

Tips and Observations for using Fungicides in conjunction with Mycorrhizae

General Observations:

- Mycorrhizal fungi are soil-borne fungi that may be susceptible to certain fungicide products. The “Effects of Fungicides on Mycorrhizal Fungi” table is a list of our present knowledge of the compatibility of mycorrhizal fungi and fungicides. Many fungicides are compatible with mycorrhizal inoculation and development. The inoculation stage is the most susceptible period. The longer the wait to apply any fungicide after mycorrhizal fungi inoculation, the better for the mycorrhizal development. We suggest waiting at least two weeks to avoid interfering with the mycorrhizal inoculation.
- Most foliar applied fungicides (except systemics, such as Bayleton) have little effect on the mycorrhizal fungi.
- Seeds treated with fungicides typically do not impair mycorrhizal development since the germinating roots carry the mycorrhizae away from the treated seed.

Terms and interpretations used in the “Effects of Fungicides on Mycorrhizal Fungi” Table:

- “OK” – These fungicides can be safely used and should maximize the impact of the mycorrhizal inoculation.
- “Avoid Use” – If these fungicides are used as a part of the planned production, please refer to the Example Situation below.
- “Insufficient Data” – These either haven't been trialed, or research on the interactions was not available at the time of the chart's creation. If part of planned production, treat similarly to "Avoid Use" fungicides in order to maximize the impact of the mycorrhizal inoculation.

Tip for how to most safely apply the two in conjunction with one another:

Example Situation:

An Industry Professional wants to inoculate his/her plants with mycorrhizal fungi, but also uses a fungicide listed as "Avoid Use" on our Fungicide List, a couple times a year..

1. Apply Fungicide and wait 1 month
2. Apply Mycorrhizal inoculum
3. Give Mycorrhizal Propagules time to germinate (approx. 2-6 weeks)
4. When the fungicide is reapplied after this time period, your roots will temporarily lose external mycorrhizal filaments. However, because the mycorrhizal fungi have already had a chance to establish themselves within the root system, after a short period of time they will reproduce those external filaments (hyphae) that were lost or reduced due to the fungicide application.