

MB Alternatives – Almost DONE!!!



Culpepper and Sumner
University of Georgia
Tifton Campus

Viabie MB Fumigant Alternatives

1. MIDAS
2. 3-WAY
3. Paladin

Herbicides

MIDAS

1. Application procedure similar to MB
2. MIDAS is a 50:50 or 98:2 mix with Pic
3. Use rate similar to MB
4. Reduce use rate 40% under VIF mulches.

**Effective product but limited adoption
because of economics.**

Telone/Pic/Vapam

Spring applications = 16 of 17 experiments over 4 years with greater than 93% nutsedge control

Ideal Placement

Vapam = 4 inches

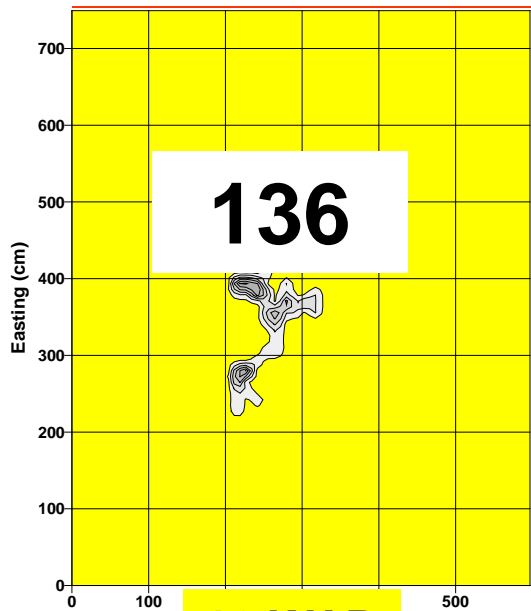
Chloropicrin = 8 inches

Telone = 12 inches

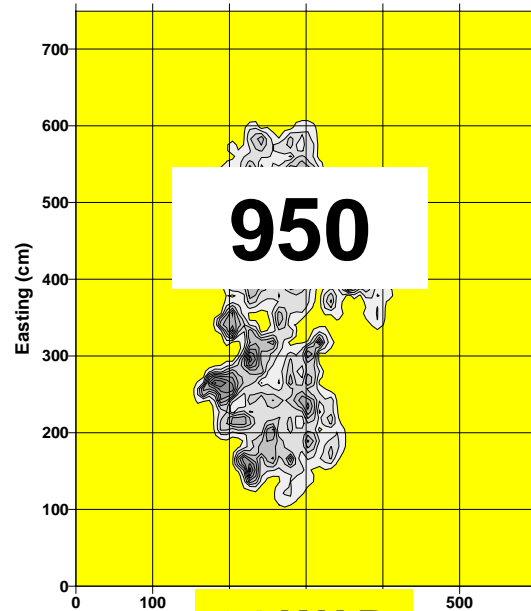


20 feet

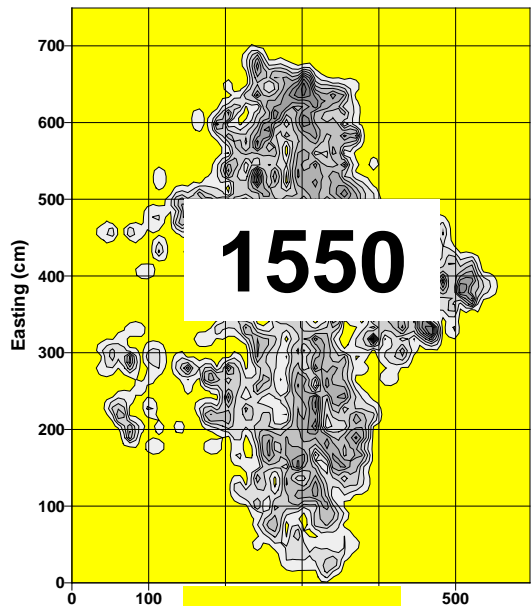
25 feet



16 WAP

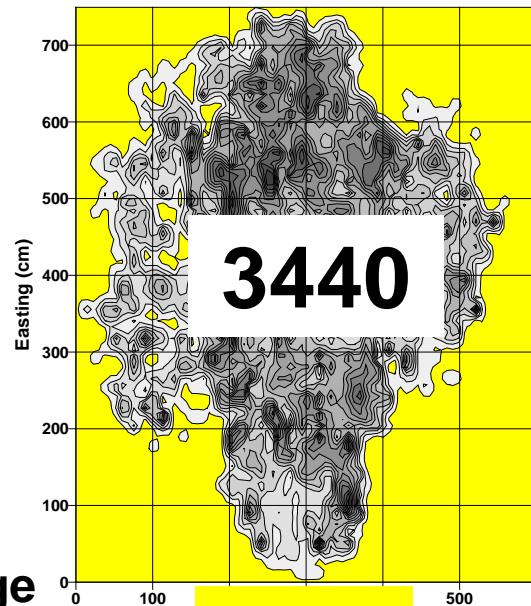


24 WAP



32 WAP

1550



60 WAP

Purple Nutsedge
Black LDPE Mulch



