

# Forming the Perfect Bed and Fumigation



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# Methyl Bromide

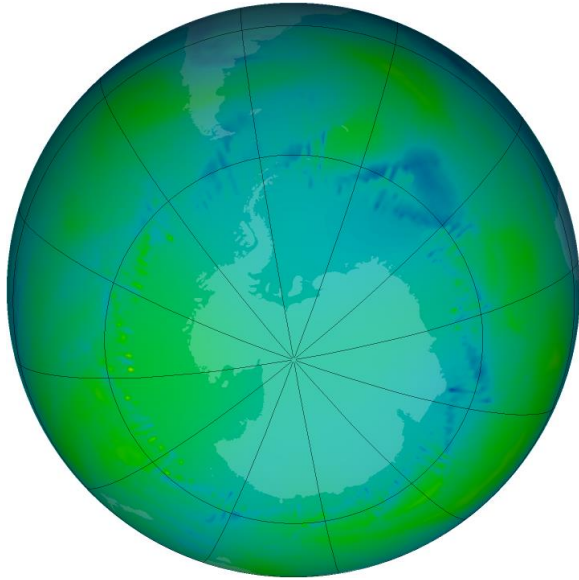
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- Over 50 years of use
- 1990 Montreal Protocol and Clean Air Act: methyl bromide was classified as a class 1 ozone depleting substance and for its gradual removal from the market.

1 August 2005

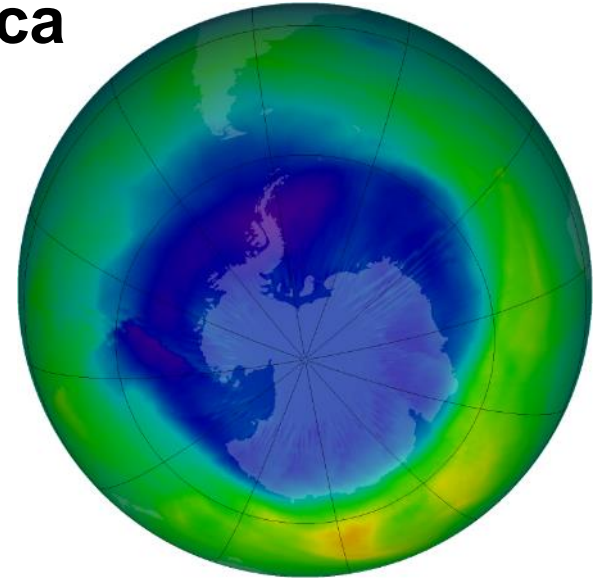
# Ozone layer in Antarctica

1 September 2005



Total Ozone (Dobson Units)

