

# A Modular Strategy for the Synthesis of Dothideopyrones E and F, Secondary Metabolites from an Endolichenic Fungus

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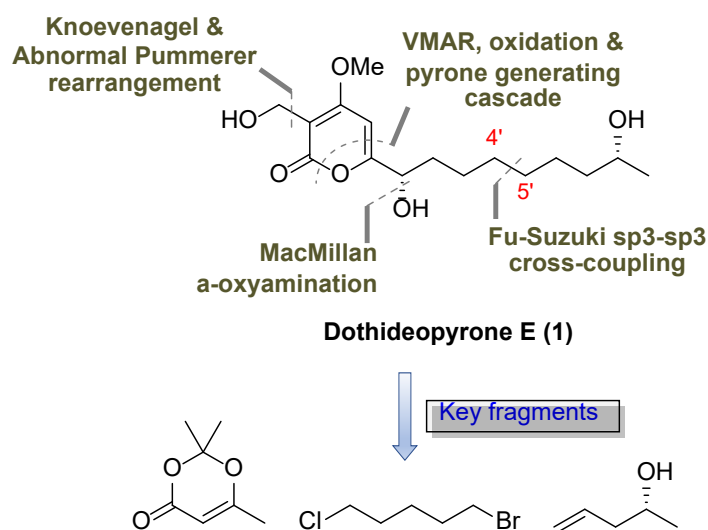
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Endolichenic fungi are a rich source of natural products with a wide range of potent bioactions [1]. Dothideopyrone E (**1**) was isolated in 2018 from a culture of the endolichenic fungus *Dothideomyces* sp. EL003334 [2].

Said natural product has been highlighted as a promising therapeutic lead-agent to prevent neurodegenerative diseases [2]. Given our interest in naturally occurring compounds, especially related to anti-inflammatory properties, this attracted our attention. Our progress towards realizing an efficient synthesis of dothideopyrone E (**1**) will be presented [3].



## References

- [1] R. F. Schäberle, *Beilstein J. Org. Chem.*, **2016**, *12*, 571.
- [2] G. S. Kim, W. Ko, J. W. Kim, M.-H. Jeong, S.-K. Ko, J.-S. Hur, H. Oh, J.-H. Jang, J. S. Ahn, *J. Nat. Prod.* **2018**, *81*, 1084.
- [3] M. Aursnes, K. G. Primdahl, D. Liwara, E. J. Solum, *J. Nat. Prod.* **2023**, *86*, 804.