Note moisture
and compaction

Telone II fb
Vapam

LDPE mulch

Telone II fb
Pic

LDPE mulch

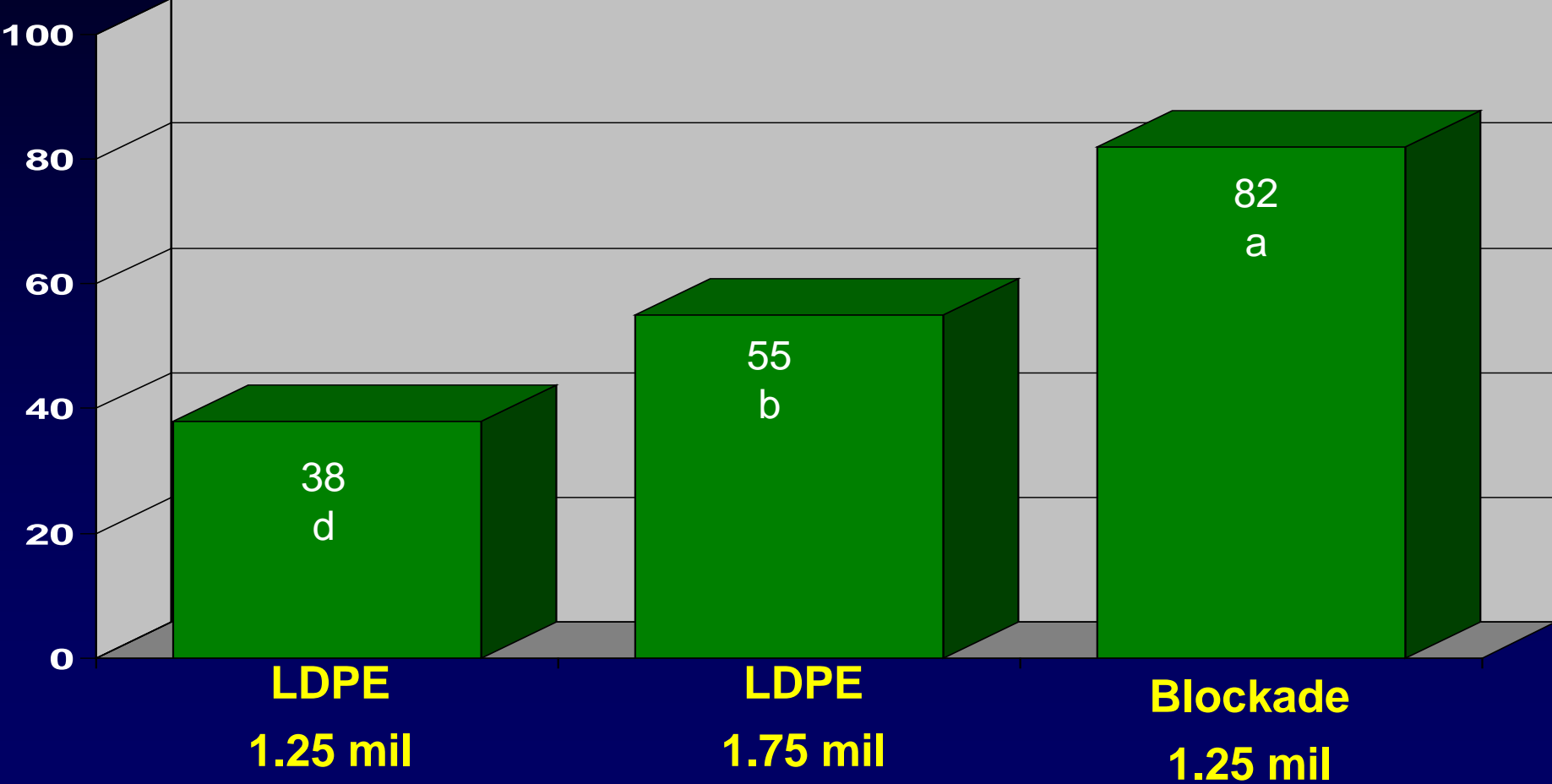
Telone II fb
Pic fb Vapam

LDPE mulch

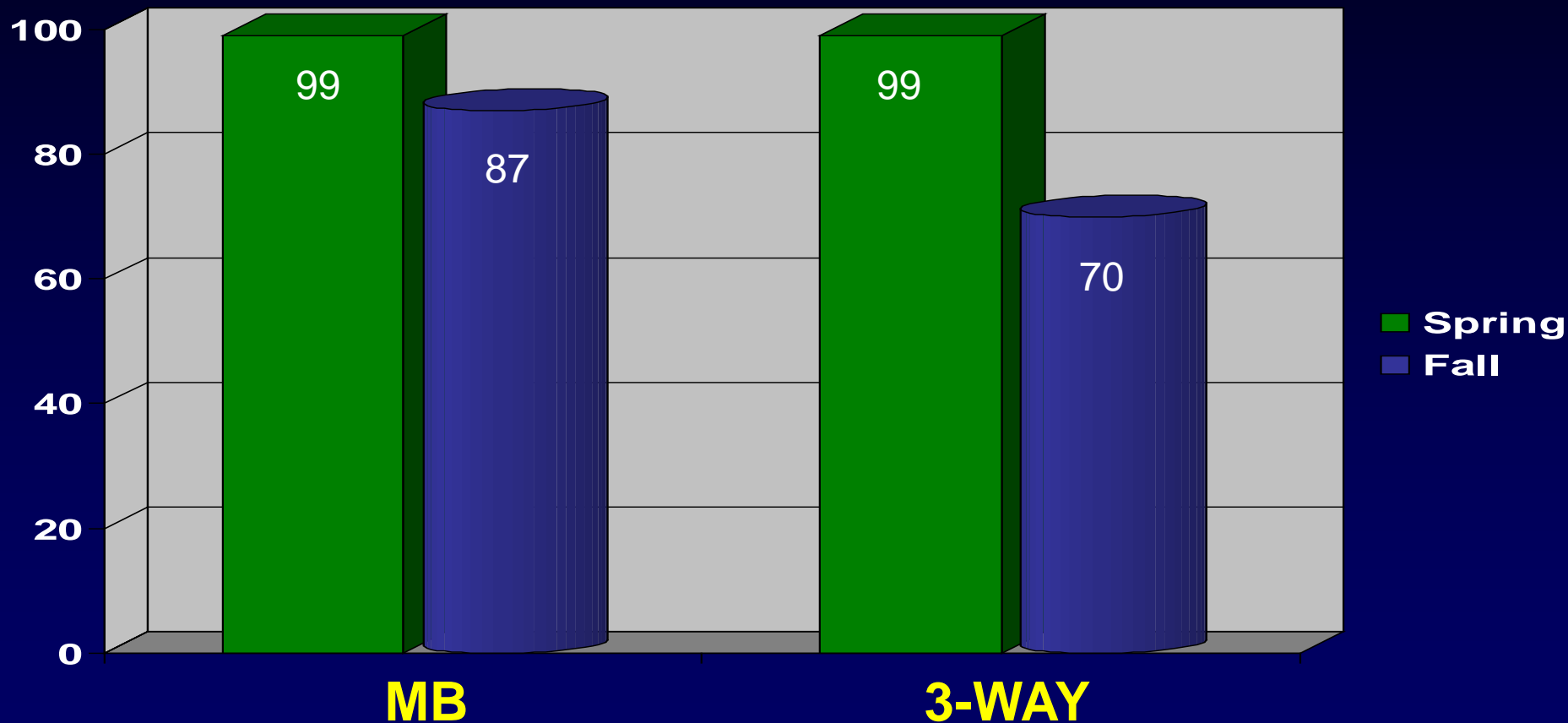


V4-05, 60 DAT

Percent purple nutsedge control by Pic Chlor 60 @ 21G as impacted by mulch. Ponder, Spring 2007-2008.



Percent Purple Nutsedge Control by MB and 3-WAY at Pepper Harvest. Ponder, Spring 2008.

