemicals:

When two chemicals are brought together in a single spray mixture, due to reaction, a compound differing from either parent may be formed. Knowledge of the effects of such compounds on the plants when applied is essential to avoid improper use.

The different types of incompatibility are:

1. **Chemical incompatibility** : Different compounds are formed due to reaction of various chemicals as in synthetic or organic compounds with an alkaline material which causes injury to plants.
2. **Phytotoxic incompatibility**: The component parts though themselves are not injurious to the plants and do not show any chemical reaction when mixed, the mixture causes injury to plants.
3. **Physical incompatibility**: The chemicals change their physical form to one that is unstable and hazardous for application.

Phytotoxicity of insecticides:

The adverse effect of insecticide on the plants due to the treatment is known as phytotoxicity. These effects on plants may either be permanent leading to death of the plant or temporary leaving scorching behind and allowing the plant to recover after some time. Many of the chemicals, which are non-phytotoxic at normal doses may prove to be phytotoxic at higher doses.

Record Work:

1. Observe the physical compatibility by mixing any two insecticides.
2. Spray a chemical with hand sprayer to demonstrate phytotoxicity