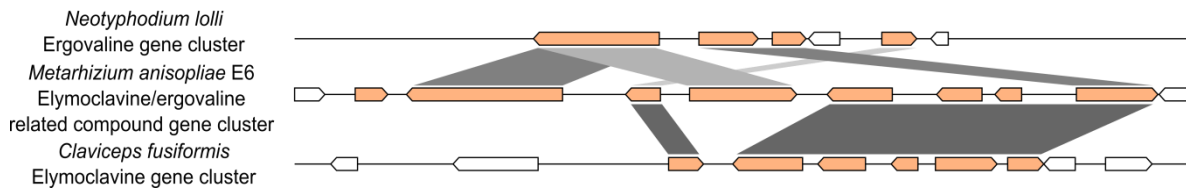


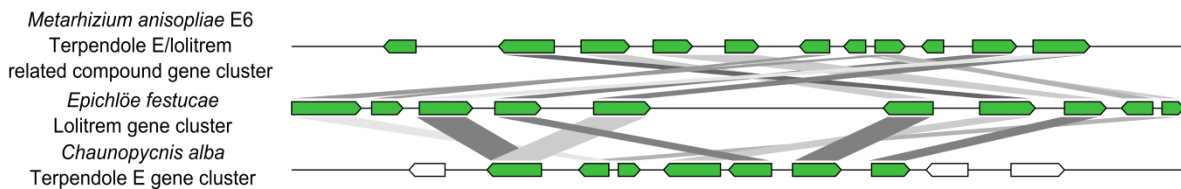
**Additional File 12:** Comparative genomic analysis and synteny for aurovertin, elymoclavine/ergovaline related compound, terpendole E/lolitrem related compound, and xenolozoyenone related compound BGCs.

**Elymoclavine/ergovaline related compound biosynthetic gene cluster**



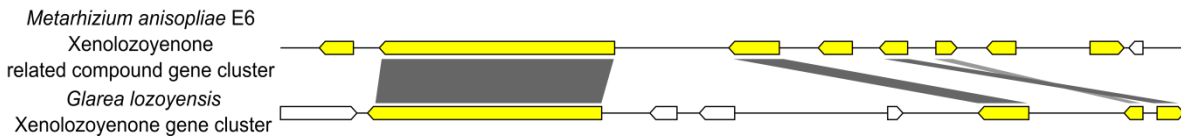
**Figure 1:** Comparative genomic analysis and synteny for elymoclavine/ergovaline related compound BGC (MaIND-NRPS1).

**Terpendole E/lolitrem related compound biosynthetic gene cluster**



**Figure 2:** Comparative genomic analysis and synteny for terpendole E/lolitrem related compound BGC (MaIND-TERP1).

**Xenolozoyenone related compound biosynthetic gene cluster**



**Figure 3:** Comparative genomic analysis and synteny for xenolozoyenone related compound BGC (MaNRPS-PKS3).

**Table 1\*:** Identity between aurovertin BGC from *C. arbuscula* and the putative aurovertin BGC (MaPKS2) from *M. anisopliae*.

<b><i>C. arbuscula</i> gene</b>	<b><i>M. anisopliae</i> gene</b>	<b>Identity</b>
<b><i>aurA</i></b>	MANI_004781	77%
<b><i>aurB</i></b>	MANI_004840	76 %
<b><i>aurC</i></b>	MANI_026083	77 %
<b><i>aurD</i></b>	MANI_026090	71 %
<b><i>aurE</i></b>	MANI_026098	53 %
<b><i>aurF</i></b>	MANI_120612	40%
<b><i>aurG</i></b>	x	x

\*No nucleotide sequence found for aurovertin BGC from *C. arbuscula*, not allowing synteny analysis.