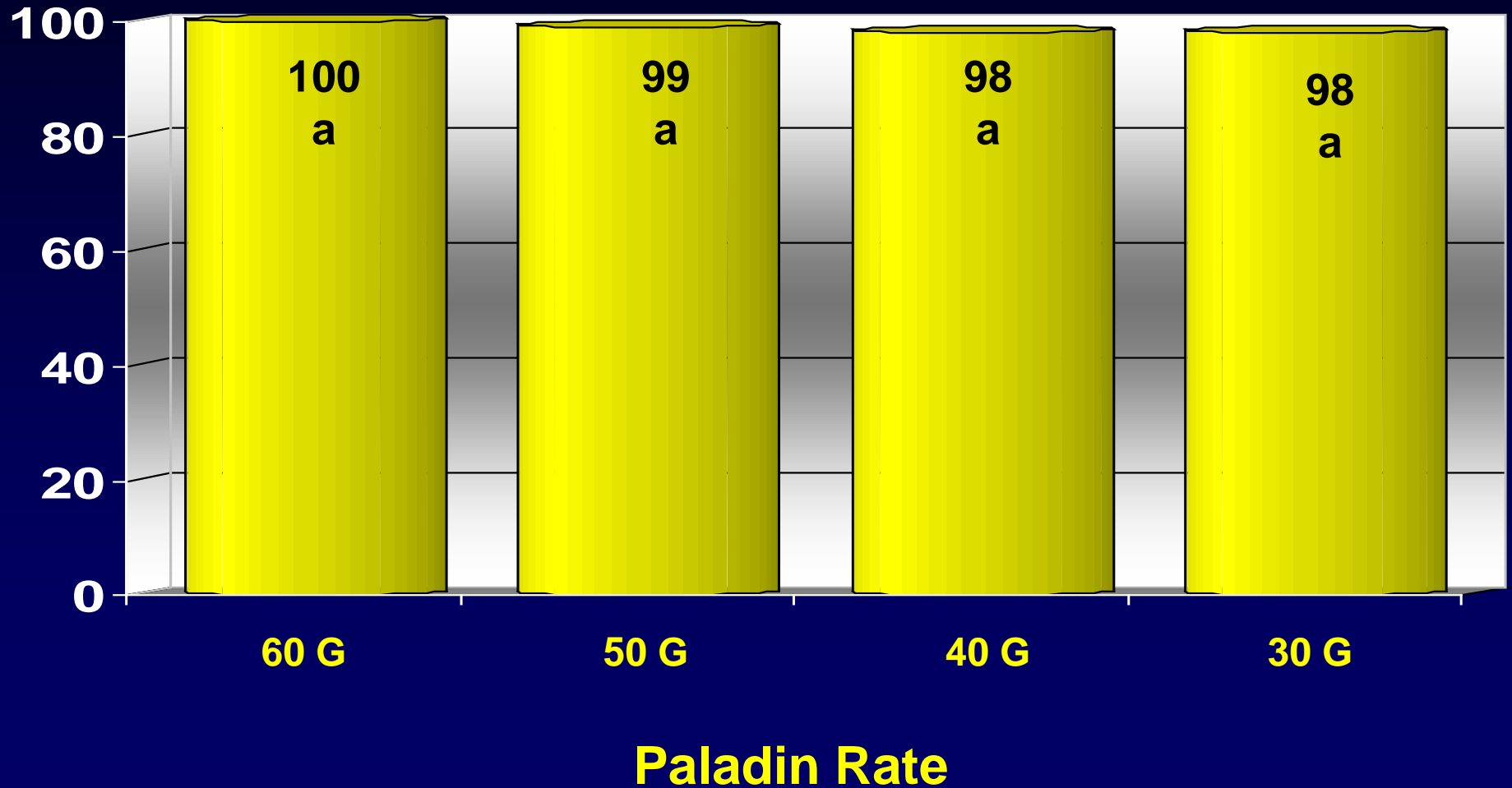


Plots were 1 bed by 50 feet. Spring soil temp 60 F; Fall soil temp 93.

Paladin (DMDS + Pic)

