



PEPEROMIA DISEASES

Peperomias (*Peperomia* spp.) are popular foliage pot plants that are subject to only a few diseases. Fortunately, these problems can be fairly easily controlled. The most common diseases are ring spot, oedema, phytophthora rot, and cutting rot.

RING SPOT

Peperomia ring spot is caused by a virus that is commonly transmitted by taking cuttings from apparently healthy but infected plants. The disease affects *Peperomia obtusifolia* and *P. obtusifolia* var. *variegata*.



Figure 1. Ring spot of peperomia. Note the concentric, sunken dead areas (IL Natural History Survey photo).

Symptoms

Peperomia ring spot appears as concentric, brown, necrotic ring markings that disfigure the leaves (Figure 1). The young leaves on certain plants may be markedly cupped, curled, or twisted. On some plants only the older leaves are affected. Severely diseased plants may be stunted. Each ring spot starts as a small, translucent spot that enlarges by the outward addition of a number of narrow bands or lines. Some lines are light and translucent while others are brown and opaque. On the upper leaf surface the tissue over the brown lines often becomes sunken, forming narrow furrows or grooves. The area covered by the ring spot is lighter colored than the healthy portion of the leaf. When one or a few ring spots occur on a leaf, the outlines of the spots and ring patterns are regular. If many spots occur close together, they merge with their outlines and the rings form irregular patterns (Figure 1).

Control

- A. Discard all diseased plants when first discovered; they will not recover.
- B. Take cuttings only from known healthy plants.
- C. Propagate cuttings in a sterilized soil mix.
- D. Since insects may possibly transmit the virus, keep plants as insect-free as possible. Follow suggestions of University of Illinois Extension Entomologists.

For further information contact Nancy R. Pataky, Extension Specialist and Director of the Plant Clinic, Department of Crop Sciences, University of Illinois at Urbana-Champaign.

OEDEMA

The cause of oedema or edema is unknown, but there is evidence that it may be a virus.

Symptoms

Small, raised, pimply areas appear on both leaf surfaces, but are most pronounced on the underleaf surface (Figure 2). The raised areas are first a darker green than surrounding areas, but later become brown, corky, and often sunken. If severe, diseased leaves may be distorted and somewhat stunted.

Control

- A. Same as for ring spot.

PHYTOPHTHORA ROT

Phytophthora rot, caused by the soilborne fungi *Phytophthora palmivora* and *P. nicotianae* var. *Parasitica*, occurs on all parts of the peperomia plant.

Symptoms

On small plants infection begins where the leaf blades touch the soil and then progresses into the stem. The stem is girdled and killed by a black rot (figure 3). On older plants the first symptom is a blackening on the stem at the soil line. The rot may encircle the stem causing the lower leaves to droop. Plants are stunted, gradually wilt, wither, and die. The rot may be associated with nematodes (for example, lesion, pin, root knot, and spiral).

Control

- A. Destroy affected plants when first seen.
- B. Avoid overwatering and heavy, poorly drained soil mixes. Water from below and keep the soil on the dry side.
- C. Take cuttings only from known healthy plants, 6 to 12 inches above the soil line.
- D. Steam-sterilize propagation boxes, pots, sand, and soil mixtures before putting cuttings or plants into them.



Figure 2. Oedema of *Peperomia obtusifolia* (nonvariegated) shown on the lower leaf surface (Florida Dept. of Agriculture, Division of Plant Industry photo).

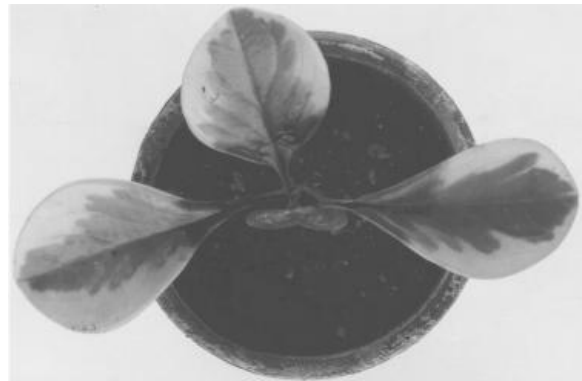


Figure 3. *Phytophthora* rot of peperomia (IL. Natural History Survey photo).



Figure 4. Cutting rot of peperomia. Note the blackened stem, petiole and base of leaves affected by *Phytophthora* (IL Natural History Survey photo).

CUTTING ROT

Cutting rot may be caused by a number of common soilborne fungi including the same *Phytophthora* species that cause Phytophthora rot. Other cutting rot fungi include *Rhizoctonia solani* and species of *Pythium*.

Symptoms

Diseased cuttings have dark brown to black, watersoaked areas in the petioles at the soil line that may extend into the leaf blades (Figure 4). The roots are also commonly decayed.

Control

- A. Same as for Phytophthora rot.