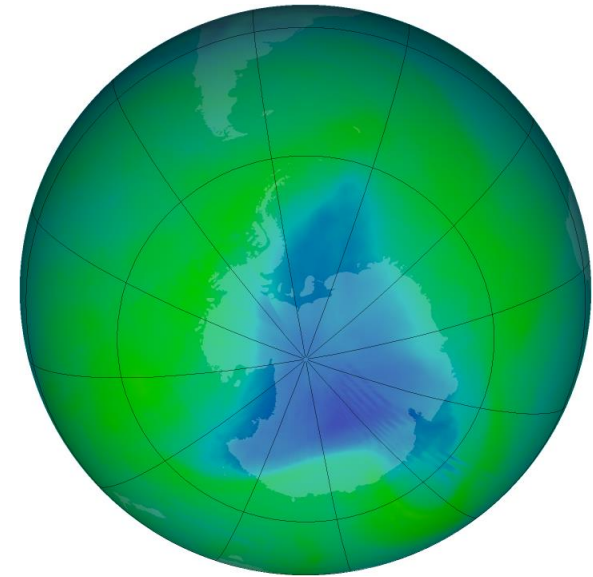
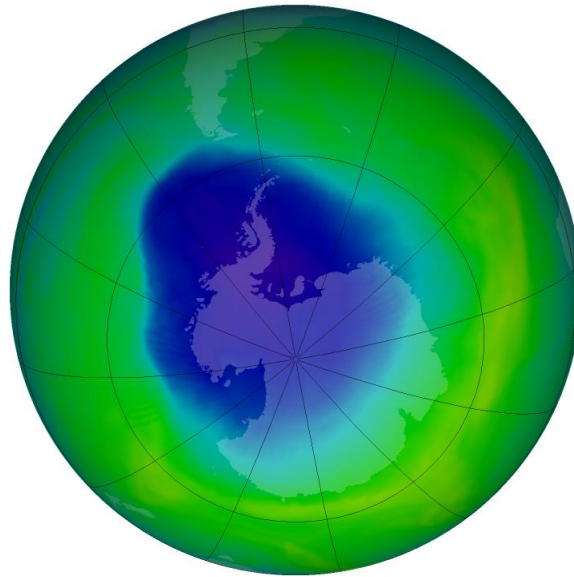
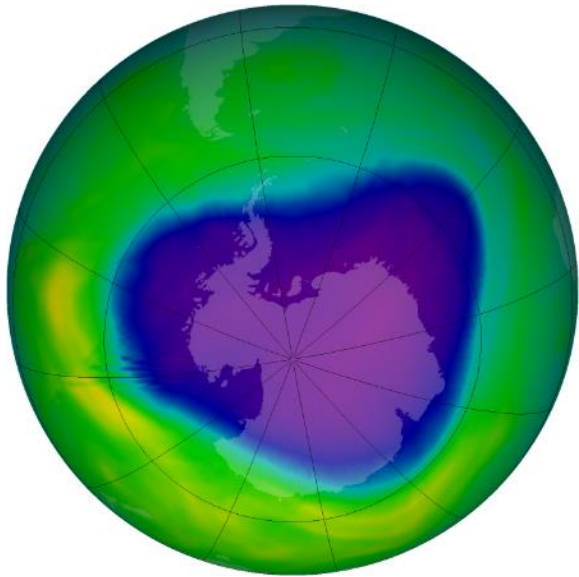
110 220 330 440 550



1 October 2005

1 November 2005

1 December 2005



<http://ozonewatch.gsfc.nasa.gov/index.html>



# Production Challenges

## BED FORMATION



**Proper bed facilitates better fumigant, water & fertilizer movement**

# 2020 Fumigant Systems For Weeds

~~1. Paladin Pic + Metam TIF~~

All common  
weeds

2. T2/Pic/Metam\* TIF

~~3. Paladin Pic TIF~~

Good nutsedge, watch  
grass and pigweed

4. T2/Pic/Metam LDPE

Watch nutsedge, good  
grass and pigweed

5. Pic Chlor 60 TIF

Watch nutsedge, grass,  
and pigweed...  
...nematodes??

