PROBLEMS AFFECTING LEAVES
1. Spots on leaves.
   a. Spots are 2-12 mm diameter, black or dark brown and roundish, may have a yellowish border, may coalesce into large black areas, generally on older leaves; edges of spots are poorly defined or feathery when viewed with a hand lens; occur on upper surface only; all seasons ..... Black spot
   b. Spots appear as dark purplish angular smudges with uneven borders, tending to end at leaf veins or to cluster around leaf veins; rapid leaf drop beginning at the bottom of the plant; often occurs during cool, wet spring or late fall weather..... Downy mildew.
2. Holes in leaves.
   a. Holes appear on leaf edges only; are semi-circular in shape and 10-15 mm in diameter.....Leaf cutter bee
   b. Holes may be on upper or lower surface, may be large or small, exposing uneaten leaf veins; holes give a “window pane” appearance; caterpillar-like insects, if present, are 5-10 mm long and greenish yellow; often occurring in groups..... Rose slug
3. Yellowish or whitish mottling on leaves; may show intricate patterns, venation, or large blotches; blossoms and stems normal..... Rose mosaic
4. Lower leaves turning yellowish and often falling from the plant; yellowing begins at leaf margins and works inward leaving green veins; undersides of leaves with a fine granular material; generally occurs in late summer or during periods of high temperature and little rain..... Spider mites
5. Young leaves puckered; may be covered with a whitish powdery material; often appearing in late summer........ Powdery mildew

B. PROBLEMS AFFECTING BUDS OR BLOSSOMS
1. Young buds and/or peduncles covered with clusters of small (3-5 mm) green, red or black insects; ..... Aphids
2. Young buds, and/or peduncles, covered with a whitish material; may also extend to newly opening leaves or young canes; new leaves may appear curled; occurs in late summer..... Powdery mildew
3. Petals show small brownish spots and blemishes; tiny gray insects may appear on petals; particularly noticeable on white or light-colored varieties ..... Flower thrips
4. Blossoms or buds absent from tips of canes..... Blind shoots
   a. As above, but tiny brown remnants of flower buds are visible at tip of canes; flowers that do form may be disfigured; buds may have bent peduncles..... Rose midge
5. Blossoms eventually form on lax, abnormally long canes, but are different from the cultivar..... Root suckers
6. Mature flower buds begin to open, then rot and turn into soggy mass; buds are often covered with dark, fuzzy mold .....Botrytis
7. Petals covered with pink spots, often on light colored roses following rain.....Ghost spots
8. Strange, green, leaf-like structures emerging from flowers ..... Phyllody
C. PROBLEMS AFFECTING STEMS OR CANES

1. Problems normally affecting upper stems or canes.
   a. Tips of stems, including buds, young flowers and leaves disappear; appear to be torn off ..... Deer damage
   b. Tip of new cane suddenly wilts and dies back forming a “U” shaped bend; transition between living and dead shoot is abrupt; occurs in spring ..... Raspberry horntail
   c. Canes are strangely flattened and distorted; may have an overabundance of buds, leaves and flowers ..... Fasciation

2. Problems normally affecting lower stems or canes.
   a. Canes show a spiral thickening below the surface; surface becomes dark in color and attains a cracked appearance; cane ultimately breaks above the damaged area ..... Rose stem girdler
   b. Stems and leaves at base of plant suddenly disappear; damage normally confined to lower 30 cm of plant ..... Rabbit damage
   c. Brown, corky or flesh colored roundish mass develops on canes often at or near the bud union; may also occur farther up the cane beneath pruning cuts ..... Crown gall
   d. Canes develop that are much longer than other canes; canes are generally lax, and not branched; may not have blossoms or, if blossoms form, they are of a different cultivar and are either white or dark red ..... Root suckers

D. PROBLEMS AFFECTING ROOTS

1. Masses of hair-like roots in clumps along root system ..... Hairy root disease
2. Roots black, tissue under bark dark brown, bark falls off easily ..... Root rot
3. Roots are chewed off at or below ground level ..... Rodent damage
4. Roots, when extracted from the ground, contain numerous small nodules, plant vigor declines, plant may be chlorotic (yellow) ..... Root knot nematode

Adapted from:
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