AHDB Lettuce Fusarium Workshop: Soil Sterilisation Options Using Basamid

'Start Clean, Stay Clean'

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Basamid

- Contains 97% w/w dazomet (Granule)
- Originally prepared by M. Delépine (Bull. Soc. Chim. Fr., 1897, 15, 891)
- Key activity established:
 - Herbicidal
 - Nematicidal
 - Fungicidal
- Generates MITC on contact with warm damp soil (StartClean:StayClean)



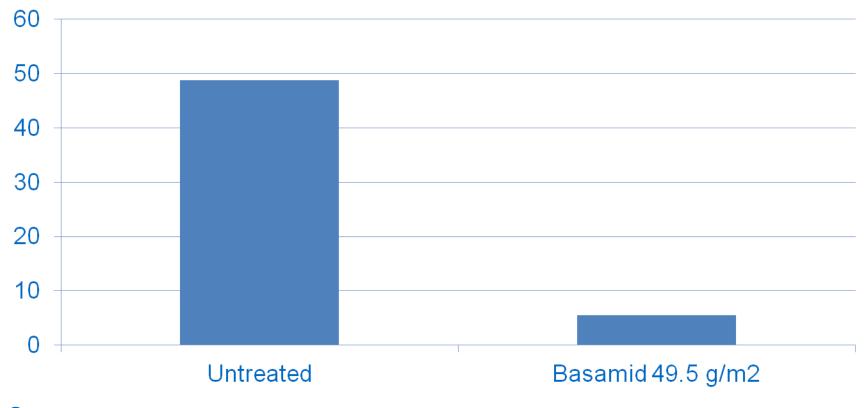
FUSARIUM ON BASIL IN PROTECTED CROP (Italy, 2012)





Fusarium Wilt Results (Reported January 2017)

Disease Index (1-100) Average over 3 trials with 2 varieties = 6 results averaged.

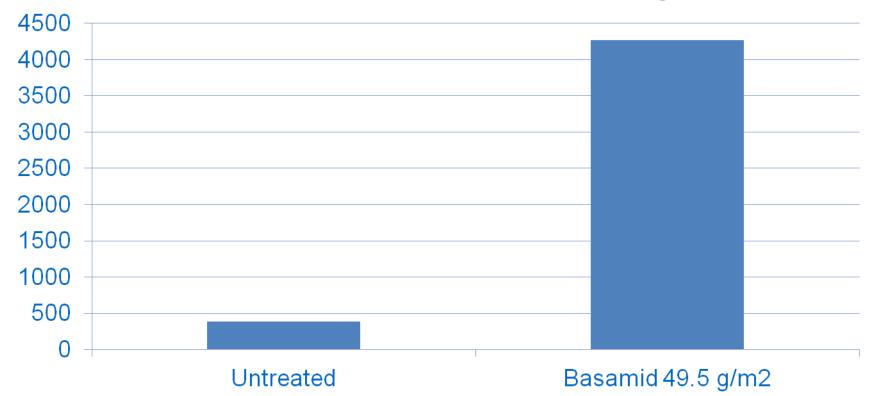


Source: Gilardi, Gullino, Garibaldi. Soil disinfestation...for management of Fusarium wilt on lettuce in Italy. J Plant Dis Prot..



Yield Results (Reported January 2017)

Marketable Lettuce fresh weight g/m2. Average of 3 trials/2 varieties = 6 results averaged



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Source: Gilardi, Gullino, Garibaldi. Soil disinfestation...for management of Fusarium wilt on lettuce in Italy. J Plant Dis Prot..

