

Question: What happens to an IPM program when growers are facing the potential introduction of quarantine pests such as Light Brown Apple Moth (LBAM)?

Answer: Well, that depends on what part of the IPM program you are talking about. Let's take monitoring as an example. Monitoring (scouting) is the foundation that supports a strong IPM program in any case. It helps find, identify, and quantify disease, pest, and weed populations so a grower can make intelligent pest management decisions. Usually a few pests can be tolerated on most crops for short periods; they can be left for natural biological control or environmental control mechanisms or the minor damage they cause can often be tolerated. With monitoring, the manager can decide when populations are heading toward levels that are not tolerable and control strategies can be implemented. Predators and parasites can be introduced into nursery stock early enough to be effective or more specific and less toxic insecticides could be applied when most appropriate and effective. The problem is that with a quarantined pest such as LBAM, there is no such tolerance for the pest. In this case, monitoring is used for finding any LBAM life-stages or similar leafrollers, and then they must be immediately and completely destroyed.

Question: So doesn't this "eradication" pose a conflict with the implementation of IPM?

Answer: Yes, in several ways. With an invasive pest, such as LBAM, you need to eradicate the pest, not just manage the pest at tolerable levels. If a regulatory inspection finds LBAM-- just one specimen-- it often means that all the nursery stock or crop is quarantined and a specified regulatory insecticide treatment is often applied to the *entire* nursery stock or crop. These insecticides purposely have activity on all life stages of LBAM. They often have a broad spectrum of activity and therefore can unfortunately kill beneficial insects that a grower is trying to maintain.

Question: Can't there be a less harmful treatment made when an invasive pest is detected?

Answer: Usually not, because, again, important invasive pests need to be eradicated quickly and efficiently. However, in the case with LBAM, regulatory officials are considering to allow a targeted insecticide application to the areas where LBAM life stages have been found. This "localized" application would be made instead of a mandatory insecticide treatment to the entire nursery. This targeted application would be triggered by an official regulatory detection and require that the nursery operator have an active and demonstrably successful IPM program, including monitoring, in place to control leafrollers (any leafroller). The advantage of this concept is that it uses inspectors and grower scouts to make smart and targeted treatments to areas most likely to contain LBAM. This would leave open large pockets of beneficial insects that could help fight LBAM or other leafrollers if they are re-introduced again. The cost to the environment and the grower's eradication costs could be significantly less than blanket pesticide applications. Follow-up regulatory inspections would determine if the treatments were effective before any plants would be shipped or sold.

