

GROWER'S ALLY® CROP DEFENDER 3

ASPERGILLUS LAB TESTING

- Independent testing conducted by Collins Agricultural Consultants, Inc. in January 2023
- Cannabis flower artificially inoculated with Aspergillus Niger
- Each plant heavily inoculated by directly painting the pathogens onto five buds
- Environmental variables constant while plants treated post-inoculation
- A total of four curative treatments every three days applied post-inoculation
- Sprayed to drip using a single nozzle backpack sprayer with a fine droplet flat fan nozzle set to 40 psi
- Crop Defender 3 and Oxidate 5.0 both controlled Aspergillus compared to untreated check

100% EFFECTIVE AT CONTROLLING THE SPREAD
OF ASPERGILLUS TO UNINFECTED BUDS
WHEN COMPARED TO UNTREATED CHECK, AFTER 10 DAYS AND 4 APPLICATIONS

70% LESS SEVERITY OF ASPERGILLUS
VERSUS THE UNTREATED CHECK

10% BETTER CONTROL OF ASPERGILLUS
THAN EPA COMPETITOR, OXIDATE 5.0



BENEFITS

- NO new buds infected
- NO infected buds got worse
- NO phytotoxicity reported
- NO restrictions
- NO synthetic chemicals used
- NO re-entry interval

TREATMENT PROTOCOLS

USE	MIX RATE	INTERVAL
Preventative	0.25% or 10 mL/gal	Every 7 Days
Curative	1.0% or 40 mL/gal	Every 3 Days



WHAT IS ASPERGILLUS?

- A common mold or fungus that lives both indoors and outdoors
- Can occur at any point in the cannabis plant lifecycle, including after harvest
- Most strains are harmless, except for people with weakened immune systems or lung diseases
- Can cause serious illness, and even death, for people with certain lung conditions



Aspergillus in a petri dish

END-FLOWER TESTING

- Many states have implemented mandatory testing of cannabis for Aspergillus to protect consumers
- There are four main strains of concern: A. Niger, A. Flavus, A. Terreus, A. Fumigatus
- Most states do not allow for any presence of these strains

COLLINS AGRICULTURAL CONSULTANTS TESTING DATA

TREATMENT NAME	ASPERGILLUS CONTROLLED
CROP DEFENDER 3 FIFRA 25(b) Actives: Thyme Oil, Rosemary Oil, Clove Oil, Peppermint Oil	70%
OXIDATE 5.0 EPA Actives: Hydrogen Peroxide, Peroxyacetic Acid	60%
UNTREATED CHECK	0%

TESTING TAKEAWAYS

- **Aspergillus can be 100% prevented with environmental controls and Crop Defender 3**
- **Aspergillus can be controlled once present, ultimately saving you money—less cost to remediate and less end-product to destroy**

TREATMENT TIPS

- Never rinse plants that have Aspergillus with water; it will spread the pathogens
- Crop Defender 3 can be combined with Gard 'N Clean, for added protection
- Crop Defender 3 can be used up until day of harvest, or three days prior for fresh frozen
- Crop Defender 3 can be applied post-harvest using the dunk method, as needed