

A Complex disease on Zucchini (Cucurbita pepo) reported from Tripura, India

Amar Bahadur

College of Agriculture, Tripura

The Zucchini (*Cucurbita pepo*) crop probably cultivated in the United States in California, fruits are green cylindrical immature squash harvested for edible and typically called "zucchini" as cultivated in northern Italy. Zucchini is a favorite of home gardeners for good prolific, easy to grow and the fruits taste. All zucchini are squash but not all squash are zucchini. The squash plant species are known as gourd family, which is divided into winter and summer squash. Zucchini (*Cucurbita pepo*) plants are typically bushy, leaves are palmately lobed, stems and leaves have small spiny trichomes, belongs to family Cucurbitaceae, crop called summer squash, it's one of the most common vegetable crop growing in the home garden and their fruits known as pepo. Species of the cultivar called the "Pepo Pumpkin" (*Cucurbita pepo*). Zucchini are low food energy approximately in 100g zucchini of raw summer squash 16 calories, 3.4g carbohydrates, 1.1g fiber, 0.2g fat, 1.2g protein, 2.2g sugars, and 95g water. It has 12% of Riboflavin, 17% of Vitamin B6 and 20% of Vitamin C which is a powerful antioxidant and an anti-inflammatory agent. The potassium in zucchini also helps to lower blood pressure, and its manganese helps the body produce collagen, which allows for healthy skin. Plants are susceptible to a wide variety of diseases. A complex disease (powdery mildews, downy mildew, *Fusarium* fruit rot

and, viruses) reported from college of Agriculture, Tripura, Lembucherra, Agartala, India on Zucchini plants in the year of 2020-21. A complex symptoms observed of Zucchini plants as symptoms of powdery mildew appear white powdery growth on the upper surfaces of leaves; infected plants often stunted, distorted and drop leaves prematurely. Powdery mildew is caused by the fungi *Erysiphe cichoracearum* and *Sphaerotheca fuliginea*. Downy mildew symptoms appear as small yellow areas on the upper leaf surface, they may become brown with irregular margins, and entire leaves wither and die. Infected plants develop gray mold on the lower leaf surface in moist conditions. This disease is caused by the fungus *Pseudoperonospora cubensis*. Blossom-end rot appears as a dark-colored dry rot on the end of the fruit where the flower attached with fruits. It's caused by *Fusarium* sp. as microscopic observation on rotted area of fruits as macro-conidia and also lack of calcium in the developing fruit. Zucchini yellow mosaic virus (ZYMV) is another disease that causes the leaf mottling known as mosaic and transmitted by aphids. Complex diseases cause heavy reduction of yield or even kill the plants.

Keywords: zucchini, powdery mildew, downy mildew, blossom-end rot, mosaic.