

Weed Management in Peach Orchards and Sprayer Calibration

Dr. Peter Dittmar

Horticultural Sciences Dept.



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Preemergence herbicide options

- Alion
 - 5 - 6.5 fl. oz.
- Chateau
 - 6 to 12 oz.
- Diuron, Karmex, Direx
 - 2 – 2.75 lb.
 - 1.6 – 2.2 qt.
- GoalTender
 - 2.5-4 pt.
- Solicam
 - 1.25 – 1.5 lb.
- Oryzalin, Surflan
 - 2 – 6 qt.
- Prowl H₂O
 - 2 to 6.3 qt.
- Princep, Simazine
 - 1.4 – 4 qt.
 - 1.6 – 4.4 lb.
- Sinbar
 - 0.5 – 2 lb.
- Treflan
 - 1 – 1.5 pt.

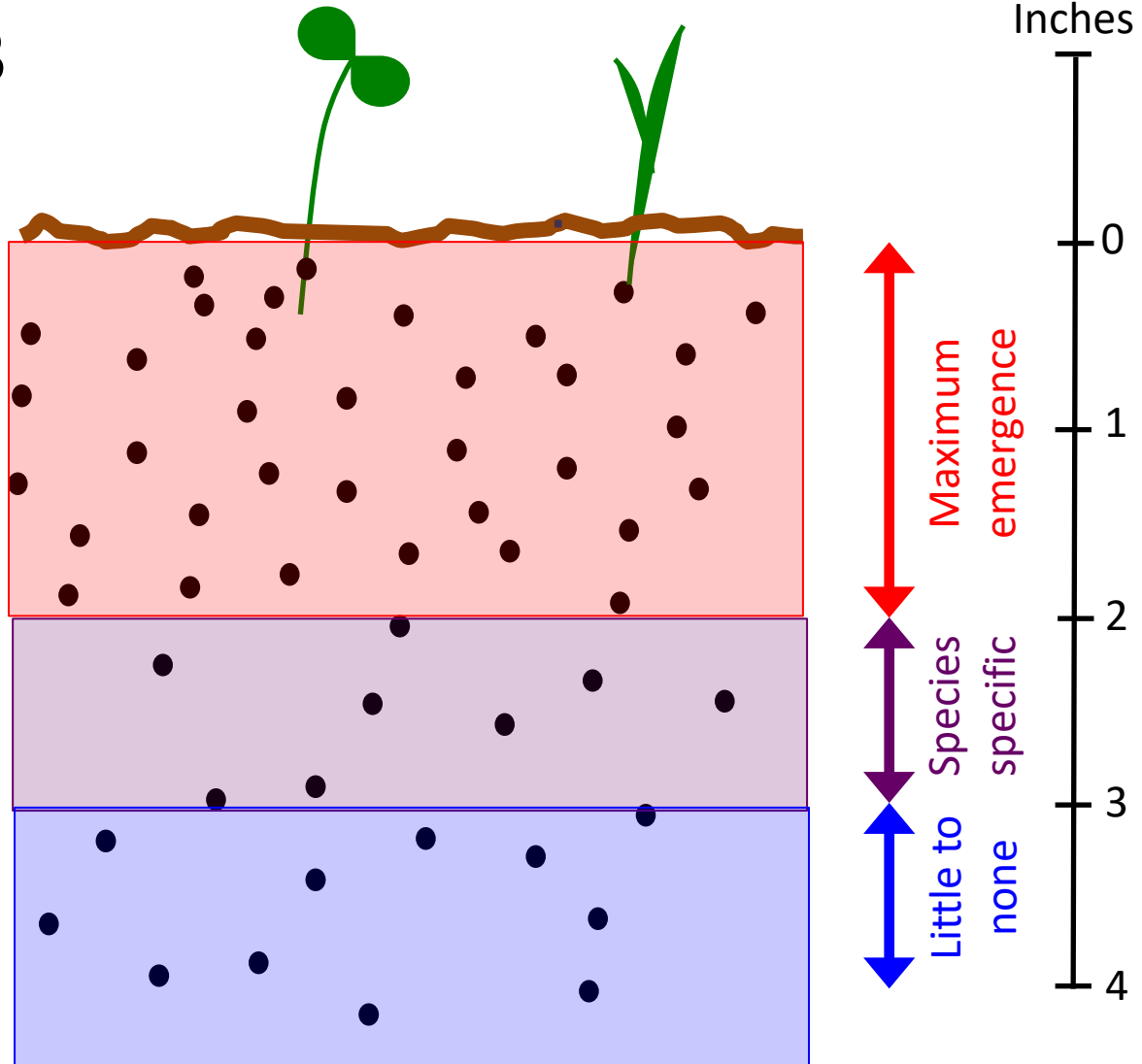
Preemergence new trees (<3 yr.)

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Incorporating preemergence

- Incorporate 2 to 3 inches deep
 - Cultivation
 - Irrigation
 - Rainfall
- Within 24 hours

**TOO
DEEP**



Broadleaf POST herbicides

- Aim
 - 0.5 – 2 fl. oz.
- Firestorm/Gramoxone
 - 1.7-2.7 pt./2.5-4.0 pt.
- Glyphosate
 - Consult individual labels
- Matrix
 - 2-4 oz./A
- Rely/Cheetah/Forfeit/Lifeline
 - 48 – 82 fl. oz./A
- Stinger
 - 0.3 – 0.7 pt.

Nutsedge control in Peaches

- Correctly identify
 - Triangular stems and flower heads
- Glyphosate
- Matrix 2-4 oz./A



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Herbicide application

$$\text{GPM} = \frac{\text{GPA} \times \text{MPH} \times \text{Band Width (in)}}{5940}$$



$$\text{GPA} = \frac{(\text{GPM} \times 5940)}{\text{MPH} \times \text{W}}$$

Herbicide application

- Gallons per Acre
 - Most herbicide labels suggest 15 to 20 GPA
 - Some may allow higher (I discourage.)
 - Hand pump sprayers can not be calibrated
- MPH
- Band width

$$\text{GPM} = \frac{\text{GPA} \times \text{MPH} \times \text{Band Width (in)}}{5940}$$



Herbicide application

- Gallons per Acre
- MPH
 - Flag a path in the orchard
 - Record the tractor gear/throttle and adjust if necessary
 - If apply with a backpack, use a metronome
- Band width

$$\text{GPM} = \frac{\text{GPA} \times \text{MPH} \times \text{Band Width (in)}}{5940}$$



Herbicide application

- Gallons per Acre
- MPH
- Band width
 - Spacing between the nozzles
 - If using a single nozzle then it is the band width

$$\text{GPM} = \frac{\text{GPA} \times \text{MPH} \times \text{Band Width (in)}}{5940}$$



Air blast sprayer

- Check speed
- Ribbons or spray cards in the tree to determine the appropriate coverage in the tree
- Connect the tubes for collecting water
- Using the GPM formula calculate the output of each nozzle





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Questions.

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