

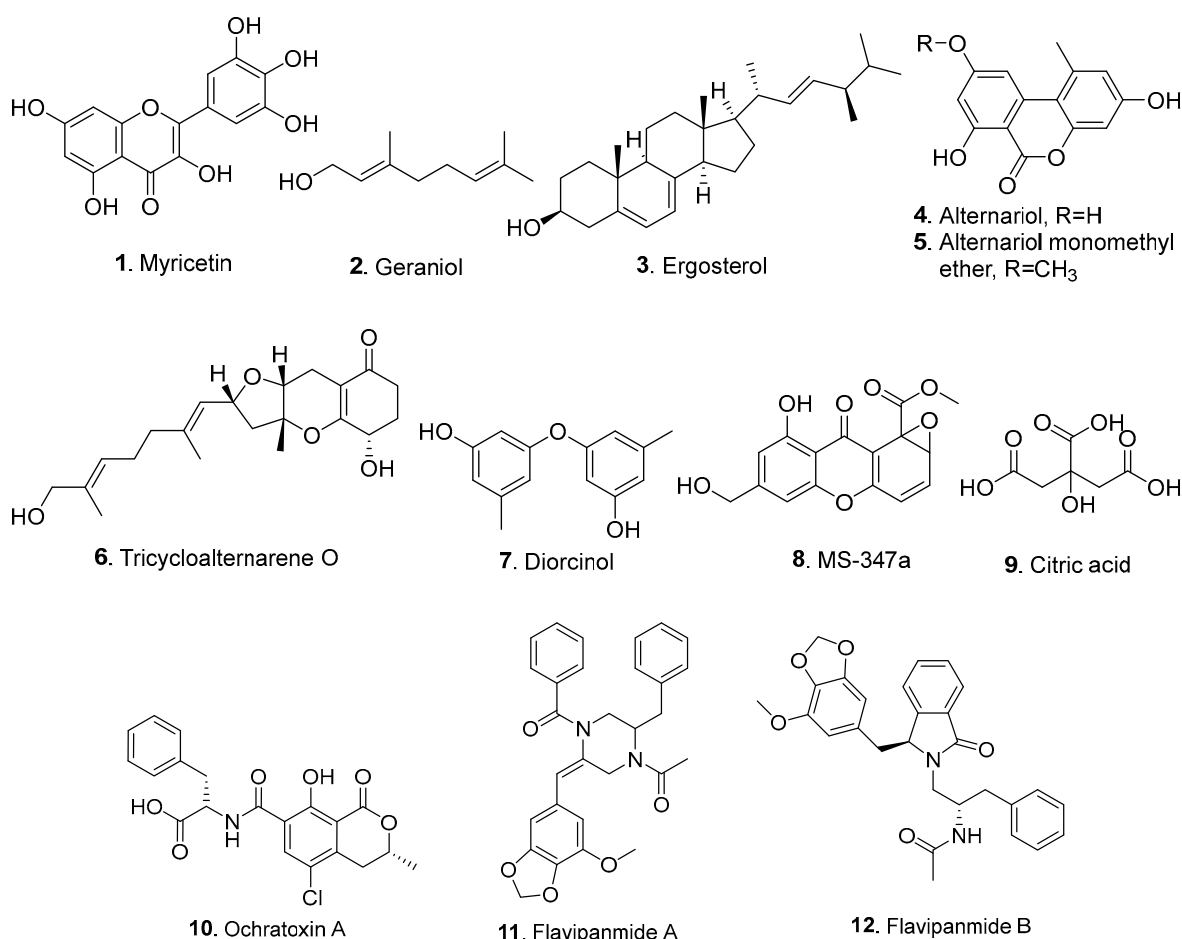
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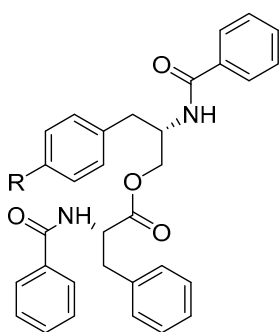
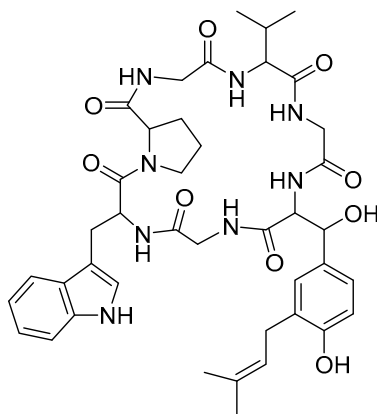
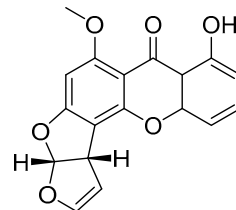
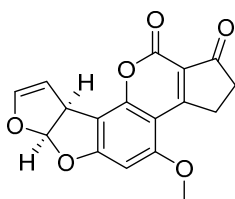
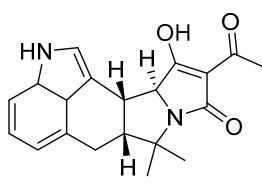
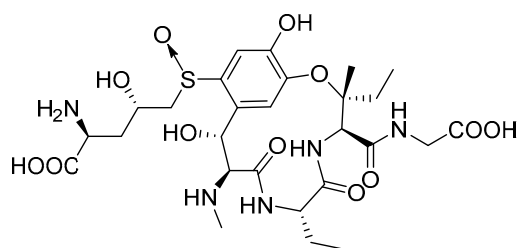
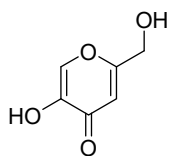
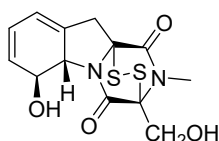
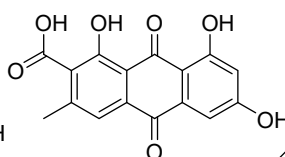
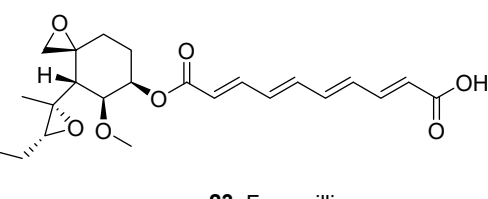
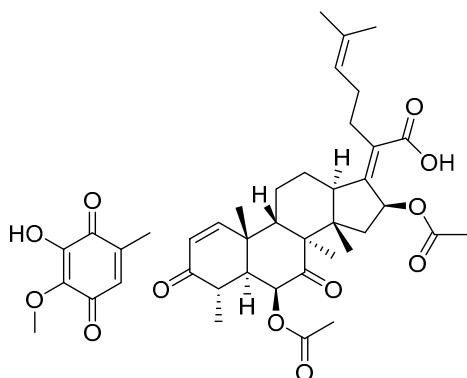
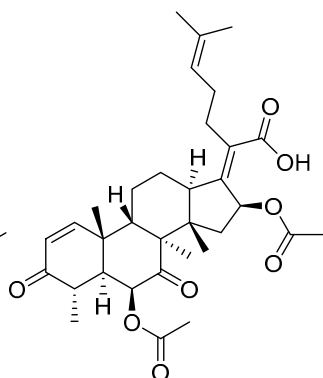
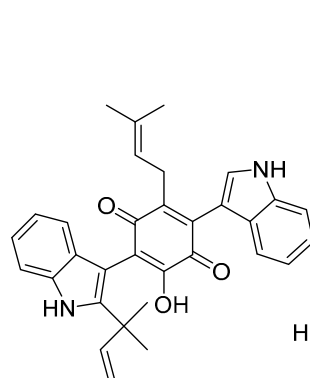
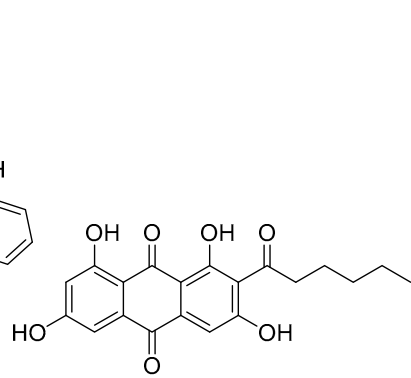
