


ARGUMENT A7	<h1>Long-term effects</h1>
	<h2>Environmental</h2>

Date (22/04/2010)

WHAT IS...	<p>During the growing season, farmers make quick decisions to reduce risks associated with the presence of pests. In urgent situations, chemical control is convenient and efficient. Nevertheless, its quick action should not hide long-term consequences such as resistance, the gradual elimination of beneficials and environmental and health impacts.</p> <p>Even though there are urgent and important situations that call for rapid action, farmers also make decisions of the slower type: regarding choice of crops and varieties, investment in heavy equipment, or marketing strategies. Whereas the decision to spray or not to spray a chemical, and the expected result of such decisions, can be extremely short-term, the process of switching to IPM and fully benefiting from it is slower. IPM therefore needs to find its place in the long-term strategic thinking of farmers.</p> <p>IPM, as any knowledge-intensive technology, requires much learning and problem solving in the beginning though much less once the solutions are developed. The net returns from a transition to IPM will increase more rapidly if farmers are part of a dynamic network that will more quickly circulate valuable site-specific information on these solutions.</p> <p>IPM is also more closely connected to natural processes. Some of these processes, such as the build-up of beneficials, can in some cases take a long time. In Canada, for example, a study on apples found that the maximum effect of beneficials against apple maggot (obtaining 91% clean fruit without insecticides) was attained only after five years. The persistence of seed-banks makes weed management a multi-year question. That's why ENDURE recommends that farmers reducing their reliance on herbicides consider cover cropping and diversifying their rotations.</p>
WHY	<p>The benefits of chemical crop protection are short term but their drawbacks tend to become apparent over the longer term. Conversely, the drawbacks of IPM are more significant in the initial stages of transition and their advantages appear in</p>

	<p>the longer term.</p> <p>It is important to talk about short term versus long term so that IPM can be included in the long-term strategic thinking of farmers. Because switching to IPM is challenging in the initial stages, farmers and advisers need to devise locally adapted solutions to overcome short-term drawbacks.</p>
HOW	<p>Take some time to talk about this issue with farmers. Come to your group with real-life illustrations of the short-term/long-term issue. Encourage your audience to give their opinion and share their experience and explore solutions.</p>
SOURCES	<ul style="list-style-type: none"> ▶ ENDURE Integrated Weed Management Case Study Guide 1. ▶ Bostanian NJ, Goulet H, O'Hara J, Masner L, Racette G. 2004. Towards insecticide free apple orchards: Flowering plants to attract beneficial arthropods. <i>BIOCONTROL SCIENCE AND TECHNOLOGY</i>, 14 :25-37.