

NJ Department of Environmental Protection Pesticide Control Program Pesticide Evaluation & Monitoring

NJFMEP Integrated Pest Management (IPM) Survey - 2008

During the winter of 2008, the NJDEP Pesticide Control Program (PCP) provided licensed Private Applicators with the opportunity to receive 1 unit of Core credit for completing a survey. The survey was designed based on the results of the initial overview survey conducted during 2006-2007. This survey focused solely on IPM and asked specific questions relating to various aspects of an IPM strategy.

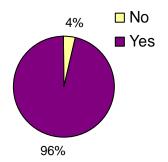
55 surveys were completed. The survey indicates that nearly all of the individuals surveyed regularly inspect their crops for pests and diseases, most on a weekly basis. More than half of those surveyed do the crop inspections themselves. Slightly less than half utilize traps to monitor changes in insect populations. When asked to identify their source to determine an economic threshold, 28% of the responses were Rutgers Extension recommendations/publications and 23% of the responses were personal experience. More than half of those surveyed indicated they use cultural controls (e.g. soil management, crop rotation) to manage pests, while less than one-third use mechanical controls (e.g. physical barriers) for pest management. Over 80% will remove or destroy potentially disease or pest-infested crops to minimize overall crop damage. Just less than 50% of the respondents use natural enemies (biological controls) to manage certain pests, while 67% will use biological insecticides whenever possible. 75% of those surveyed will use resistant crop varieties to control pests. More than 75% will only use synthetic pesticides when necessary and 84% believe that their dependence on pesticides has been reduced to IPM techniques.

While most individuals surveyed seem to feel the ecological benefits outweigh the potential additional expense associated with an IPM approach, some are still skeptical. These individuals indicated monetary compensation, more research or a guarantee are necessary before they will adopt an IPM strategy. The PCP will communicate these concerns to other agencies in the hope that their concerns will be eliminated and more NJ growers will adopt IPM strategies.

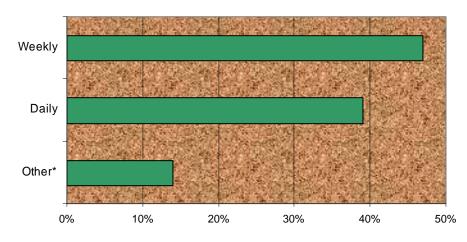
The specific responses to each survey question are presented as follows.

Monitoring

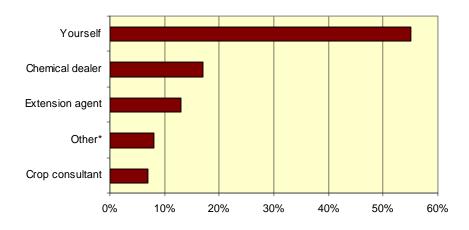
Do you inspect crops regularly for pests and diseases? There were 53 responses.



If <u>ves</u>: How often?



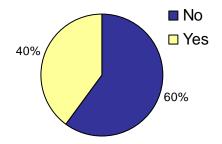
*The other responses included monthly, every other day and as needed.



Who does the monitoring?

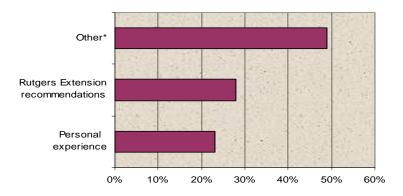
*The other responses included IPM coordinator, State Nursery Inspector and brother.

Do you use traps (pheromone, blacklight, etc.) to measure population changes?



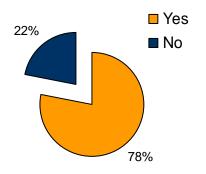
Thresholds

An economic threshold is reached when the cost of potential crop damage exceeds the cost of control. What source or reference do you use to determine an economic threshold? 43 responses.

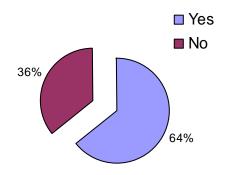


*The other responses included possible damage vs. cost of application, blacklight numbers, fresh market value, insect population, and chemical dealer.

<u>Cultural Controls</u> Do you manage soil (e.g. timely plowing or disking) to disrupt pest life cycles?

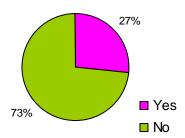


Do you rotate crops to avoid or minimize pests?

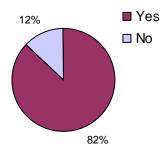


Mechanical Controls

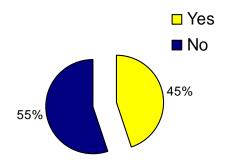
Do you use physical barriers (e.g. netting, row covers, screening, fencing) to separate pests from crops?



<u>Sanitation</u> Do you remove or destroy potentially diseased or pest-infested crops?

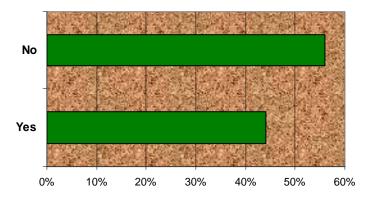


<u>Biological Controls</u> Do you use natural enemies (i.e. parasites and predators) to control certain pests?

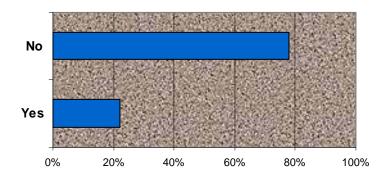


If <u>yes</u>:

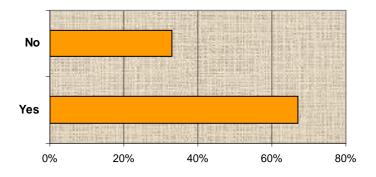
Do you allow naturally occurring beneficial organisms to build up to high levels to control pests?



Do you introduce beneficial organisms in controlled releases to control pests?

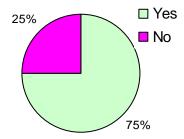


Do you use biological insecticides (e.g. bacteria, viruses, plant derivatives) whenever possible?



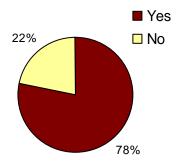
Resistant Varieties

Do you use resistant crop varieties to eliminate or reduce other forms of pest control?

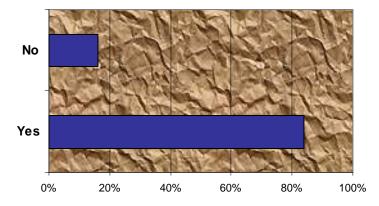


Pesticides

Do you use synthetic pesticides ONLY when necessary (i.e. when economic thresholds have been reached)?



Overall, do you find the dependence on pesticides reduced due to these approaches (i.e. IPM)?



If you currently DO NOT practice IPM, what would it take for you to adopt an IPM strategy? 13 responses. The responses included: monetary compensation to justify expense, more research to prove cost effectiveness, reassurance/guarantee, easy ways to apply.