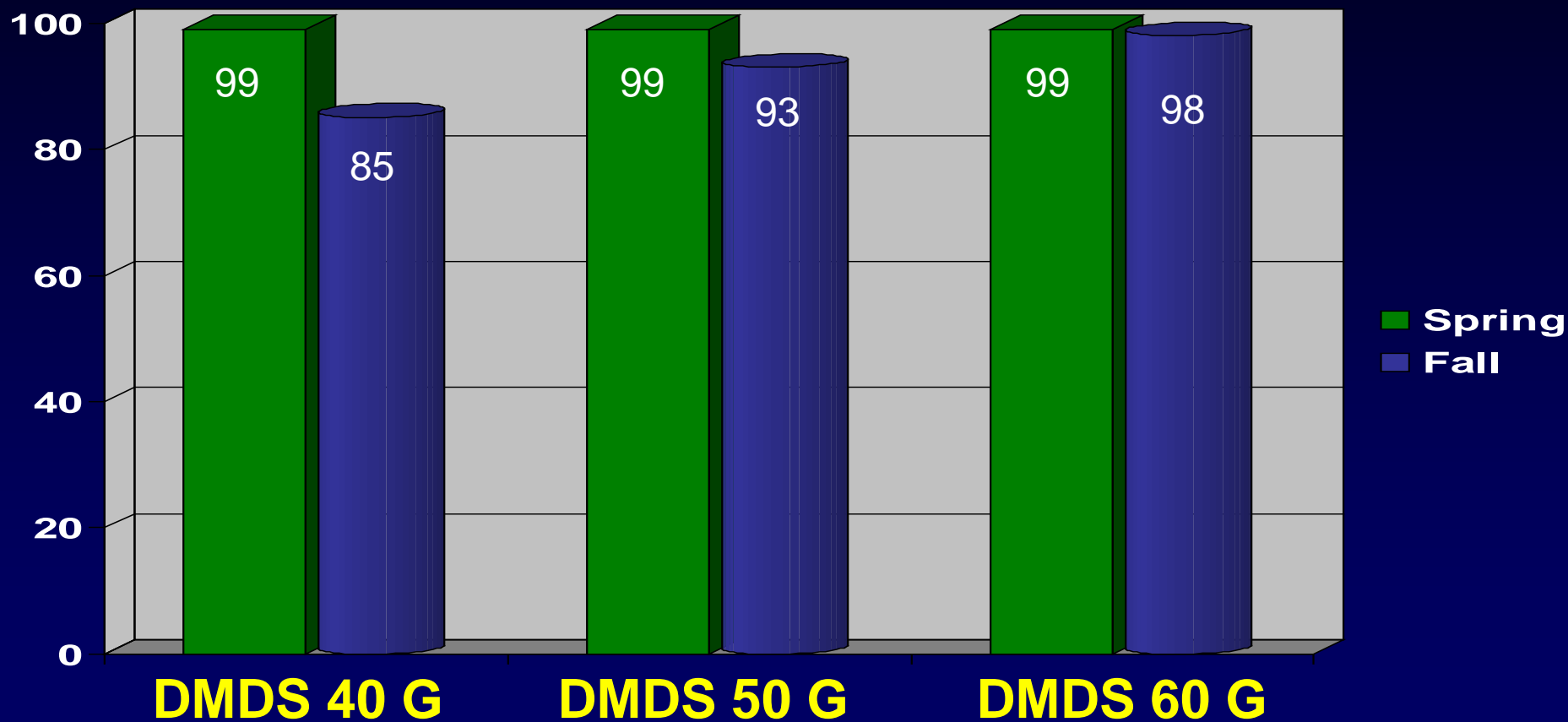
1. Labeled ...8 months from Nov 2009.....April or May I HOPE.
2. 79:21 mixture with chloropicrin
3. Same application procedures as MB
4. Excellent nutsedge control; needs help on annual grasses, pigweed, and likely other small seeded annual broadleaf weeds.

Percent yellow nutsedge control at harvest as impacted by Paladin rate. TyTy, GA 2008.*



