UNIVERSITY OF THE PACIFIC

IPM Plan for Campus Landscape

Introduction

University of the Pacific recognizes that maintenance of a safe, clean and healthful environment for students and staff is essential to learning. It is the goal of the University of the Pacific to provide safe and effective pest management while protecting students, staff, the environment, and University of the Pacific properties and assets.

Statement of Purpose

The purpose of this integrated pest management (IPM) plan is a guideline for the application of best pest management strategies and control methods at University of the Pacific to enhance the health and safety of campus students, faculty, staff, and visitors along with protecting the environment. Although IPM does not exclude the use of pesticides, University of the Pacific encourages minimizing their use and using those that pose the least hazard to humans, animals, and the environment.

Goals

The goals of the IPM program at University of the Pacific are:

1. Protect human health and the surrounding environment by employing a range of preventative strategies and using best practices for pest suppression and eradication.
2. To strengthen and stabilize the landscape so that conditions are favorable for desirable plants and beneficial insects but unfavorable for pests.
3. Inspect and monitor pest populations to enhance control strategies.
4. Minimize the quantity and toxicity of chemicals used for pest management.
5. Minimize environmental impacts by using species-specific pesticides and targeting application areas carefully.
6. Establish clear criteria for acceptable circumstances in which using a pesticide is necessary; restricted materials are not used on the Pacific campus (Stockton). Appropriate pesticides shall only be used when there is a threat to public health and safety, or to prevent economic or environmental damage, and only after all other alternatives have been considered and are shown to be ineffective.

IPM Concepts

Integrated Pest Management, or IPM, is a broad-based approach to designing and maintaining landscapes in which pests, diseases and weeds are either prevented or suppressed using a combination of best practices (cultural, mechanical, biological or chemical). One of the characteristics of an IPM approach that makes it so effective is that the basic decision making process is the same for any pest problem in any location. The strategies and tactics may change, but the steps taken to decide if and when treatment is needed and which concepts to use are the same each time. These practices are based on the concepts of

- pest identification and damage recognition
- monitoring

- injury level and action threshold
- applying IPM best practices
- evaluate and adjust

Pest Identification and Damage Recognition

Pest identification is necessary for following pest development and activity. Early detection, monitoring seasons and weather, and recognizing pest damage allows for planning a program which will help in predicting if and when treatment is necessary.

Monitoring

Monitoring is the observation of the overall health of your landscape including development stages and life cycle events and how they relate to climatic conditions. Monitoring provides important field information on pest populations and their daily activity. The most important field information for making management decisions includes what species are present, the stage of development, the time of year they are present, factors controlling or favoring the pest, and natural enemies.

Injury Level and Action Threshold

The first step before determining any course of action is to determine the injury level. The injury level is the level of damage or the level of pest population that causes unacceptable injury. Once the injury level has been determined, an action threshold must be set. The action should occur before the situation progresses the point of unacceptable injury. The action threshold is the level of pest damage or number of pests that triggers treatment to prevent pest numbers from reaching the injury level.

Aesthetic injury applies mainly to the damage of plants. This is injury that affects the appearance without affecting the health of the plant.

Economic injury refers to pest damage that causes monetary loss.

Medical injury relates to human health problems caused by pests.

Criteria for Applying IPM Best Practices

Once the IPM decision making process is in place and monitoring indicates that pest treatment is needed, choose specific criteria that are:

- Least hazardous to human health
- Least disruptive of natural controls in landscape situations
- Least toxic to non-target organisms other than natural controls