

Pest Management

Managing Pests Naturally

Are pests bugging you? If pests are taking over there might be a good reason! Instead of grabbing that bottle of spray, consider using techniques that can solve your pest problems without toxic pesticides. These pest management techniques, collectively known as "Integrated Pest Management" or IPM, can help get rid of indoor and outdoor pests without harming your family, pets, or the environment.

A garden that is designed and maintained using sustainable landscaping practices will have healthy plants that are less susceptible to pests and diseases.



IPM techniques include the following steps:

Cultural Controls

No welcome mat for pests!

Cultural controls are basic practices that prevent or reduce pest problems. For example, cultural practices for aphid control are:

- Fertilize less. Aphids are attracted to tender new growth. Use slow release plant or animal based fertilizers to provide nitrogen slowly and steadily.
- Include in your garden flowering plants that attract insects that prey on and parasitize aphids.
- Eliminate the use of pesticides in your garden to avoid killing natural enemies of aphids.

Physical Controls

Block that Bug!

Physical controls are mechanical or physical barriers prevent pests from contacting the plant or remove them from the plant. For example, physical controls for controlling aphids are:

- Wash aphids off with water.
- Check susceptible plants frequently for colonies and remove them.
- Prune infested parts of plants.

Biological Controls

Don't Squash that Bug!

These techniques use the pests' natural enemies (such as ladybugs) to control them. Some examples of biological control of aphids include:

- Bring in natural predators by planting flowering plants.
- Encourage natural predators to stay in your garden by not using pesticides.

Chemical Controls

Your Last Resort!

Chemical controls or pesticides are used only when all other techniques fail and if you feel it is absolutely necessary to save the plant that is affected. If you have to use pesticides, choose the least-toxic option available. Some examples of less-toxic pesticides for aphid control are:

- Insecticidal soap
- Neem oil

Most retail hardware stores and nurseries carry less-toxic pesticides. To find a list of stores in the Santa Clara Valley that carry these products, visit <http://mywatershedwatch.org/localstores.html>. For stores in other Bay Area Counties, visit www.OurWaterOurWorld.org.

When you are buying pesticides, look for "shelf talkers" that make it easy for you to choose a less-toxic product. Shelf-talkers are labels placed on store shelves, in front of a product, to help you identify less-toxic products. The product name is listed in the white space.



Disposal of Pesticides

It is best to use up pesticides and fertilizers or give them to a friend or community group that will use them. Old or unused pesticides, fertilizers, and other household hazardous waste can be taken to a household hazardous waste drop-off site free of charge.

Santa Clara County Household Hazardous Waste Program (408) 299-7300 or visit www.hhw.org

Drop-off sites are open to all County residents (except Palo Alto residents). Scheduling your drop-off online is as easy as 1-2-3! You may also schedule your appointment by calling the number listed above. Residents can also pick-up leftover pesticides, fertilizers, paint and cleaning products at Reuse Centers.

City of Palo Alto (650) 496-6980

Monthly drop-offs are open to residents of Palo Alto. Call for more information or visit www.cleanbay.org.

City of Sunnyvale (408) 730-7262

Monthly drop-offs are open to residents of Sunnyvale. Call for more information or visit www.sunnyvalerecycles.org.

• For 24-hour information, please call 1 800 CLEANUP or visit www.1800cleanup.org. problems, call Santa Clara County Master Gardeners at (408) 282-3105 or email http://www.mastergardeners.org/email.

• Visit the University of California Statewide IPM Program (UC IPM) at <http://www.ipm.ucdavis.edu/index.html> for more information on IPM techniques.

Are you looking to hire someone to design or maintain your garden? Consider hiring a certified Santa Clara Valley Green Gardener, trained in sustainable landscaping practices.



**City of San José:
the IPM Innovator
Award Winner 2010**