\*UGA 3-WAY: system of Telone II, Pic, Metam



**Better management  
is needed with  
fumigant system**

**Moisture  
No Trash  
Hopefully no clods  
Flat smooth fields**

**Bed shoulders can  
tell us the story**





**Can help with, trash, weeds and diseases**



# Ideal Bed Formation

P  
E  
S  
T  
  
C  
O  
N  
T  
R  
O  
L

P  
L  
A  
N  
T  
  
B  
A  
C  
K



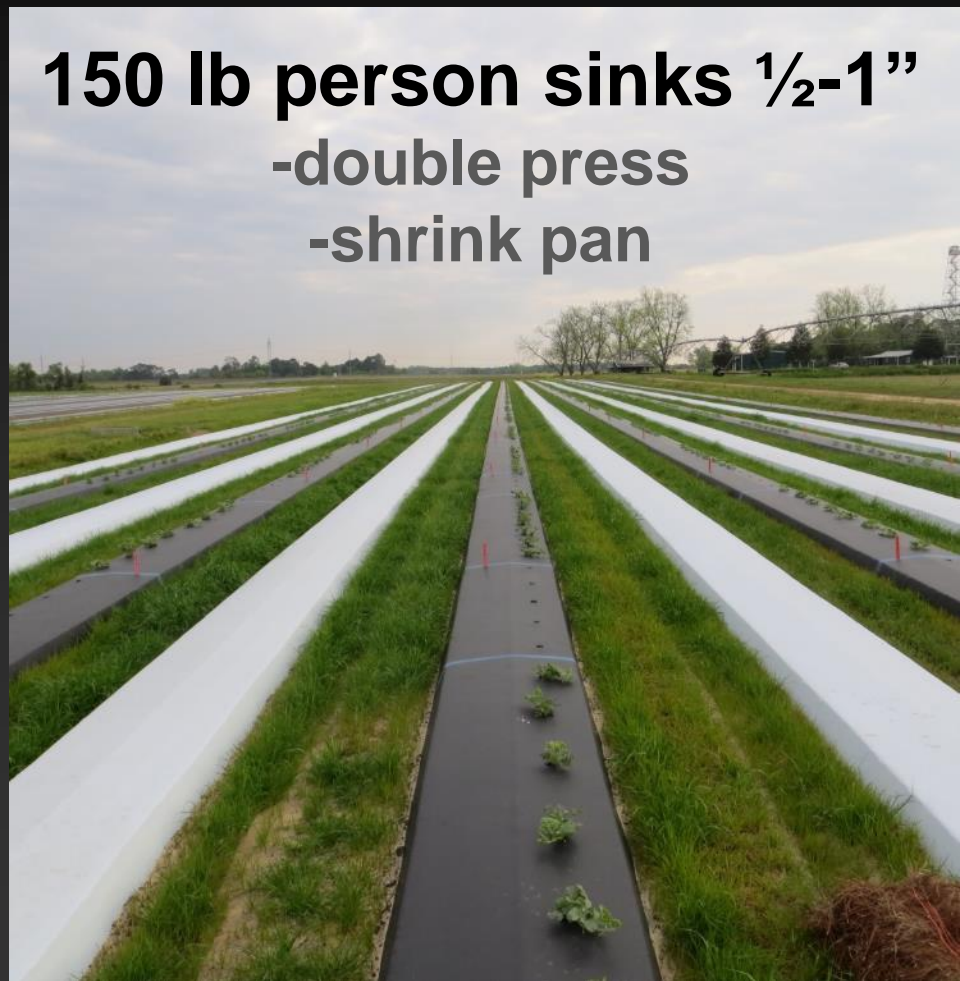
**concentration over time**  
(where the pest is located)