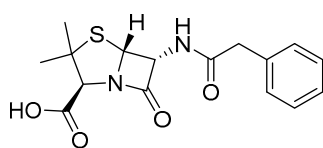
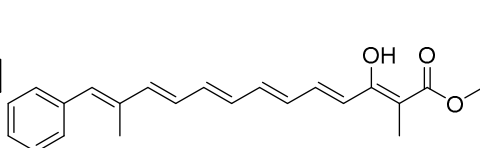
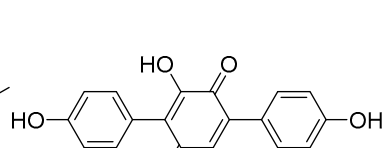
Involvement of LaeA and Velvet Proteins in Regulating the Production of Mycotoxins and Other Fungal Secondary Metabolites

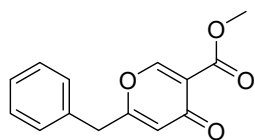
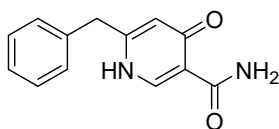
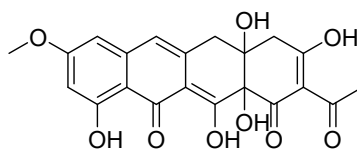
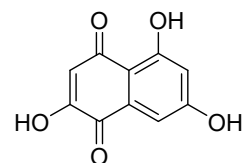
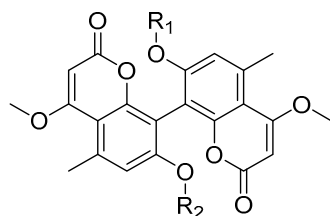
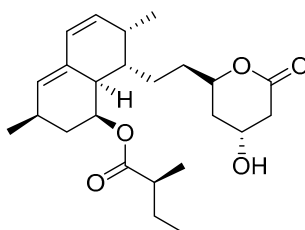
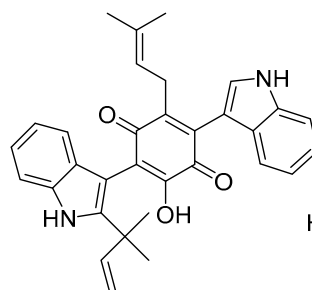
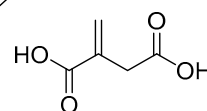
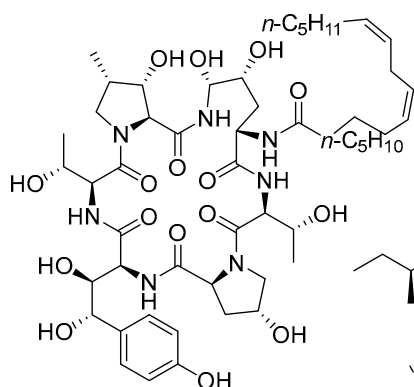
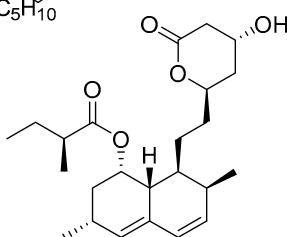
