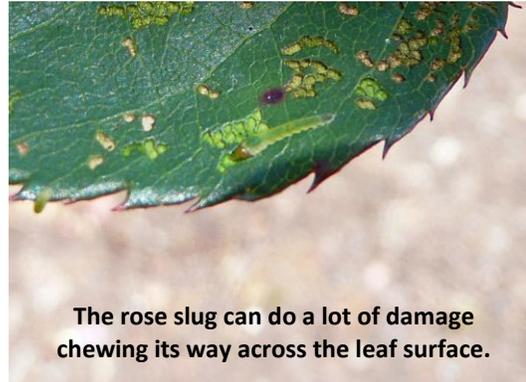


Chewing Pests

Sometimes you see 'em, sometimes you don't. But you can sure tell they've been there when your rose petals, leaves and canes are punctured, chewed, shredded, skeletonized, mined or just plain missing. It's those nasty pests with chewing mouthparts that bite, rip, rasp or tear plant tissue doing the damage. The cast of characters that go for roses includes beetles and their larvae (Fuller rose beetle, Hoplia beetle), the dreaded curculio weevil, rose slugs (larvae of sawflies) and a host of caterpillars. Other chewy eaters that inhabit the garden, though usually don't bother roses too much, are grasshoppers, katydids and the all too ubiquitous snails and slugs. So, what to do? Here are suggestions for coping with insects and mollusks that chew through your plants:



- **Cultural methods** – many of the chewers aren't terribly picky about what they consume, particularly many caterpillars and grasshoppers. If it's green and succulent, they're likely to eat it. The primary cultural method of control is good garden sanitation – eliminate habitats for the insect pests to hide, reproduce and over-winter. And go light on chemical fertilizers that promote lots of lush new growth – it's a real attractant to both chewing and sucking pests.
- **Mechanical and physical methods** – adult forms of unwanted pests are often visible and easy to remove by handpicking. Head out to the garden when you're most likely to see them (might be nighttime so bring a flashlight), with a small container or bucket filled with some soapy water. Pluck the little beast from its feeding spot and drop it into the bucket. For snails and slugs, a well-placed saucer of beer (any kind will do), or other yeasty brew is a great attractant – they'll head for the aromatic mixture, fall in and drown. If you're growing plants in containers, add a rim of copper foil (available at most nurseries) – the slimy critters won't cross it. Large infestations of caterpillars are best remedied by cutting off the afflicted portion of the plant and disposing of it. If you observe any egg masses that you're sure belong to the pest you're trying to control, remove and destroy them.
- **Biological methods** – encourage generalist predators (birds, beneficial insects, lizards and toads) to the garden by providing their desired habitat. Microbial based products that contain bacteria (*Bacillus thuringiensis* or Bt) are pathogenic for a range of caterpillars and leafrollers.
- **Chemical methods** – start with the least toxic chemicals.
 - A dormant spray with horticultural oil may help reduce pests from overwintering.

- Insecticidal soaps utilize potassium salts of fatty acids as the active ingredient and most beneficial insects are not harmed by soap sprays.
- Products containing iron phosphate as its active ingredient, are very effective for control of snails and slugs, and is safe to use around the garden, even food crops.
- Neem seed-based products with the active ingredient azadirachtin are approved to control a range of insects when in the larval, pupal and nymphal stages (it's a growth regulator / inhibitor). Though it doesn't kill adults, it may repel, and in some cases, reduce egg laying and hatch.
- Insecticides that include spinosad as the active ingredient, can be effective against aphids, leaf miners, leafrollers, sawflies and thrips. Spinosad is a natural substance made by a soil bacterium.

While chewing pests can be a real nuisance in our gardens, they usually don't do too much damage. We're fortunate not to have Japanese beetles that can easily decimate the spring garden. Let's hope they never make it west of the Rockies!



*By Nanette Londeree, Master Rosarian
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