# Production Challenges

## BED FORMATION

**150 lb person sinks ½-1"**  
-double press  
-shrink pan



**Proper bed facilitates better fumigant, water & fertilizer movement**



# Telone II Application 12 to 14 " deep





**Chloropicrin placed  
8-10" deep**



**Pre-bedder pan 10  
inch tall 34 inch wide**



# On some soils, need to be creative





# Metam Application blades 4" apart 4" deep

Final bed pan 8 inch  
tall 32 inch wide





# Either LDPE or TIF Mulch Depending on Nutsedge Control Needed!





# UGA 3-WAY. Fall 2013. Tift Co.

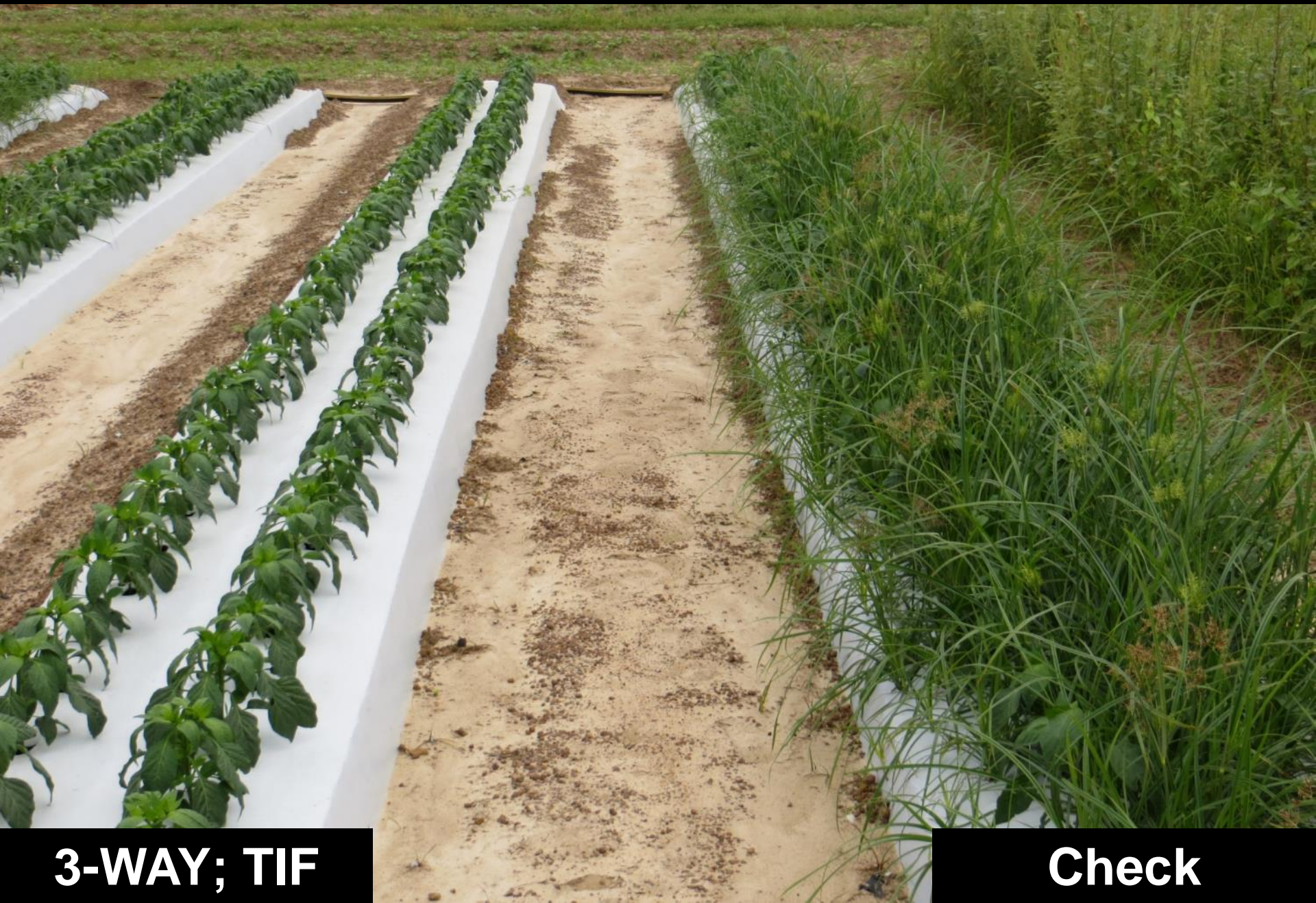


**Check**

**3-WAY; LDPE**



# UGA 3-WAY. Fall 2013. Tift Co.



**3-WAY; TIF**

**Check**



# TIF MULCH

## PLANT BACK INTERVALS

P  
E  
S  
T  
  
C  
O  
N  
T  
R  
O  
L

P  
L  
A  
N  
T  
  
B  
A  
C  
K



**concentration over time**  
(where the pest is located)