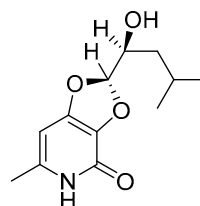
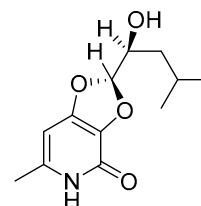
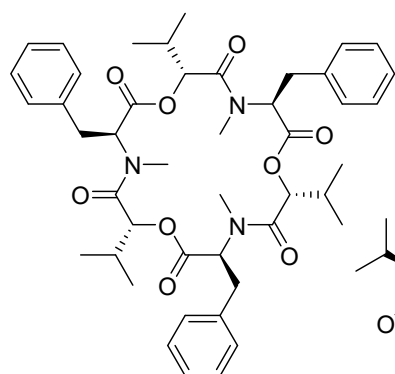
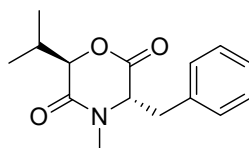
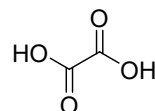
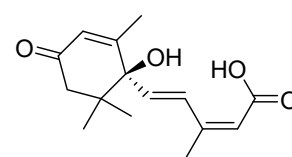
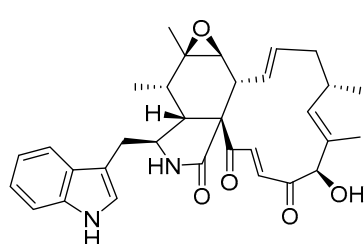
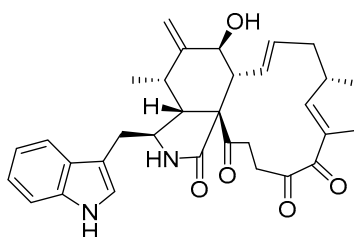
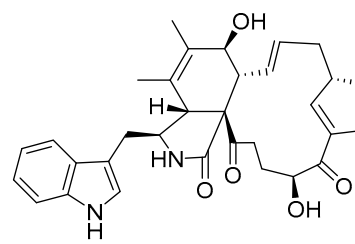
Xuwen Hou, Liyao Liu, Dan Xu, Daowan Lai, and Ligang Zhou *

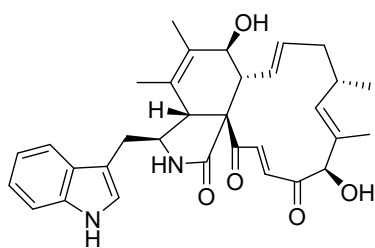
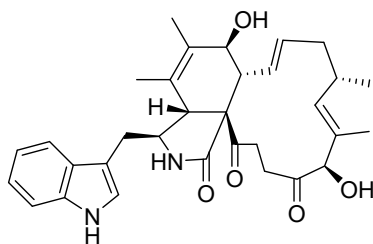
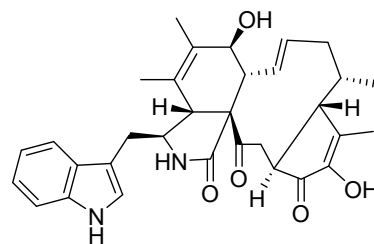
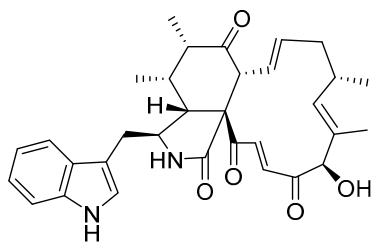
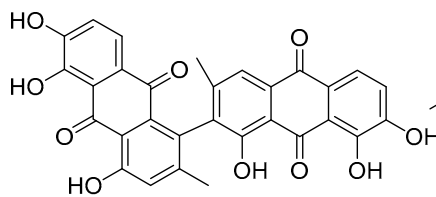
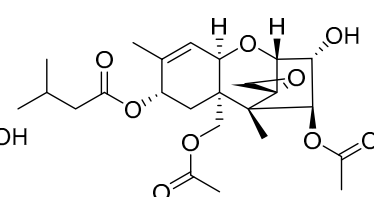
