

IPM Jeopardy in Reverse

Diseases	Insects	Weeds	General IPM & Safety
100	100	100	100
200	200	200	200
300	300	300	300
400	400	400	400
500	500	500	500

Diseases

True or false? The development of powdery mildew is discouraged by rain.

Answer: True, powdery mildew is encouraged by hot humid conditions, but rain or free standing water actually discouraged the germinating of spores.

Diseases

If you encounter a patch of disease plants that were oozing a milky substance, what type of organism would you suspect is causing the disease?

Answer: The disease is most likely caused by a bacteria. Ooze is a means for the bacteria to be dispersed.

Diseases

What are the three sides of the Disease Triangle?

Answer: Host, Pathogen, Environment

Diseases

What does "damping off" mean?

Answer: Pre or post emergence rotting of seedlings either as they germinate or just as they are emerging. Seedlings collapse and fall over.

Diseases

What is a mycoplasma? Give an example.

Answer: : a bacteria -like organism without a cell wall e.g. Aster Yellows

Insects

What is a sex pheromone?

Answer: A chemical blend, usually emitted by the female insect, to attract the male for mating.

Insects

What is the difference between an action threshold, and an economic injury threshold?

*Answer: Action threshold; The density of pests at which control measures should be applied; lower than the EIL
EIL: the pest density that causes damage equal in value to the cost of treatment*

Insects

How do you calculate growing degree-days for insects?

Answer: : Add the daily maximum and minimum temperatures, divide by 2 to get the average, and subtract the base temperature (which is pest specific).

Insects

What life stages does an insect with complete development pass through?

Answer: Egg, larva, pupa, adult

Insects

Name three beneficials that you might find associated with aphids and mites.

Answer: ladybird beetles, lacewings, syrphid fly larvae, parasitic wasps, predatory mites, minute pirate bugs, spider mite destroyers, etc...

Weeds

What are the first leaves that emerge from a broadleaf weed seed called?

Answer: cotyledons

Weeds

What is the typical growth form of many winter annual weeds in the fall?

Answer: rosette

Weeds

I found a grass-like seedling that has shiny leaves and a triangular stem.
What is it?

Answer: a sedge plant, likely yellow nut sedge

Weeds

One of the common grass seedlings is often referred to as "naked", because it has no ligule. What is it?

Answer: barnyard grass

Weeds

Weeds that emerge early in the growing season often compete more strongly with crops and can cause greater yield losses than weeds that emerge later in the season. What is this important time called?

Answer: Critical period of weed control

General IPM & Safety

What are three key things you should do to keep yourself healthy and safe when monitoring?

Answer: Check spray records; Wear sunscreen; Wear insect repellent; Wear long-sleeved shirt; Wear a hat; Drink lots of water

General IPM & Safety

An IPM program requires 5 basic components to be successful. What are the three components that a scout needs to know and understand?

Answer: 1. Pest biology and behaviour
2. Monitoring techniques
3. Recording keeping

The grower uses these: Economic thresholds,
Use and timing of management tools,
Resistance management strategies

General IPM & Safety

Do the most toxic pesticides have a low or high LD50?

Answer: Low LD50

General IPM & Safety

What are three important pieces of information to include in your scouting report to the growers?

Answer: Quantity: Numbers!!!!

Age of injury: Don't count the damage twice

Distribution: Is it wide spread? Or not?

Development of pest and the crop

Patterns, extent and location

Field location

General IPM & Safety

What is the difference between economic injury level and a treatment threshold.

Answer: Economic injury level (EIL) is the highest density of the pest that can be tolerated without significant crop loss.
Treatment threshold (TT) (action or economic threshold) is the density at which control is needed to prevent pest densities from exceeding EIL