

Student Name \_\_\_\_\_

Weed Science, PLS 4601c Section 7644  
and Grad. – Prin. Of Weed Science AGR 6932 Section 9212  
University of Florida - Davie

<http://grove.ufl.edu/~turf/weedscience/>

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July 23, 2009

**Hour Test 2 (circle the right answers)**

**Take-home, open-book (includes Internet), no helping or getting help**

**Send answer to: [turf@ufl.edu](mailto:turf@ufl.edu) by 11:59 pm, Monday, August 3**

**Invasive weeds**

1. Which invasive weed is a vine?
  - a) catclaw mimosa
  - b) cogongrass
  - c) hydrilla
  - d) kudzu
  - e) paperbark tree
2. Which invasive weed is a poisonous shrub?
  - a) hydrilla
  - b) kudzu
  - c) Old World climbing fern
  - d) paperbark tree
  - e) tropical soda apple
3. Which invasive weed is not a flowering plant?
  - a) *Dioscorea bulbifera*
  - b) *Imperata cylindrica*
  - c) *Lygodium microphyllum*
  - d) *Neyraudia reynaudiana*
  - e) *Pistia stratiotes*

4. Which invasive weed is a monocot?
  - a) air potato
  - b) hydrilla
  - c) kudzu
  - d) Old World climbing fern
  - e) Waterlettuce
5. Which invasive weed is a dicot?
  - a) Hydrilla verticillata
  - b) Imperata cylindrica
  - c) Neyraudia reynaudiana
  - d) Pistia stratiotes
  - e) Solanum viarum
6. Of the 10 invasive weeds on Weed Set 2, which do you think is the most dangerous and why?

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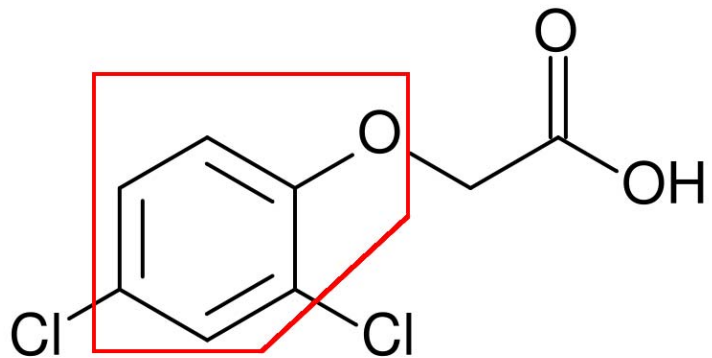
**Herbicides**

7. Which herbicide is an ALS inhibitor:

- a) atrazine
- b) glyphosate
- c) imazapyr
- d) oxadiazon
- e) paraquat

8. What is the functional group in the 5-sided box?

- a) aniline
- b) glycine
- c) methyl
- d) phenoxy
- e) triazine



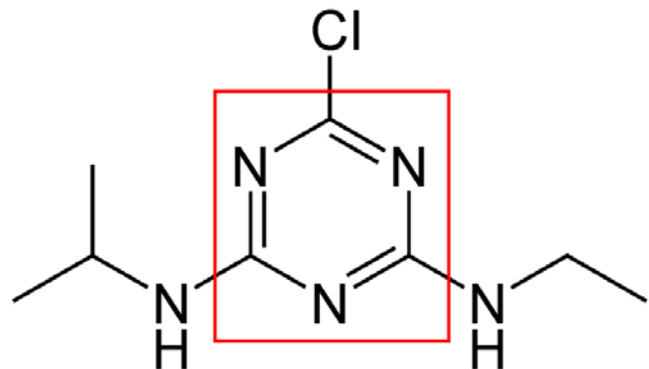
9. Which heavy element occurs in one of the herbicides we studied?

