Moving Toward Better Ant and Weed Management in Schools

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California schools are taking great steps forward in implementing integrated pest management (IPM) policies and practices according to a recently released report from the Department of Pesticide Regulation (DPR). Almost 70% of school districts reported adoption of an IPM program in 2004 and many now have policies that support IPM, such as requiring the use of least-toxic pest management practices or pest monitoring.

The widespread adoption of IPM in California schools appears to have been inspired by the passage of the Healthy Schools Act (HSA) in September of 2000. The Healthy Schools Act requires school districts to provide parents and guardians with written notification of pesticide products expected to be used in the district during the school year, keep a registry of parents and guardians wishing to be notified of individual pesticide applications, post warning signs on school grounds if pesticides are applied, and keep records of pesticide use for four years.

IPM is a voluntary component of the HSA but school district staff quickly found that an IPM program also helps in complying with the mandatory aspects of the law. For instance, use of self-contained baits is exempt from the posting and notification portion of the law. If a school chooses to use ant bait stations instead of an aerosol insecticide to control ants, they can eliminate the cost and labor associated with HSA required posting and notification of pesticide applications. This contributes to making IPM cost-effective in many cases.

According to the 2004 survey, large districts (those with over 7,500 average daily attendance), high school districts, and districts in large cities are most likely to have an IPM program. IPM programs are often not a priority for maintenance staff in small districts and are frequently seen as separate from maintenance programs. However, the key to IPM success in any district is to focus on pest prevention during routine maintenance. This could include caulking cracks in foundations, sealing around plumbing, heating, ventilation and air conditioning units, and other exclusion efforts that keep pests out of buildings. Simple steps like keeping exterior doors closed when not in use also keep many pests out.

The most cost-effective approach to pest prevention is to combine pest management tasks with regular maintenance activities.

The trend in schools is toward IPM-compatible ant management: using ant baits and sanitation instead of aerosol insecticides. In 2004, 69% of districts used ant baits, up from 50% in 2001. Improved sanitation helped 30% of the respondents manage ants, an increase of nearly 20% since 2002. Sanitation is a simple technique, and 90% of those surveyed in 2004 said it was at least somewhat effective in managing ants. Ant baits also scored high in effectiveness but not as high as sanitation. Baits must be placed correctly and monitored to ensure that ants are taking the bait. Prevention is key to managing ants and sanitation is an important part of prevention. In addition, good sanitation is essential to the long-term success of a baiting program and should be integrated into routine maintenance.

IPM-compatible weed management is not as commonly used as IPM-compatible ant management. Herbicides are still used extensively in California school districts, even though physical methods are common—cultivating, hoeing, mowing and hand-pulling. Most districts manage weeds with spot treatments of herbicides (82%) and some (38%) still use broadcast herbicide treatments, an increase of 15% since 2002. In an IPM program, herbicides should be used as a last resort and only after any underlying problems have been addressed. Herbicide use without adequate irrigation, fertility, aeration or drainage frequently leads to unhealthy turf and more herbicide use. Weeds, almost by definition, thrive in poor cultural conditions. Some progress in weed management has been made. More districts (30% since 2001) are using mulches and physical controls for weeds. Increase in the use of these and other IPM-compatible weed management methods indicate schools are making progress towards fully putting into practice the IPM element of the Healthy Schools Act.

So what are some low-cost ways to implement IPM-compatible weed management? Reducing excessive irrigation in a lawn can improve the competitiveness of some turf types and reduce the amount of common weeds like plantain, nutsedge and dallisgrass. More frequent aeration is an inexpensive practice and will help manage common kowetcode. A higher mowing height can reduce spurgis and Bermuda grass. You're never going to eliminate all weeds in a lawn, but with proper maintenance practices, you can stop them from becoming a problem.

Most California school districts are aware of IPM and have policies to support monitoring for pest presence and the use of least-toxic pest management practices. School maintenance personnel report greater use of self-contained baits and increased emphasis on sanitation to control ants. The 2004 survey found that weed management is more challenging for school staff than ant management, even though they are
aware of and use some IPM-compatible weed management practices.

The groundwork has been laid for more extensive adoption of IPM in California schools. DPR will continue to assist schools by offering hands-on IPM training workshops and IPM resources, such as the SIPM Guidebook and web site, www.schoolipm.info. The entire 2004 school IPM survey can be found on the school IPM Web site at http://www.cdpr.ca.gov/docs/pmap/schoolipm.htm.