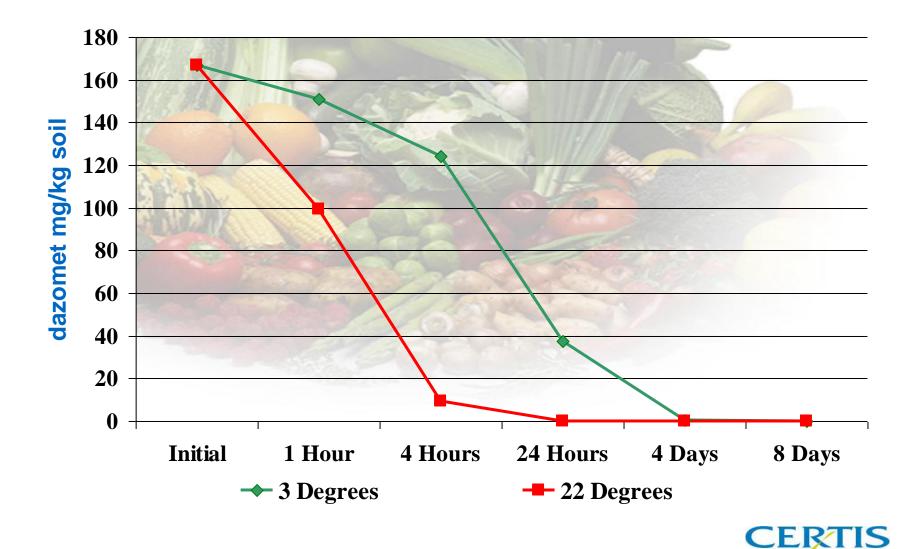
Soil Moisture: Key Points

- Wet up soils 10-14 days prior to operation – May need 22 litres/m²
- Aim for 60-70% soil moisture
- Sand and Silts soils: 70%

Application to dry soils will FAIL



Basamid breakdown in standard soil (sandy loam) at 40% of maximum water holding capacity



Soil Temperature: Key Points

- Minimum and *rising* essential for success.
 - >7°C with experienced users (8C & above)
 - 10°C at 10 cm depth (general advice to new potential users)



Equipment





Other Key Points

- Polythene cover
 - 14 days to 30 days
- Cultivate soil/cress test

• IPM Approach:

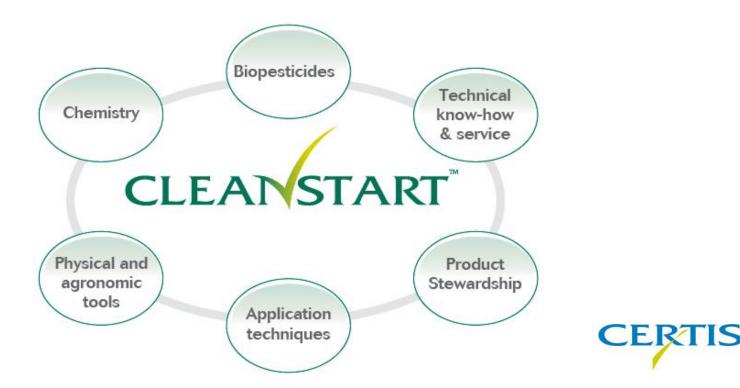
- Use 1 in 3 years (on label)
- Avoid re-contamination of treated land
- Disinfectant use (Jet 5)
- Healthy seeds/plant sources



Summary

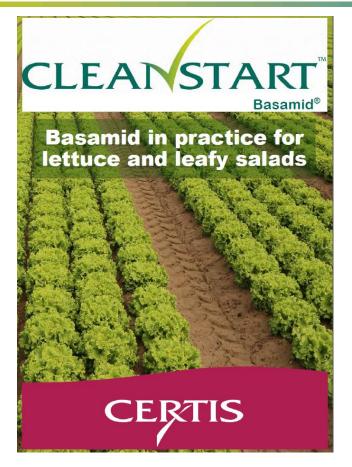
- Basamid: activity on Fusarium genera
- Soil temperatures: 10°C at 10 cm depth
- Soil moisture 60 to 70%
- Polythene cover for best results

IPM – 'Start Clean, Stay Clean'



Further technical information

BASAMID®



http://www.certiseurope.co.uk/fileadmin/ downloads_uk/products/Miscellaneous/F actsheets/Basamid_Brochure_20170830 _V8_WEB.pdf



Untreated

11324 (PCS 90213)

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The Soil sterilant for growers Application by grower or by contractor Controls a range of soil pests, nematodes, fungi, weeds

Ideal for crops with limited or no herbicide choice

 One in three year use - so need to plan ahead on a whole farm basis

Guide to Best Results with Basamid

Plan soil moist prior to application (10 days before)

No soil carryover residues" No crop residues" Outdoor and protected use

Check soil temperature Plan for 1 in 3 year applications Polythene cover (gas impermeable thickness) Contractor use or grower with adequate machinery Use spade-type rotovators (eg Imants/Forigo) Use measuring units (ee Abrithie Farmerv discensers

Basamid

One/pre-cro

5 or 20 kg Pre-planting of cr

* = Carry out cress test after treatment period to check for soil residues prior to crop tetion Dazomet, 07%, Granular. cal class Methyl isothiocynante, IRRAC code: Z All Feld and glasshouse crops

Max doses: 760 kg/ha(protected) and 570 kg/ha (outdoor)

Thank You

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