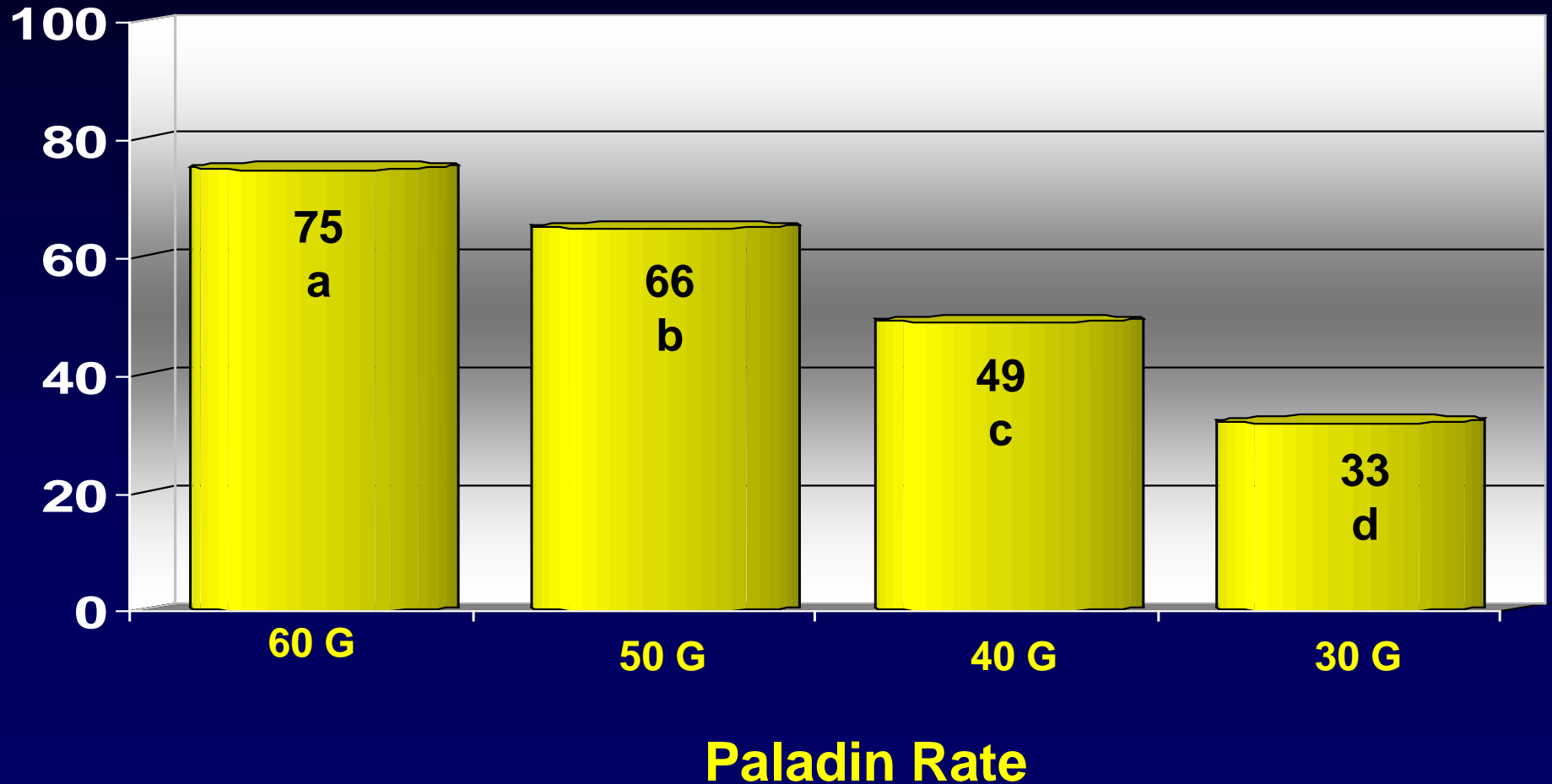
Blockade mulch

Percent Purple Nutsedge Control by Paladin at Pepper Harvest. Ponder, Spring 2008.



Plots were 1 bed by 50 feet. Spring soil temp 60 F; Fall soil temp 93. Blockade mulch.

Percent large crabgrass control at harvest as impacted by Paladin rate. TyTy, GA 2008.*





Bell Pepper

(Plasticulture and Bareground)

Split application



PRE:

6-8 oz Dual Mag
2 to 3 lb Devrinol
Command

POST 1:

8-10 oz Dual Mag

POST 2:

Select Max as needed

Paladin (DMDS + Pic)

1. Labeled ?????
2. 79:21 mixture with chloropicrin
3. Same application procedures as MB
4. Excellent nutsedge control; needs help on annual grasses, pigweed, and likely other small seeded annual broadleaf weeds.
5. Must use high barrier mulch

