



## GARDEN DISEASE PROBLEMS

- SYMPTOM:** The young leaves, young twigs, and flower buds are covered with a thin layer of grayish white powdery material. Infected leaves may be distorted and curled and many turn yellow or purplish and drop off.
- CAUSE:** *Powdery Mildew*. This common plant disease is caused by a fungus. This is one of the most widespread and serious diseases of roses. Spores are spread by the wind to healthy plants. The fungus is fostered by cool nights, warm days, and high humidity.
- REMEDY:** Spray with fungicide, dust with sulphur, or spray with baking soda and soap.
- PRODUCT:** Safer Garden Fungicide
- SYMPTOM:** Circular black spots with fringed margins appear on the upper surfaces of the leaves in the spring. The tissue around the spots or the entire leaf may turn yellow, and the infected leaves may drop. Severly infected plants may lose all of their leaves by midsummer.
- CAUSE:** *Black Spot*. Black spot is caused by a fungus that is a severe problem in areas where high humidity or rain is common in spring and summer. The spores are spread from plant to plant by splashing water and rain. The fungus enters the tissue, forming spots the size of a pinhead that enlarge as the fungus spreads.
- REMEDY:** Remove dropped leaves and other debris. Spray with fungicide. The fungus spores are on leaf undersides so spray from underneath.
- PRODUCT:** Safer Garden Fungicide
- SYMPTOM:** Leaves turn yellow, wilt, and die. Brown spots on petals or red-pink spots on lighter colored flower buds. Brown dieback of cut canes, brown fuzzy mold on debris around the plant. In severe cases, the entire flower bud rots.
- CAUSE:** *Botrytis*. This disease is caused by a fungus that is commonly found on dead and decaying plant materials. The spores of the fungus can invade dead or weak tissues and flowers but not healthy stems and leaves. The fungus is favored by nights with high humidity or periods of cool temperature accompanied by rain.
- REMEDY:** Remove any dead plant materials from the plant as well as from the ground below the plant. Water plants in the morning rather than at night. Do not mist plants.
- PRODUCT:** Rose Rx

<b>SYMPTOM:</b>	Small yellow spots appear on the upper surfaces of the leaves The lower surfaces are covered with a white cottony growth. Older leaves are affected first, leaves eventually drop.
<b>CAUSE:</b>	<b><u>Downy Mildew:</u></b> This is a plant disease caused by a fungus which is present in the soil and prevalent in cool, moist, rainy growing seasons. The fungus survives the winter in diseased leaves on the ground.
<b>REMEDY:</b>	Clean up plant debris and cut off and destroy infected leaves. Spray with fungicide. Remove and destroy plant debris at the end of every season to reduce the number of over-wintering spores.
<b>PRODUCT:</b>	Rose Rx
<b>SYMPTOM:</b>	Tumor-like growths on stems, roots, or at bud union. Plants with numerous galls are weak, growth is slowed, and leaves turn yellow. Branches will die back and in severe cases the entire plant may die back.
<b>CAUSE:</b>	<b><u>Gall:</u></b> This plant disease is caused by a soil-inhabiting bacterium that infects many ornamentals and fruit trees in the garden. The bacteria are spread with the soil and contaminated pruning tools and enter through a plant wound. The galls disrupt the flow of water and nutrients up the roots and stems. Galls do not usually cause the death of the plant.
<b>REMEDY:</b>	Prune away the affected section, if possible. Sterilize pruners and other tools with bleach or alcohol to prevent bacteria from spreading. The bacteria will remain in the soil for 2 to 3 years. Destroy severely infected plants.
<b>PRODUCT:</b>	All Seasons Spray Oil
<b>SYMPTOM:</b>	Yellow or orange spots appear on the upper surfaces of the leaves in early spring. Rust-colored or brown powdery pustules develop on the undersides of the leaves and stems of host plants. Diseased plants are weak and stunted. Severely infected leaves shrivel, turn gray or tan, and hang down.
<b>CAUSE:</b>	<b><u>Rust:</u></b> Rust is a fungus. Plant infection starts in early spring when conditions become favorable for plant growth. Spores may be blown hundreds of miles to infect healthy plants. Rust grows most prolifically when conditions are wet.
<b>REMEDY:</b>	Spray infected plants with a fungicide. Pick off and destroy badly infected leaves. Keep the foliage as dry as possible. Watering in the morning gives the plant a chance to dry out quickly, reducing the chance of infection.
<b>PRODUCT:</b>	Garden Fungicide Immunox Fungicide