

Lawn Insects

Contrary to popular belief, insects do not commonly cause damage in California lawns. Poor lawn care, especially ill-timed watering and planting grass not suited to your yard, are more likely causes of unhealthy or dying lawns. Plant disease, excess or inappropriate use of chemicals such as fertilizer and herbicides, or dog urine also produce similar damage. Never apply an insecticide unless a damaging level of a known insect is confirmed. Insecticides are effective only if applied at the right time and in the right manner. Many insecticides also kill good bugs—use them only as a last resort.

Keep your lawn healthy.

- ◆ Plant grass species that will do well in your area.
- ◆ Over-seed thin areas in the spring and fall.
- ◆ Water deeply and infrequently.
- ◆ Perform routine maintenance on sprinkler heads.
- ◆ Apply fertilizer appropriately.
- ◆ Aerate your lawn annually; remove thatch if it exceeds ½ inch.
- ◆ Cut only ⅓ of grass height at each mowing and keep lawnmower blades sharp.

How do you know if insects are causing damage?

- ◆ Brown spots in lawns also can be caused by over- or under-watering, plant disease, a fertilizer/herbicide spill or over-application, or dog urine.
- ◆ Confirm that insects are present at numbers high enough to cause damage before applying an insecticide.
 - For grubs, dig around roots. A few grubs will not do serious damage, but 6 or more per square foot can.
 - For other insects, perform a drench test as described on reverse.
- ◆ If you do not find live pest insects at high levels, do not treat with chemicals.



If there is a damaging number of insects:

- ◆ First see if you can alter your lawn environment to discourage the pest.
- ◆ If an insecticide is required, select the least toxic product available for the pest you are targeting.
- ◆ Find out which insecticide targets your specific lawn insect:
 - *Bacillus thuringiensis* (Bt) and spinosad are least toxic pesticides that kill caterpillars.
 - Insect-attacking nematodes reduce caterpillars or grubs.
 - Azadirachtin controls cutworms, armyworms, and larvae of lawn moths.
 - Imidacloprid is effective against young lawn grubs.
 - Apyrethroids (e.g. bifenthrin). These are broadly toxic insecticides that kill chinch bugs, grubs, lawn moths, and cutworms, but also kill beneficial insects and impair water quality.

How to Perform a Drench Test

- Mix 3-4 tblsp of dishwashing liquid to 2 gal of water.
- Evenly apply the 2 gal to 1 sq yrd of your lawn.
- Watch the area for 10 min and count the number of caterpillars that rise to the surface.
- Treat the area only if insect numbers exceed 5 armyworms or cutworms or 15 lawn moths per sq yrd.



cutworm larvae



lawn moth caterpillar



grub larva

Minimize the use of pesticides that pollute our waterways. Use nonchemical alternatives or less toxic pesticide products whenever possible. Read product labels carefully and follow instructions on proper use, storage, and disposal.

For more information about managing pests, contact your **University of California Cooperative Extension office** listed under the county government pages of your phone book or the UC IPM Web site at www.ipm.ucdavis.edu.



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What you use in your garden affects our creeks, rivers, and oceans!