

Use this supplemental guide as a helpful tool to interpret Mycotoxins test results, understand associated mold species, and uncover potential sources from the environment, food, or both.

Mycotoxins and Associated Mold Species

| Mycotoxin | Known Associated Mold Species |
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| Aflatoxins | |
| Aflatoxin B1 | Aspergillus spp. <i>A. parasiticus, A. flavus</i> ^{1 2 3} |
| Aflatoxin B2 | Aspergillus spp. <i>A. parasiticus, A. flavus</i> ^{1 2} |
| Aflatoxin G1 | Aspergillus spp. <i>A. parasiticus, A. flavus</i> ^{1 2} |
| Aflatoxin G2 | Aspergillus spp. <i>A. parasiticus, A. flavus</i> ^{1 2} |
| Aflatoxin M1 | Aspergillus spp. <i>A. parasiticus, A. flavus</i> ¹ |
| Other | |
| Chaetoglobosin A (CHA) | Chaetomium globosum ⁴ |
| Citrinin (CTN) | Penicillium spp. <i>P. citrinum, P. expansum, P. radicum, P. verrucosum</i> ^{2,5} Aspergillus spp. <i>A. terreus, A. niveus, A. oryzae</i> ^{2,5} Monascus spp. <i>M. ruber, M. purpureus</i> ^{2,5} |
| Dihydrocitrinone | Penicillium spp. ⁶ Aspergillus spp. ⁶ Monascus spp. ⁶ |
| Enniatin B1 (ENN B1) | Fusarium spp. <i>F. avenaceum, F. esadepsipeptides, F. oxysporum, F. poae, F. tricinctum</i> ^{7,8} |
| Fumonisins B1 | Fusarium spp. <i>F. verticillioides, F. proliferatum</i> ^{2,3,9} Aspergillus niger ⁹ |
| Fumonisins B2 | Fusarium spp. <i>F. verticillioides, F. proliferatum</i> ^{2,3,9} Aspergillus niger ⁹ |

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| Fumonisins B3 | Fusarium spp. F. verticillioides, F. proliferatum ^{2,3,9} Aspergillus niger ⁹ |
| Gliotoxin | Fusarium spp. F. verticillioides, F. proliferatum ^{3,10,11} <i>Candida albicans</i> ³ <i>Gliocadium fimbriatum</i> ¹² Penicillium spp. ³ <i>Trichoderma virens</i> ¹³ |
| Mycophenolic Acid | Penicillium spp. P. brevicompactum, P. roqueforti, P. carneum ^{3,8,14} Byssochlamys nive ⁸ |
| Ochratoxin A (OTA) | Aspergillus spp. A. niger, A. ochraceus, A. carbonarius, A. tubingensis ^{2,3,15} Penicillium spp. P. verrucosum, P. viridicatum, P. nordicum ^{2,3,15} |
| Patulin | Aspergillus spp. ² Penicillium spp. P. expansum ² Paecilomyces spp. ² Byssochlamys spp. ¹⁶ |
| Sterigmatocystin (STC) | Aspergillus spp. A. flavus, A. nidulans, A. parasiticus, A. versicolor ^{1,3,8,14,17} Bipolaris spp. ⁸ Botryotrichum spp. ⁸ Chaetomium spp. ⁸ Emericella spp. ⁸ Humicola spp. ⁸ Penicillium spp. P. luteum ⁸ |
| Zearalenone (ZEN) | Fusarium spp. F. acuminatum, F. cerealis, F. crookwellense, F. culmorum, F. equiseti, F. graminearum, F. oxysporum, F. semitectum, F. sporotrichioides, F. verticillioides ^{2,18} Gibberella spp. ^{2,18} |
| Trichothecenes | |
| Deoxynivalenol (DON) | Fusarium spp. F. graminearum ² |
| Diacetoxyscirpenol (DAS) | Fusarium spp. F. langsethiae, F. poae, F. sambucinum ^{2,19} |

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|------------------------|--|
| Nivalenol (NIV) | Fusarium spp. <i>F. asiaticum, F. cortaderiae, F. crookwellense, F. culmorum, F. graminearum, F. nivale, F. poae</i> ^{2,20} |
| Roridin A | <i>Stachybotrys chartarum</i> ²¹ |
| Roridin E | <i>Stachybotrys chartarum</i> ²¹ Fusarium spp. Myrothecium spp. Trichoderma spp. Trichothecium spp. Cephalosporium spp. Verticimonosporium spp. |
| Roridin L2 | <i>Stachybotrys chartarum</i> ^{14,21,22} |
| Satratoxin G | <i>Stachybotrys chartarum</i> ^{14,21,22,23} |
| Satratoxin H | <i>Stachybotrys chartarum</i> ^{14,21,22,23} |
| T-2 Toxin | Fusarium spp. <i>F. acuminatum, F. poae, F. sporotrichioides</i> ²⁴ |
| Verrucarin A | <i>Stachybotrys chartarum</i> ¹⁴ Fusarium spp. Myrothecium spp. |
| Verrucarin J | <i>Stachybotrys chartarum</i> ^{14,21} |

Mycotoxins Sources: Food, Environment, or Both?

| Mycotoxin | Food | Environment |
|---------------------|------------------|-----------------|
| Aflatoxins | | |
| Aflatoxin B1 | ✓ ^{1,2} | ✓ ²⁵ |
| Aflatoxin B2 | ✓ ^{1,2} | ✓ ²⁵ |
| Aflatoxin G1 | ✓ ^{1,2} | |
| Aflatoxin G2 | ✓ ^{1,2} | |
| Aflatoxin M1 | ✓ ^{1,2} | |

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| Mycotoxin | Food | Environment |
|--------------------------|-------------------|--------------------------|
| Other | | |
| Chaetoglobosin A (CHA) | | ✓ ^{4,25} |
| Citrinin (CTN) | ✓ ^{2,5} | |
| Dihydrocitrinone | ✓ ⁶ | |
| Enniatin B1 (ENN B1) | ✓ ^{7,8} | |
| Fumonisins B1 | ✓ ^{2,9} | |
| Fumonisins B2 | ✓ ^{2,9} | |
| Fumonisins B3 | ✓ ^{2,9} | |
| Gliotoxin | | ✓ ¹⁰ |
| Mycophenolic Acid | ✓ ⁸ | ✓ ¹⁴ |
| Ochratoxin A (OTA) | ✓ ^{2,7} | ✓ ^{25,28} |
| Patulin | ✓ ² | |
| Sterigmatocystin (STC) | ✓ ¹⁷ | ✓ ^{4,14,25} |
| Zearalenone (ZEN) | ✓ ^{2,18} | |
| Trichothecenes | | |
| Deoxynivalenol (DON) | ✓ ² | |
| Diacetoxyscirpenol (DAS) | ✓ ^{2,19} | |
| Nivalenol (NIV) | ✓ ^{2,20} | |
| Roridin A | ✓ | ✓ ²¹ |
| Roridin E | ✓ | ✓ ^{21,25} |
| Roridin L2 | | ✓ ^{14,21,22} |
| Satratoxin G | | ✓ ^{14,21,22,23} |

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| Mycotoxin | Food | Environment |
|--------------|-------------------|--------------------------|
| Satratoxin H | ✓ | ✓ ^{14,21,22,23} |
| T-2 Toxin | ✓ ^{2,24} | |
| Verrucarin A | ✓ | |
| Verrucarin J | | ✓ ^{14,21} |

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