

NATIONAL ROAD MAP FOR INTEGRATED PEST MANAGEMENT

May 17, 2004

FUTURE DIRECTION

Improve cost benefit analyses when adopting IPM Practices

Improving the overall benefits resulting from the adoption of IPM practices is a critical component of the National IPM Program. Conducting a “cost benefit” analysis of proposed IPM strategies is not based solely on the monetary costs. It is based on four main parameters: monetary, environmental/ecological health and function, aesthetic benefits, and human health.

While there may be many benefits from adoption of IPM practices, if new IPM programs do not appear to be as economically beneficial as practices already in place, they are not likely to be adopted. Risks and benefits need to be determined. A major factor in the adoption of IPM programs is whether the benefit to humans and the broader natural systems, outweighs the cost in implementing an IPM practice. Evaluation of the short and long term risks and benefits is needed.

Reduce potential human health risks from pests and related management strategies

IPM plays a major role in human health. Public health is dependent upon a continual supply of affordable, high quality food. IPM protects human health through its contribution to food security by reducing potential health risks and enhancing worker safety. Success in reducing the health risks from pest management practices themselves were measured in the past by tracking changes in the annual amount of pesticides used in the United States. While pesticide use information is relatively easy to collect, when used alone it is a poor indicator of human health risk, and more advanced systems of measurement are required.

Minimize adverse environmental effects from pests and related management strategies

IPM programs are designed to protect agricultural, urban and natural resource environments from the encroachment of native and non-native pest species while minimizing unreasonable adverse effects on soil, water, air and beneficial organisms. For example, in agriculture, IPM practices promote a healthy within crop environment, and conserve organisms that are beneficial to agricultural systems, including pollinators and natural enemies. By reducing off-target impacts, IPM also helps to maximize the positive contributions that agricultural land use can make to watershed health and function. IPM practices are used to suppress invasive species in natural wetlands ecosystems; the non-native invasive purple loosestrife for example is managed using a spot application of low risk, herbicide application for short-term control in conjunction with the release of biological control agents for long-term management.