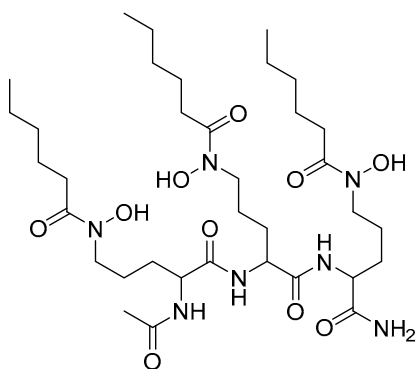
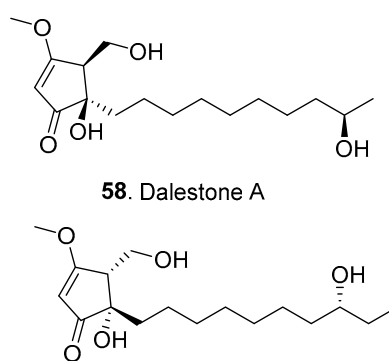
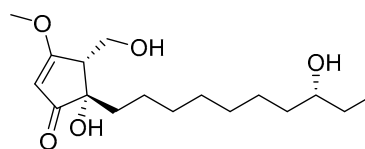
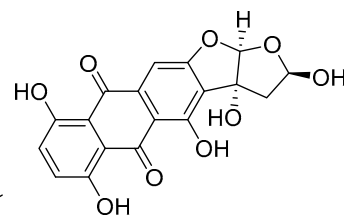
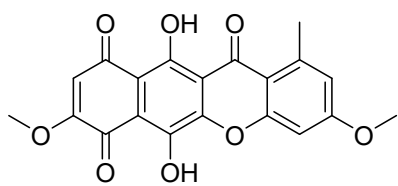
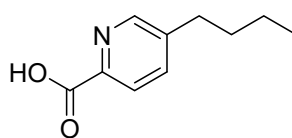
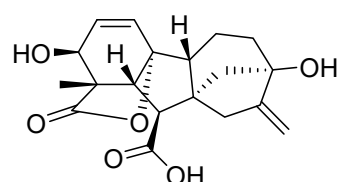
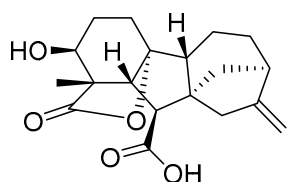
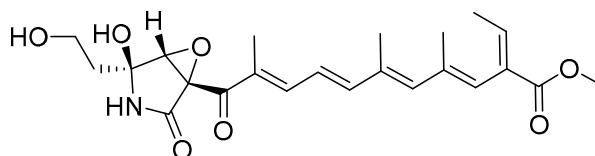
Department of Plant Pathology and MOA Key Lab of Pest Monitoring and Green Management, College of Plant Protection, China Agricultural University, Beijing 100193, China; xwhou@cau.edu.cn (X.H.); lyliu@cau.edu.cn (L.L.); cauxudan@cau.edu.cn (D.X.); dwlai@cau.edu.cn (D.L.)

