

FLUTIANIL Fungicide Product name: GATTEN®



2021 IR-4 meeting





Flutianil, Characteristics

 New chemical group: cyano-methylene thiazolidine $H_3C^{-0} \xrightarrow{C} CN \xrightarrow{F} CF_3$

- Effective in controlling powdery mildew
- Novel Mode of Action against powdery mildew (FRAC Code U13)
 We'd like to propose a MOA of flutianil as "functional inhibition of the haustorium"*

No Cross-Resistance with other chemical classes

*Reference: J Pestic Sci 45(4), 206-2015 (2020) J Pestic Sci 26(2), 206-2013 (2021)

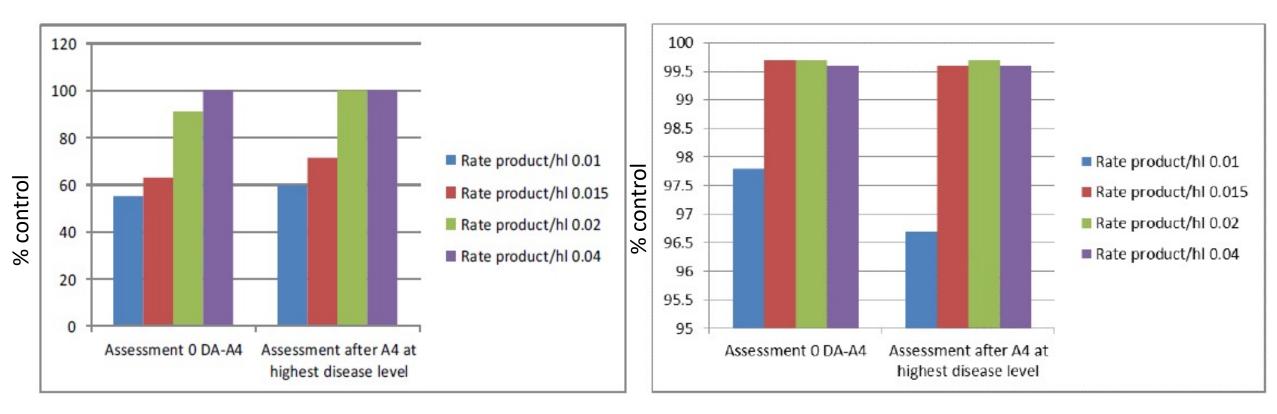


Performance on Greenhouse Zinnias For Powdery A OATS Mildew Control– US (IR-4)

Treatment (Rate)	Mean Disease Severity (0 to 10 Scale)
Nontreated Water Spray	2.0 BC
Gatten® (12.8 fl oz / 100 gallons)	0.1 A
Gatten [®] (25.4 fl oz / 100 gallons)	0.0 A
MBI-121 (96 fl oz / 100 gallons)	1.9 BC
MBI-121 (128 fl oz / 100 gallons)	1.3 AB
EcoSwing (32 fl oz / 100 gallons)	2.3 BCD
SP2700 (11 oz / 100 gallons)	1.3 AB
SP2700 (22 oz / 100 gallons)	1.3 AB
TDA-NC-1 (570 g / 100 gallons; 3 Apps)	3.4 D
TDA-NC-1 (570 g / 100 gallons; 6 Apps)	3.0 CD
TXC2020 64 fl oz 3 Apps	1.6 B
TXC2020 64 fl oz 4 Apps	2.2 BCD
XDE-659 (20.6 fl oz / 100 gallons)	2.3 BCD
XDE-659 (34.3 fl oz / 100 gallons)	1.3 AB
Note: Means sharing a letter are not significantly different at the 5% level.	



Performance in Greenhouse For Control of Powdery Mildew – EU and UK



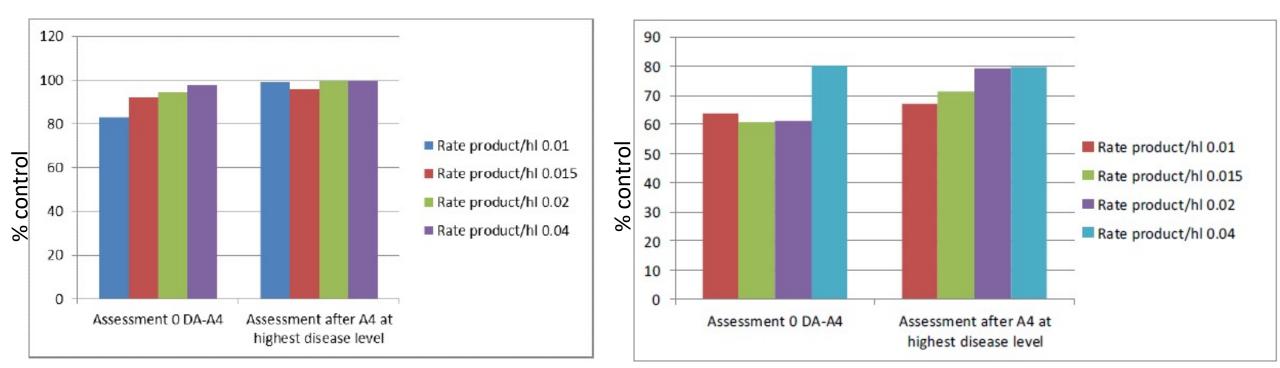
Podosphaera major on Horned violet 4th application, 2 trial, Greece, Protected

Podsphaera macularis on Garden pansy 4th application, 1 trial, UK, Protected

0.01 L/hl (100 L)= 1.27 fl oz/100 gallon 0.015 = 1.92 0.02 = 2.56 0.04 = 5.12



Performance in Greenhouse For Control of Powdery Mildew – EU and UK



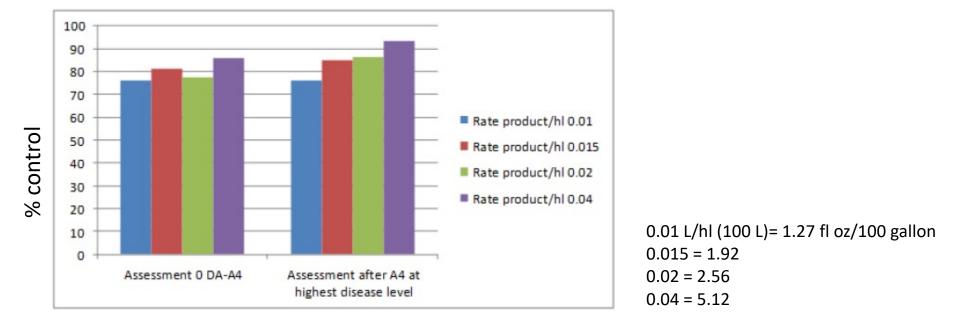
Erysiphe sp. on African daisy 4th application, 2 trial, UK, Protected

Podosphaera pannosa/ Uncinula sp./ Odium sp. on Rose 4th application, 4 trial, Spain and Italy, Protected

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0.01 L/hl (100 L)= 1.27 fl oz/100 gallon
0.015 = 1.92
0.02 = 2.56
0.04 = 5.12
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Performance in Greenhouse For Control of Powdery A OATS Mildew – EU and UK



Erysiphe sp. on Japanese honey suckle 4th application, 3 trial, Germany and UK, Protected

Summary Efficacy of the dose rate of 0.02 L product/hL (2.56 fl oz/100 gallon) was significantly superior.