

## Tobacco Mosaic Virus

Tobacco Mosaic Virus (TMV) can affect many different types of plants. It exists in virtually all tobacco producing countries. The most common symptoms of the virus are blotching of the leaves with light and dark green areas, curling and slight malformation of the leaflets.

The virus shows up most often on newer, younger leaves, producing the mosaic pattern, which gives the disease its name. In mature or nearly mature plants, the mottling or mosaic symptoms appear only on the tip leaves. Older plants may develop one to three non-mottled center leaves with large dead areas. This is referred to as “mosaic burn”, which can cause extensive damage to infected plants.

TMV often shows up in the veins of plant's leaves, changing the color from normal to light green. Next it will develop a local lesion, or spot or rings of necrotic or chlorotic tissue. Within a week, blotching or mottling of young leaves will occur. Often the shape of leaves will be affected, with the result being narrower or smaller. Sometimes green fruit are mottles.

This virus can be easily spread from infected plants (tobacco or other host species) to non-infected plants. It affects tobacco and related plants, such as tomato, eggplant, pepper and dill. Some of the many ornamental plants that are susceptible are cosmos, nicotiana, and rose.

There are no known insect vectors for TMV. It is primarily thought to be transmitted by workers or gardeners who use tobacco products before weeding or taking transplants from the plant bed.

There are no chemical controls for TMV. The virus is very persistent and infectious, and can be spread by merely brushing against plants. Once discovered, it is very important to destroy infected stalks and roots, to ensure that decomposition will not affect the next crop or nearby plants. Disease resistant plants are available.

## References

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