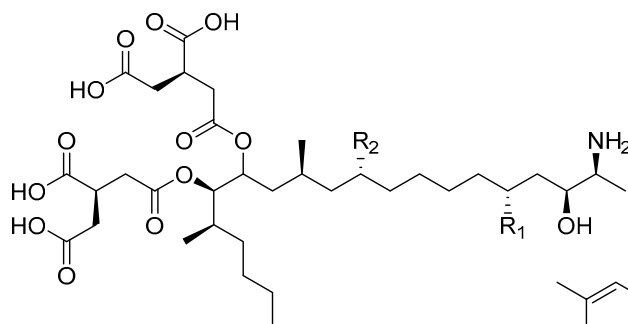
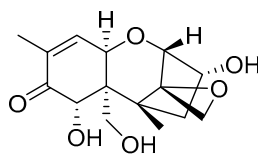
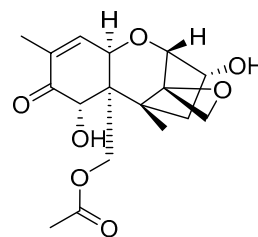
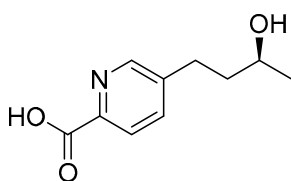
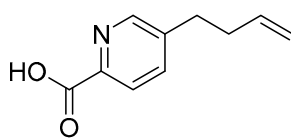
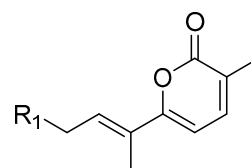
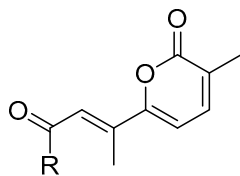
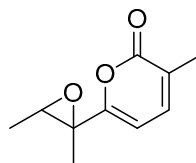
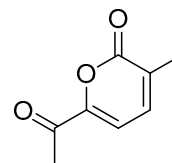
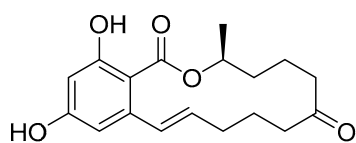
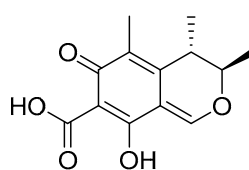
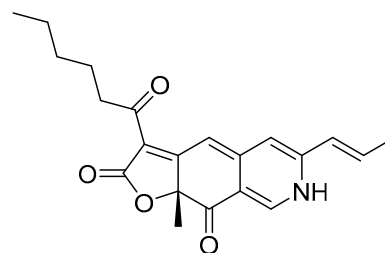
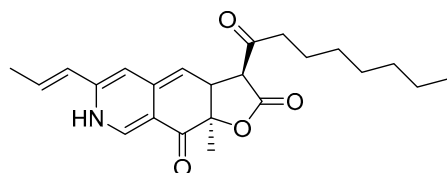
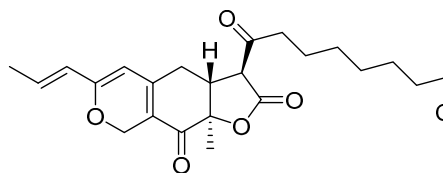
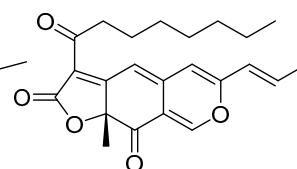
* Correspondence: lgzhou@cau.edu.cn (L.Z.); Tel.: +86-10-6273-1199

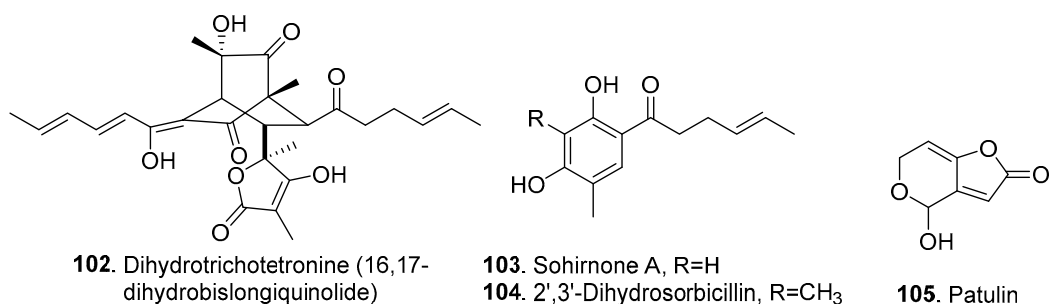
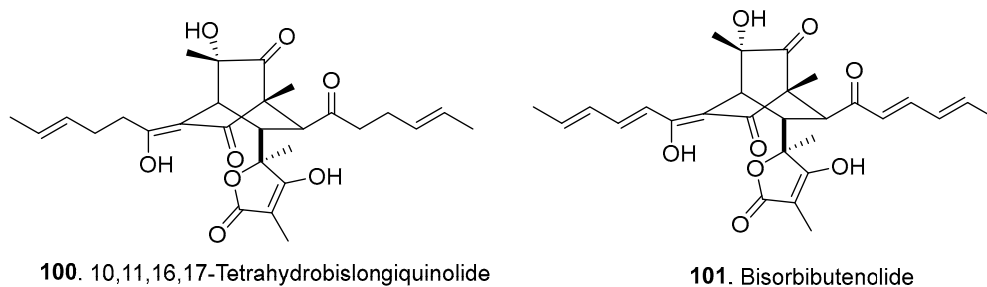
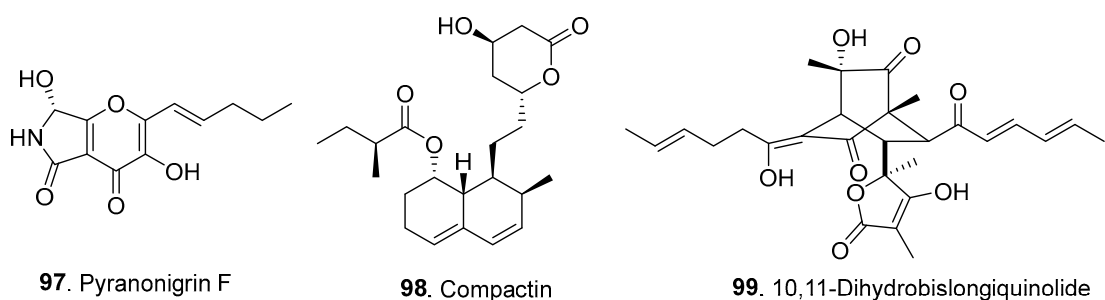
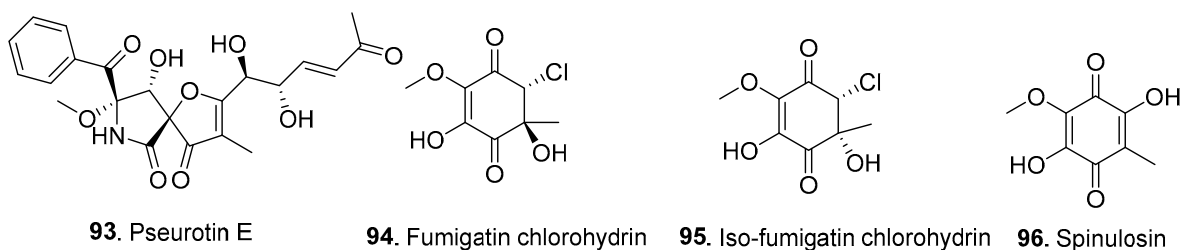
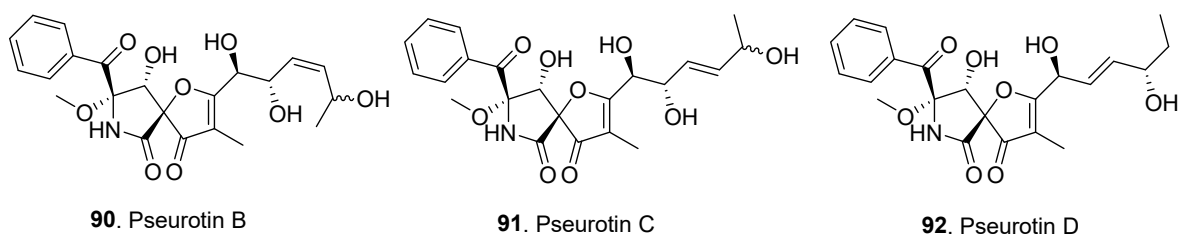
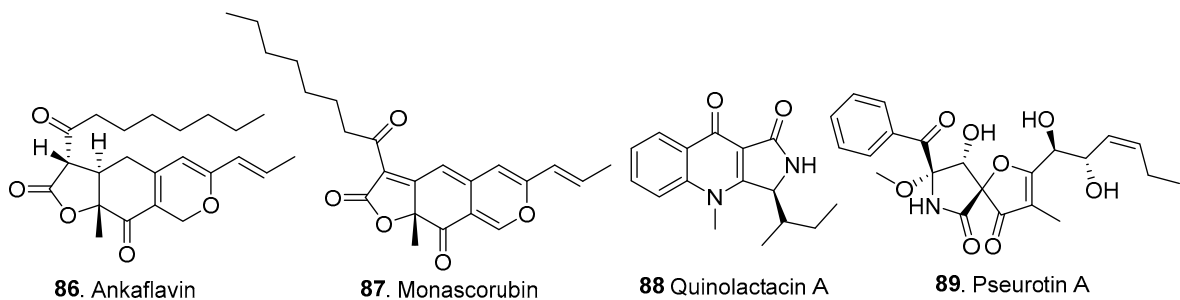


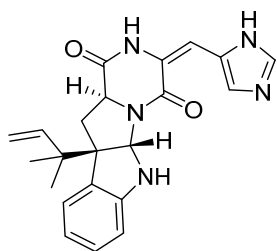
