

## Accompanying Questions to the Online Workshop: "Integrated Pest Management in Cranberries: An Overview" by Charles Armstrong, Cranberry Professional University of Maine Cooperative Extension

Workshop posted at:

https://extension.umaine.edu/cranberries/grower-services/workshops-and-meetings/

**Instructions:** You can email the information being asked on this form, as well as your quiz answers (or *photos* of the completed papers) to Charles Armstrong at <a href="mailto:charles.armstrong@maine.edu">charles.armstrong@maine.edu</a> or, alternatively, you can print out this completed page and your quiz answers, and mail to the Umaine Extension Diagnostic and Research Laboratory, c/o Charles Armstrong, 17 Godfrey Drive, Orono, ME 04473.

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- 1) **True or False:** IPM does not take into consideration any organic control options when seeking the solution to a pest problem.
- 2) Using what you now know about IPM, which of the following would be the best replacement for the word "Integrated" for describing what IPM is all about:
  - a. Instant
  - b. Intelligent
  - c. Impartial
  - d. Independent
- 3) Which of the following events in the history of IPM did not take place during the 1970s:
  - a. The USDA creates nationwide IPM programs at the Land Grant universities
  - b. Maine passes the "Maine Pesticide Control Act of [a certain year]"
  - c. Rachel Carson publishes Silent Spring
  - d. A lot of research is undertaken on the topic of IPM
- 4) **True or False:** The Maine State Policy regarding IPM includes the general public when it comes to educating people on the topic of "the proper use of pesticides."
- 5) **True or False:** Taking into account your **past history** with a given pest is something that is encouraged as part of cranberry IPM, rather than putting all of your trust solely in some other component of IPM (such as what your 'scouting' results are saying that you should do for a pest, in the case of—for example—an insect pest).
- 6) Which of the following statements is true about the core components of cranberry IPM?
  - a. Weed priority determinations were developed based on five different criteria.
  - b. Relying solely on your 'gut feeling' or the date on the calendar for the timing of a pesticide application is a good IPM philosophy or strategy.
  - c. Correct pest identification is less important than pest monitoring.
  - d. The practice of making a "weed map" has little value in a cranberry IPM program.
  - The most effective pest monitoring includes careful close-up "visual monitoring" rather than relying solely on sweep net catches.
- 7) **True or False:** Most of the highest priority weeds in cranberries are annuals rather than perennials.
- 8) **True or False:** Total weed eradication is considered a reasonable goal in cranberry IPM.
- 9) Which of the following statements about weeds is true?
  - a. All weeds are "created equal."
  - b. There are <u>four</u> groups of weed 'priority' in the priority system that UMass developed in 1995.
  - c. Weeding by hand is never effective.
  - d. Maintaining a neutral pH is a great way to reduce one's weed pressure.
  - e. "Priority 2" weeds are considered "weeds of little importance."

- 10) True or False: Yellow loosestrife is designated as a "Priority 1" weed.
- 11) Which of the following is false regarding dodder?
  - a. It's not a perennial weed (it's an annual).
  - b. Plants afflicted by dodder receive 'some' nitrogen from the dodder vines in exchange for the water and other nutrients that the dodder receives.
  - c. Dodder is parasitic on other plants.
  - d. Dodder plants cannot survive if they do not eventually find a host plant to infect.
- 12) Which of the following is *not* true?
  - a. Clopyralid is effective against clover.
  - b. Sedges and grasses that are perennials fall under a "Priority 3" ranking.
  - c. Napropamide is the active ingredient in Devrinol®.
  - d. The "Resistance Management Grouping" number given to the cranberry herbicides is determined based on each herbicide's mode of action.
  - e. Callisto® and Stinger® share the same mode of action, for how they work.
- 13) **True or False:** Annual sedges, annual grasses, and mosses, are all considered to be "weeds of little concern" to cranberries.
- 14) **True or False:** There are at least 24 insect pests that afflict cranberries, but only nine of them are known to be of any economic importance in cranberry.
- 15) **True or False:** Blackheaded fireworm is a very potentially destructive insect pest to cranberries in Maine, and it goes through 2 and sometimes 3 generations per year.
- 16) Which one of the following statements is **false**?
  - a. 'Sweeping' (with a 12"-diameter net) should be conducted once a week during the growing season, right up until at *least* the start of bloom.
  - b. Visual monitoring on your hands and knees can be just as important as 'sweep net' sampling, when looking for insect pests.
  - c. The thresholds used in cranberry IPM are true "economic" thresholds based on many years of research.
  - d. One arc of 180° (in one direction) with your net, equals "1 sweep"
- 17) **True or False:** In cranberry IPM, there are as many as **eight** (and perhaps more) factors that should be considered when deciding whether or not a 'treatment/action' is prudent or justified.
- 18) **True or False:** Confirm® and Intrepid® are IGR materials that would work well against cranberry weevils.

- 19) Which one of the following statements is true?
  - a. All of the neonicotinoids registered for cranberry have very low bee toxicity.
  - b. Spinosyns target an insect's digestive system.
  - c. IGRs generally are most effective when applied multiple times and in low gallonage against **small** caterpillars.
  - d. Organophosphates are 'soft' on natural enemies and pollinators.
- 20) Which one of the following statements is true?
  - a. Red Leaf Spot is considered by the industry to be a major cranberry disease.
  - b. Many of the various fruit rot fungi remain latent or dormant in the plant until the berry reaches a certain stage of maturity.
  - c. Cottonball is a huge problem in Massachusetts.
  - d. Precipitation and humidity are the only 'key' weather factors that play a role in cranberry plant disease infection.
  - e. The 'Disease Triangle' is made up of three components, and as long as you have at least *two* of those three components, a cranberry 'disease' can be the end result.
  - f. There are only three species of fungi that are associated with cranberry fruit rot.
  - g. Having a high water level in your ditches will help protect the crop from fruit rot.
  - h. 'Field rot' and 'storage rot' are caused by the same fungus.
  - i. 'False Blossom' disease is caused by a fungus that can be spread by honeybees while they are visiting the flowers.

## **Answer Sheet for:**

## "Integrated Pest Management in Cranberries: An Overview" University of Maine Cooperative Extension

YOUR NAME:			
A score of at least 80% correct will earn you one pesti license.	icide credit towards your pesticide		
To be safe, for 'true/false' questions, please write the entire word rather than just "T" or "F" so there is no confusion over which answer you mean.			
1)	11)		
2)	12)		
3)	13)		
4)	14)		
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6)	16)		
7)	17)		
8)	18)		
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