Must Use Mulch Listed on Paladin Label



Paladin 50 G, Blockade



DMDS 70 G, LDPE



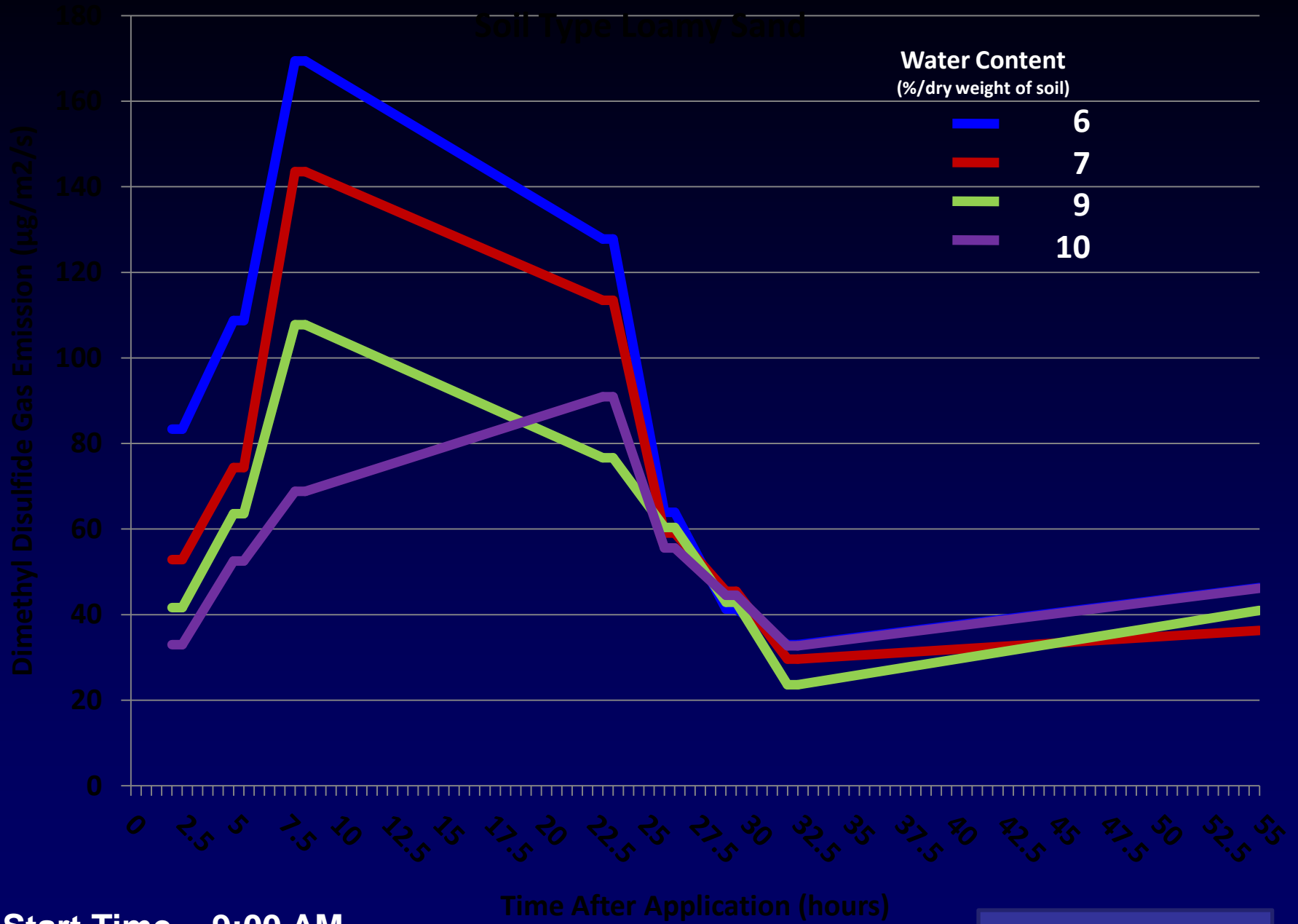
Paladin (DMDS + Pic)

1. Labeled ?????
2. 79:21 mixture with chloropicrin.
3. Same application procedures as MB.
4. Excellent nutsedge control; needs help on annual grasses, pigweed, and likely other small seeded annual broadleaf weeds.
5. Must use high barrier mulch.
6. **Smell is a serious issue and** must be addressed.

Mitigating Smell Issues

1. Correct Mulch – Mulch options will be listed on label
2. Moisture must be ideal

Soil Type Loamy Sand



Start Time = 9:00 AM

Time After Application (hours)