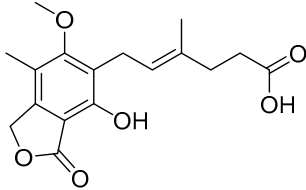
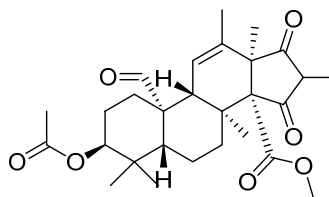
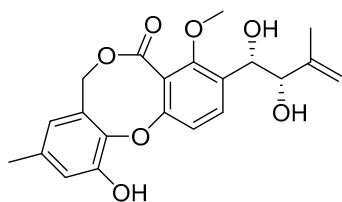
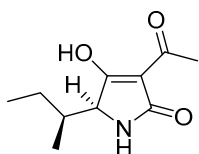
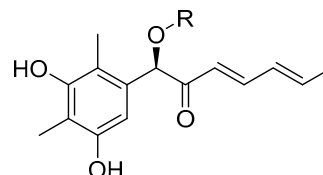
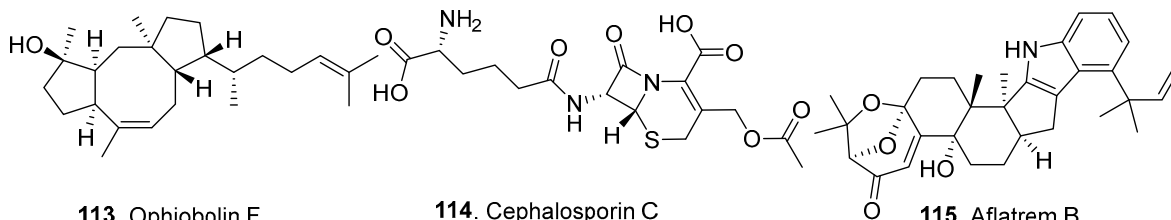
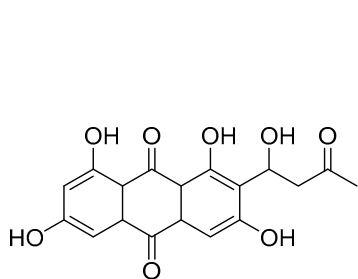
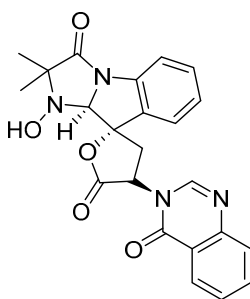
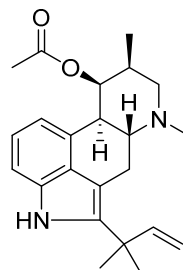
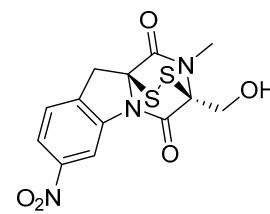
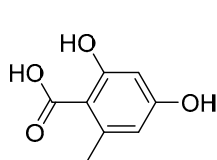
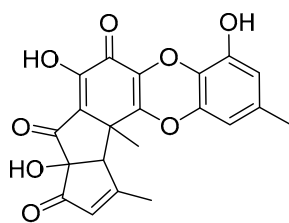
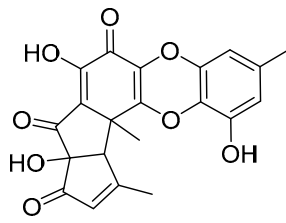
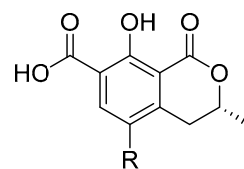
**13.** Asperphenamate, R=H**14.** 4'-OMe-Asperphenamate, R=OCH₃**15.** Cyclic Pro-Gly-Val-Gly-Trp
(8-OH, 3-prenyl)-Gly-Trp**16.** Sterigmatocystin**17.** Aflatoxin B1**18.** Cyclopiazonic acid**19.** Ustiloxin B**20.** Kojic acid**21.** Gliotoxin**22.** Endocrocin**23.** Fumagillin**24.** Fumigatin**25.** Helvolic acid**26.** Terrequinone A**27.** Norsolorinic acid**28.** Penicillin G**29.** Asperribrol**30.** Atromentin

