White Rot (*Sclerotium cepivorum*)
14,000+ infested acres in the San Joaquin Valley

Mike Davis, UC Davis
DADS (diallyl disulfide)

- Apply when soil temperatures are 50-70 F
- In the San Joaquin Valley, apply fall or spring
- 90% reduction of sclerotia
  1. helps prevent field to field and farm to farm spread
  2. may be necessary in heavily infested fields to optimize efficacy of fungicides
Effect of DADS on Survival of Sclerotia of Sclerotium cepivorum

Sample date

- Dec 7, 2007
- Apr 10, 2008
- Jun 3, 2008
- Sep 20, 2008
- Nov 8, 2008
- Feb 15, 2009

Sclerotia/500 cc soil

- 0 gal/A
- 0.5 gal/A
- 1 gal/A
DADS (single application) and Methyl Bromide

- **Sclerotia/500 g Soil**
  - none
  - DADS 1 gal/A
  - MeBr

**Sample Date (Kern County)**
- Feb-98
- Apr-98
- Jun-98
- Aug-98
- Oct-98
- Dec-98
Conclusions

• A single application of DADS can result in >90% sclerotia mortality

• Profitable yields may not be possible following DADS treatment, at least in heavily infested fields
Fungicides

- Folicur (tebuconazole) applied to the seed furrow at 20.5 fl oz in a 4 inch band.

- Maxim (fludioxonil) applied to the seed at 0.16 fl oz product per cwt or seed furrow at 1.7 pts/acre
2008 Trial

None

Switch 1 oz/1000 feet of row

Endura 6.8 oz per treated acre

Folicur 20.5 fl oz per acre in a 4 in band

Garlic Yields/ Fresno 2008

![Garlic Yields Graph]
1. Water

2. 1 X

3. 2 X
   - Make furrow, apply fungicide, plant seed, cover with soil

4. 4 X

5. 10 X

6. 1 X
   - Make furrow, apply fungicide, cover with ¼ in. soil, plant, cover

7. 2 X

8. 1 X
   - Apply fungicide, mix (incorporate), make furrow, plant seed, cover

9. 2 X

10. 1 X

11. 2 X
   - Make furrow, plant seed, apply fungicide, cover with soil

12. 3 X

13. 4 X
Seedling emergence

Folicur                0      1X     2X     4X                             0       1X      2X     4X  

<table>
<thead>
<tr>
<th>Folicur</th>
<th>0</th>
<th>1X</th>
<th>2X</th>
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<tr>
<td>77 F</td>
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<td>65 F</td>
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Graph showing seedling emergence at 77 F and 65 F.
Folicur applications

Water    1X    2X

water    4X    10x
Basal Rot
(*Fusarium oxysporum f. sp. cepae*)