- a) As
- b) Cl
- c) F
- d) H
- e) O

10. Which herbicide most commonly kills people?

- a) atrazine
- b) glyphosate
- c) metsulfuron
- d) paraquat
- e) table salt

11. Herbicides such as 2,4-D that are in the phenoxy family:
- a) Affect mostly grasses
  - b) Affect mostly sedges
  - c) Affect mostly broadleaf weeds
  - d) All of the above
  - e) None of the above
12. The strong covalent carbon ring which is derived from benzene is represented in which functional herbicide group?
- a) amino
  - b) carbamate
  - c) carboxyl
  - d) methyl
  - e) phenyl
13. What is the functional group in the square box?



- a) aniline
- b) glycine
- c) methyl
- d) phenoxy
- e) triazine

**Herbicide labels, application, and the law**

14. The web site [www.safepesticideuse.com](http://www.safepesticideuse.com) is the best place to find information on:
  - a) Florida pesticide certification and licensing
  - b) PPE (Personal Protective Equipment) for each herbicide
  - c) recommendations on Florida crop management including weed control
  - d) sample labels for herbicides
  - e) the risks of using herbicides
15. The web site [www.cdms.net](http://www.cdms.net) is the best place to find information on:
  - a) Florida pesticide certification and licensing
  - b) PPE (Personal Protective Equipment) for each herbicide
  - c) recommendations on Florida crop management including weed control
  - d) sample labels for herbicides
  - e) the risks of using herbicides
16. The web site [edis.ifas.ufl.edu](http://edis.ifas.ufl.edu) is the best place to find information on:
  - a) Florida pesticide certification and licensing
  - b) PPE (Personal Protective Equipment) for each herbicide
  - c) recommendations on Florida crop management including weed control
  - d) sample labels for herbicides
  - e) the risks of using herbicides
17. Liquid formulations of Atrazine are RUPs (restricted use pesticides) because of concern over?
  - a) cross-contamination
  - b) danger to fish
  - c) endangered species
  - d) solubility
  - e) toxicity

18. What is a major impediment to safe, effective boom spraying?
- a) wind
  - b) high humidity
  - c) difficulty of calibrating equipment
  - d) inconsistency of spray nozzles
  - e) variability in pump discharge
19. A method for solving conversion problems was presented in class that involved cancelling out terms between the numerator and denominator. The setup involved multiplying what was given (nozzle discharge, ground speed, and nozzle spacing on the boom) by one or more equivalences, e.g., 12 inches = 1 foot, therefore  $1 = 12 \text{ inches /foot}$ . Why is it okay to do this?
- a) multiplying by 1 changes nothing.
  - b) the EPA requires this method be used
  - c) it's faster than looking up a number in a book
  - d) it's a way of getting around not knowing the nozzle spacing
  - e) it works fine for liquids, not for solids.
  - f)
20. A symbol for a granular herbicide is:
- a) W
  - b) WDG
  - c) WPG
  - d) WS
  - e) WSP

For the following questions, these equivalents are important. Make sure to set up the problems correctly and show your work.

1 acre = 43,560 square feet

1 gallon = 3785 ml

1 pound = 454 g

1 mile = 5280 feet

21. A farmer is boom spraying at 5 miles per hour, the nozzles discharge 64 ounces per minute per nozzle, and they are 18 inches apart on the boom. How many gallons per acre are applied? Show your work. Continue on the reverse if necessary (10 pts).

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22. Spraying at 40 gallons per acre, how many acres can be treated with a 300 gallon spray tank. Show your work. Continue on the reverse if necessary. (10 pts)

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23. If someone in Florida wants to become a Pest Control Operator to perform contract pest control on Florida lawns and ornamentals, e.g., residential homes and businesses, they must be licensed under Chapter 482, not under Chapter 487 which only qualifies for applications to your own or your employer's property. This document distinguishes the two types of licenses:

<http://edis.ifas.ufl.edu/PI006>

More details on the 487 license are here:

<http://safepesticideuse.com/complimonitoring/databasesearch/applcert&licensing.html>

For the 482 Pest Control Operator license:

What are the additional restrictions and requirements compared with the 487 license?

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Compare the fees for the two different kinds of licenses

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Explain why you think there are two different licensing systems and whether this is justified:

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