**31.** JBIR 86**32.** Aspernigrin A**33.** BMS-192548**34.** Flaviolin**35.** Orlandin, $R_1=H$, $R_2=H$ **36.** Kotanin, $R_1=CH_3$, $R_2=CH_3$ **37.** Monacolin K**38.** Terrequinone A**40.** Itaconic acid**39.** Echinocandin B**41.** Lovastatin**42.** Dihydroisoflavipucine 1**43.** Dihydroisoflavipucine 2**44.** Beauvericin**45.** Bassiatin**46.** Oxalic acid**47.** Absciscic acid**48.** Chaetoglobosin A**49.** Chaetoglobosin B**50.** Chaetoglobosin D

**51. Chaetoglobosin E****52. Chaetoglobosin O****53. Chaetoglobosin V****54. Chaetoglobosin Z****55. Cladofulvin****56. T-toxin****57. Coprinoferrin****58. Dalestone A****59. Dalestone B****60. Dothistromin****61. Bikaverin****62. Fusaric acid****63. Gibberellin A3****64. Gibberellin A4****65. Fusarin C**

**66.** Fumonisin B1, R₁=OH, R₂=OH**67.** Fumonisin B2, R₁=OH, R₂=H**68.** Fumonisin B3, R₁=H, R₂=OH**69.