

Weather & Pesticides II Quiz - Yes or No

1. The recommended time frame for scheduling pesticide applications based on advance weather forecasts is 6-10 days prior.
2. In measuring weather conditions, the direction the wind is coming from is recorded first.
3. When measured in degrees, 180° is due west.
4. Three wind speed measurements need to be considered in spray applications – current, average and maximum.
5. A compass should always be kept in your car ready for use.
6. If you have to spray in hot temperatures increase pressure and decrease droplet size to minimize drift.
7. Weather data measurements only need to be taken prior to pesticide applications to determine if there is suitable weather for spraying.
8. Wind Chill and Heat Index each combine two of these three measurements- temperature, humidity and wind speed.
9. When the dew point temperature = the air temperature, dew forms.
10. Hollow Cone Spray Nozzles have a fine spray pattern suitable to use with contact fungicides and insecticides.
11. Spray drift and vapor drift are likely to affect the same off-target sites.
12. Using soil can reduce pesticide spray drift.
13. Wind is the only significant weather factor determining the distance drift travels from target sites.
14. Based on current technology and weather research, current weather forecasts cannot be made more accurate.
15. Weather stations are affordable for small businesses.

Quiz based on questions from the Measuring Weather Issues Core Pesticide Update II,
by Linda S. Wiles, Penn State Extension, July 31, 2007

Weather & Pesticides II Quiz - Yes or No

1. The recommended time frame for scheduling pesticide applications based on advance weather forecasts is 6-10 days prior.

Yes. 6-10 days is recommended.

2. In measuring weather conditions, the direction the wind is coming from is recorded first.

Yes. Once you know which direction the wind is coming from, you can assess the wind speed also.

3. When measured in degrees, 180° is due west.

No. Due west is 270°.

4. Three wind speed measurements need to be considered in spray applications - current, average and maximum.

Yes. All three provide a better snapshot of potential problems.

5. A compass should always be kept in your car ready for use.

No. Extreme heat or cold in cars will affect the accuracy of the compass.

6. If you have to spray in hot temperatures increase pressure and decrease droplet size to minimize drift.

No. Reverse this - decrease pressure and increase droplet size to minimize drift.

7. Weather data measurements only need to be taken prior to pesticide applications to determine if there is suitable weather for spraying.

No. They should also be taken during and after application to verify any problems, including possible need to reapply.

8. Wind Chill and Heat Index each combine two of these three measurements- temperature, humidity and wind speed.

Yes. Wind Chill measures wind and temperature, while heat index measures temperature and humidity.

9. When the dew point temperature = the air temperature, dew forms.

Yes. Also, when they are almost equal, it feels humid. If air temperature <32°F, frost forms.

10. Hollow Cone Spray Nozzles have a fine spray pattern suitable to use with contact fungicides and insecticides.

Yes. These are also suitable for post-emergent herbicides.

11. Spray drift and vapor drift are likely to affect the same off-target sites.

No. Spray drift will often be localized, while vapor drift can move considerable distances off-site.

12. Using soil can reduce pesticide spray drift.

Yes. Incorporation of pesticides into the soil, adding finer soil particles to the surface soil or irrigating the soil are all ways to limit drift.

13. Wind is the only significant weather factor determining the distance drift travels from target sites.

No. Extremes in heat and humidity can also have significant effects on the distance drift travels.

14. Based on current weather technology and weather research, weather forecasts cannot be made more accurate.

No. Incorporating vegetation/photosynthesis and soil moisture models along with weather models can increase accuracy between 5 and 50%.

15. Weather stations are affordable for small businesses.

Yes. A portable hand-held weather station and compass can be obtained for about \$150.00 or less.

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