Phytotocicity of Fungicides and Insecticides

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Growers have observed and reported plant injury (phytotoxicity) even when the correct rates of fungicides or insecticides were applied.

Many environmental factors (temperature, relative humidity and precultural conditions) may have contributed to the plant damage.

Another factor frequently forgotten is cultivar (variety) response. One should remember that it is impossible for a formulator of a pesticide to test his product on every cultivar of a plant species. As a general "rule of thumb," it can be logically assumed that a pesticide which does not injure a commonly grown cultivar should not injure other members of that species. This is in fact how insecticides and fungicides are tested. One or more cultivars are treated with the pesticide to determine its effectiveness and plant safety (no phytotoxic reactions).

It is, therefore, suggested that only a few plants be treated when first using a pesticide on a new cultivar (variety) to determine if there is any plant in-

Instances of phytotoxicity have been reported with the use of both fungicides and insecticides on a wide range of plant material (see references).

References

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