LDPE White Mulch

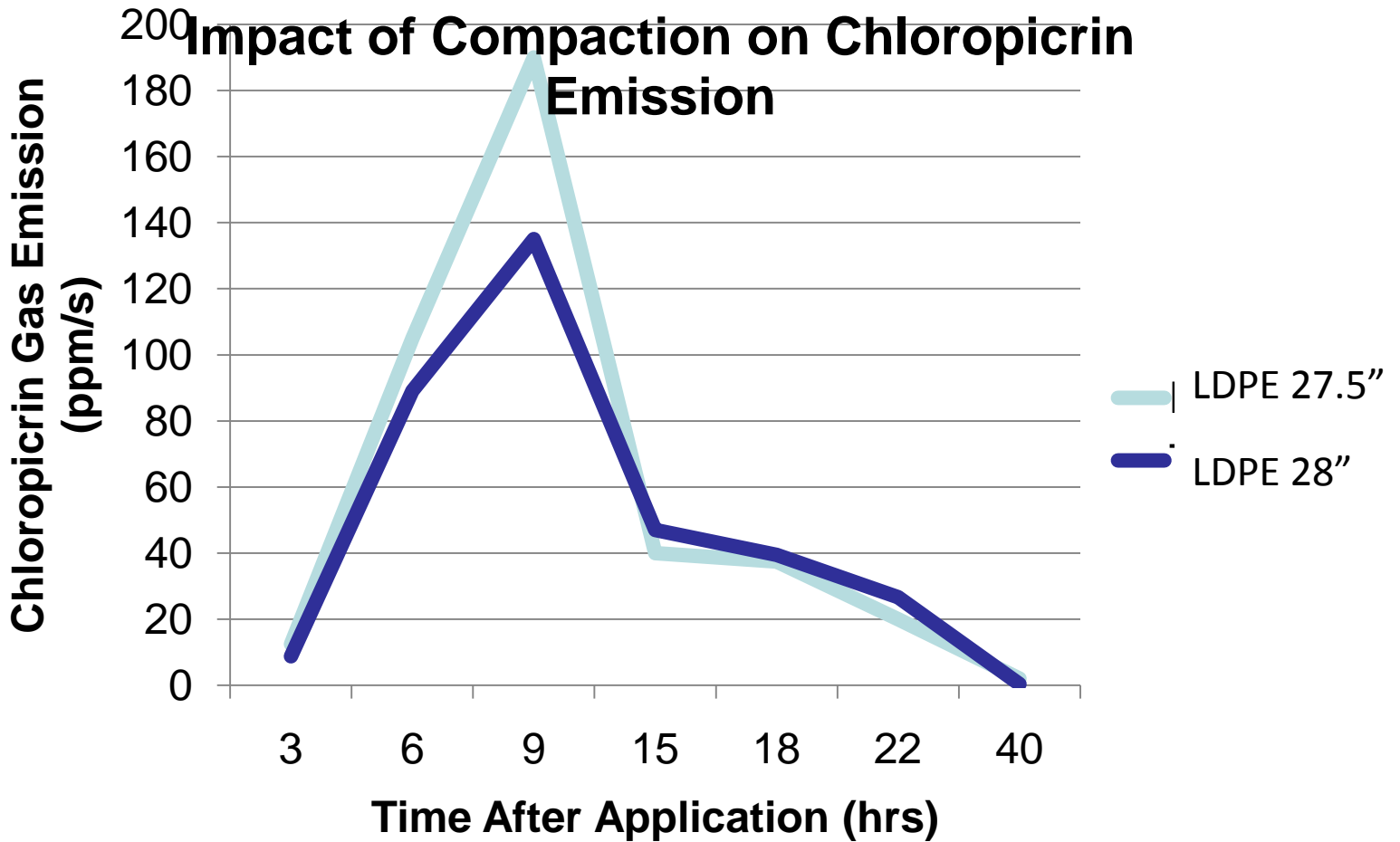
Mitigating Smell Issues

1. Correct Mulch – Mulch options will be listed on label
2. Moisture must be ideal
3. Compaction





Distance from center of bolt to center of bolt on top link was either 27.5 or 28 inches



15 % reduction due to increased bed compaction

Paladin (DMDS + Pic)

1. Odor is number 1 concern

2. Plant back:

Spring up to at least 30 days in some envir

Fall likely around 21 days

3. Cost is unknown????????????????

Future of MB Alternative Efforts

1. Get Paladin out with 4 or 5 growers in secluded areas this fall (15-25 acres) to determine if this is a viable alternative assuming product is economical.

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2. Summer of 2010 will be last submission of methyl bromide CUE request (if Paladin use is sustainable and economical).

Future of MB Alternative Efforts

1. Get Paladin out with 4 or 5 growers in secluded areas this fall (15 acres or so) to determine if this is a viable alternative (assuming product is economical).
2. Summer of 2010 will be last submission of methyl bromide CUE request (if Paladin use is sustainable and economical).
3. One year from today discuss results from Paladin efforts and one additional fumigant system in development.

Herbicide Coated Mulch



No Fumigant, No Herbicide,
Blockade Film



No Fumigant, No Herbicide
BIG Film