

Common Diseases of Mint and Their Management

***Mohit Ameta and Utsav R. Vekariya**

**Department of Plant Pathology, B. A. College of Agriculture,
Anand Agricultural University, Anand, Gujarat-388110**

Corresponding Author's email: mohitameta007@gmail.com

Mint (*Mentha* spp.) is an important medicinal and aromatic crop cultivated widely for its essential oil and culinary value. India is a leading producer of mint oil, especially menthol mint, grown extensively in the Indo-Gangetic plains. Despite its economic importance, mint cultivation is severely affected by several diseases caused by fungi, viruses, and nematodes. These diseases reduce herbage yield, oil quality, and overall profitability, making disease management crucial for sustainable mint production.

Rust of Mint

Causal organism: *Puccinia menthae*

Symptoms: Rust appears as yellowish-brown to orange pustules mainly on the lower surface of leaves. As the disease progresses, leaves dry up and fall prematurely, leading to significant yield loss.

Management: Use disease-free planting material, remove infected plant debris, grow resistant varieties, and apply recommended fungicides at early stages.



Powdery Mildew

Causal organism: *Golovinomyces biocellatus*

Symptoms: White powdery patches develop on the upper surface of leaves, later turning grey or dark. Severe infection causes defoliation and reduced oil content.

Management: Maintain field sanitation, ensure proper spacing, and apply sulfur-based or systemic fungicides at regular intervals.

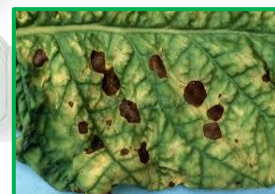


Anthracnose

Causal organism: *Sphaceloma menthae* / *Colletotrichum* spp.

Symptoms: Small sunken brown lesions appear on leaves and stems, enlarging into oval spots with grey centers. Severe infection leads to stem splitting and defoliation.

Management: Use healthy planting material, rotate crops, avoid prolonged leaf wetness, and apply protective fungicides.

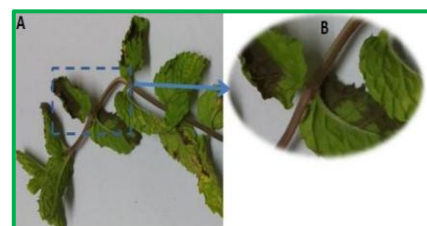


Leaf Spot

Causal organism: *Alternaria alternata*

Symptoms: Dark brown spots with concentric rings develop on leaves. These spots merge and cause extensive leaf damage and defoliation.

Management: Remove infected debris, maintain proper irrigation practices, ensure good aeration, and apply suitable fungicides.



Stolon and Root Rot

Causal organism: *Thielavia basicola* / *Rhizoctonia bataticola*

Symptoms: Dark brown rotting of stolons and roots leads to yellowing, stunted growth, and plant death, particularly in poorly drained soils.

Management: Avoid excessive irrigation, improve soil drainage, use disease-free planting material, and treat stolons before planting.

**Wilt of Mint**

Causal organism: *Verticillium dahliae* / *Verticillium alboatrum*

Symptoms: Infected plants show yellowing, wilting, vascular discoloration, and eventual death.

Management: Practice crop rotation, use healthy planting material, apply soil solarization, and adopt heat treatment of stolons.

**Viral Diseases of Mint**

Causal organism: *Tobacco mosaic virus* and related viruses

Symptoms: Mosaic patterns, leaf curling, crinkling, yellowing, and stunted growth are common.

Management: Use virus-free planting material, control insect vectors, and remove infected plants promptly.

**Root-Knot Nematode**

Causal organism: *Meloidogyne incognita* / *Meloidogyne javanica*

Symptoms: Galls form on roots and runners, leading to poor nutrient uptake and patchy field growth.

Management: Adopt integrated nematode management including crop rotation, organic amendments, biological control, and resistant varieties.