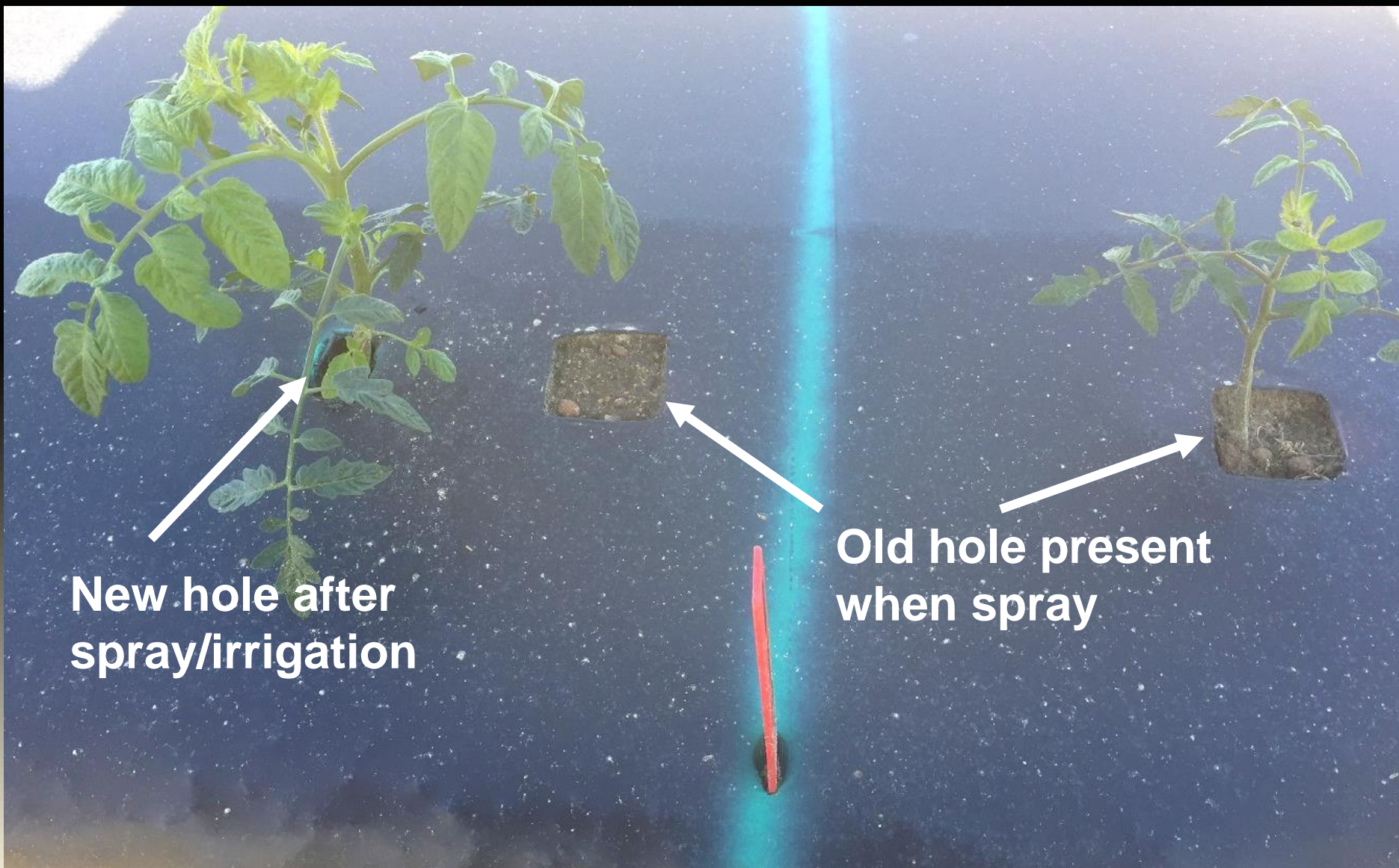
# Herbicides Under Mulch If No Metam



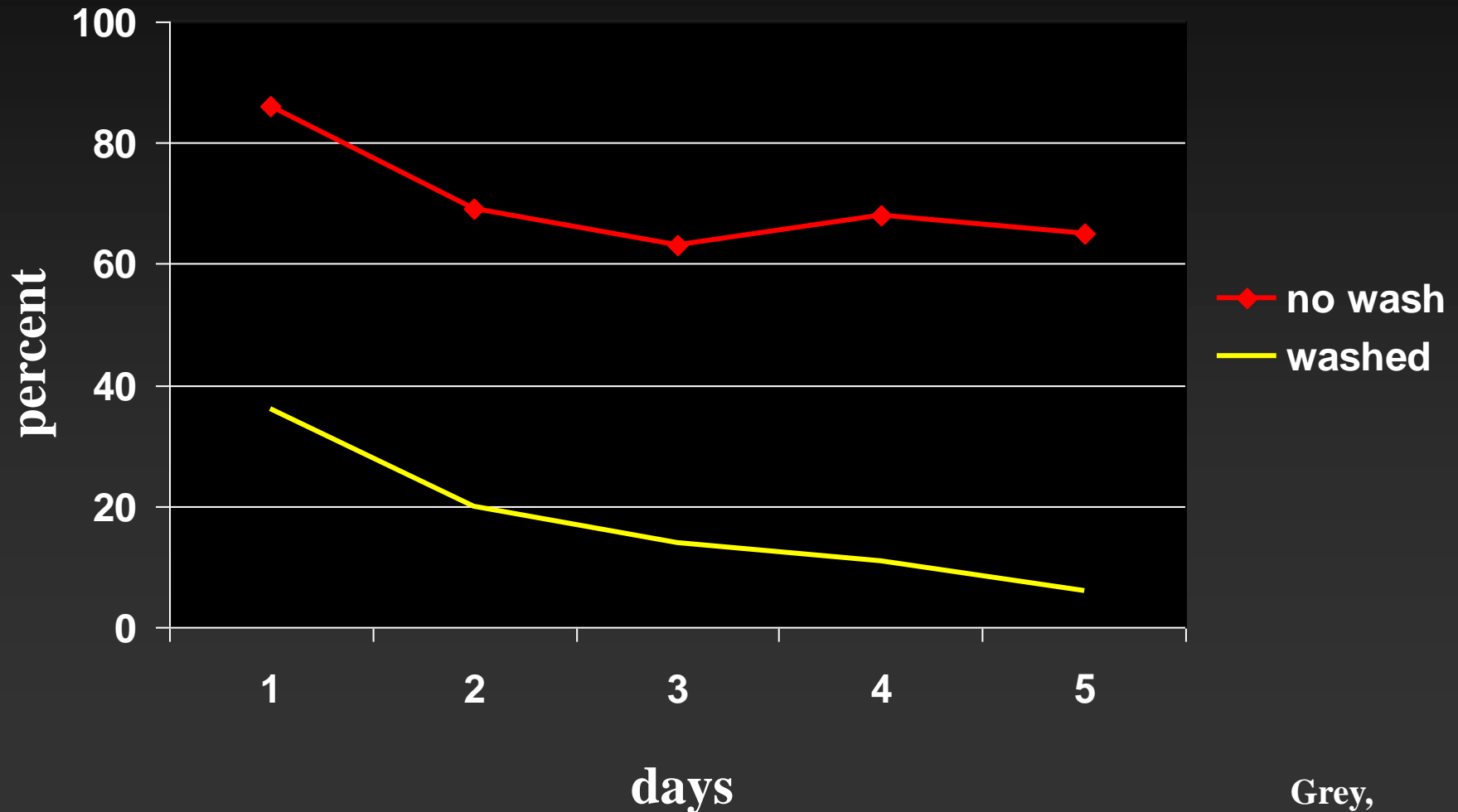
Herbicides under mulch generally don't perform well and can be problematic (injury, carryover, etc.)



# Roundup PMAX 64 oz/A Applied Over Mulch Followed by 0.5" Irrigation Before Transplant



# Amount of Sandea remaining on plastic mulch. TyTy GA, 2005.



Grey,  
Culpepper



# Questions