** Fumonisin B4, R₁=H, R₂=H**70.** Deoxynivalenol**71.** 15-Acetyl deoxynivalenol**72.** Fusarinolic acid**73.** Dehydrofusaric acid**74.** Gibepyrone A, R=H**75.** Gibepyrone B, R=OH**76.** Gibepyrone C, R=H**77.** Gibepyrone D, R=OH**78.** Gibepyrone E**79.** Gibepyrone F**80.** Zearalenone**81.** Citrinin**82.** Rubropunctamine**83.** Monascorubramine**84.** Monascin**85.** Rubropunctatin



**106.** Roquefortine C**107.** Mycophenolic acid**108.** Andrastin A**109.** Pestalotiellide B**110.** Tenuazonic acid**111.** (1R,3E,5E)-1-(3,5-Dihydroxy-2,4-dimethylphenyl)-1-hydroxyhepta-3,5-dien-2-one, R=H**112.** (1R,3E,5E)-1-(3,5-Dihydroxy-2,4-dimethylphenyl)-1-hydroxyhepta-3,5-dien-2-one, R=OH**113.** Ophiobolin F**114.** Cephalosporin C**115.** Aflatrem B**116.** Asparasone A**117.** Gumitremorgin G**118.** Fumigaclavine C**119.** Glionitrin A**120.** Orsellinic acid**121.** F9775A**122.** F9775B**123.** Ochratoxin α , R=Cl**124.** Ochratoxin β , R=H

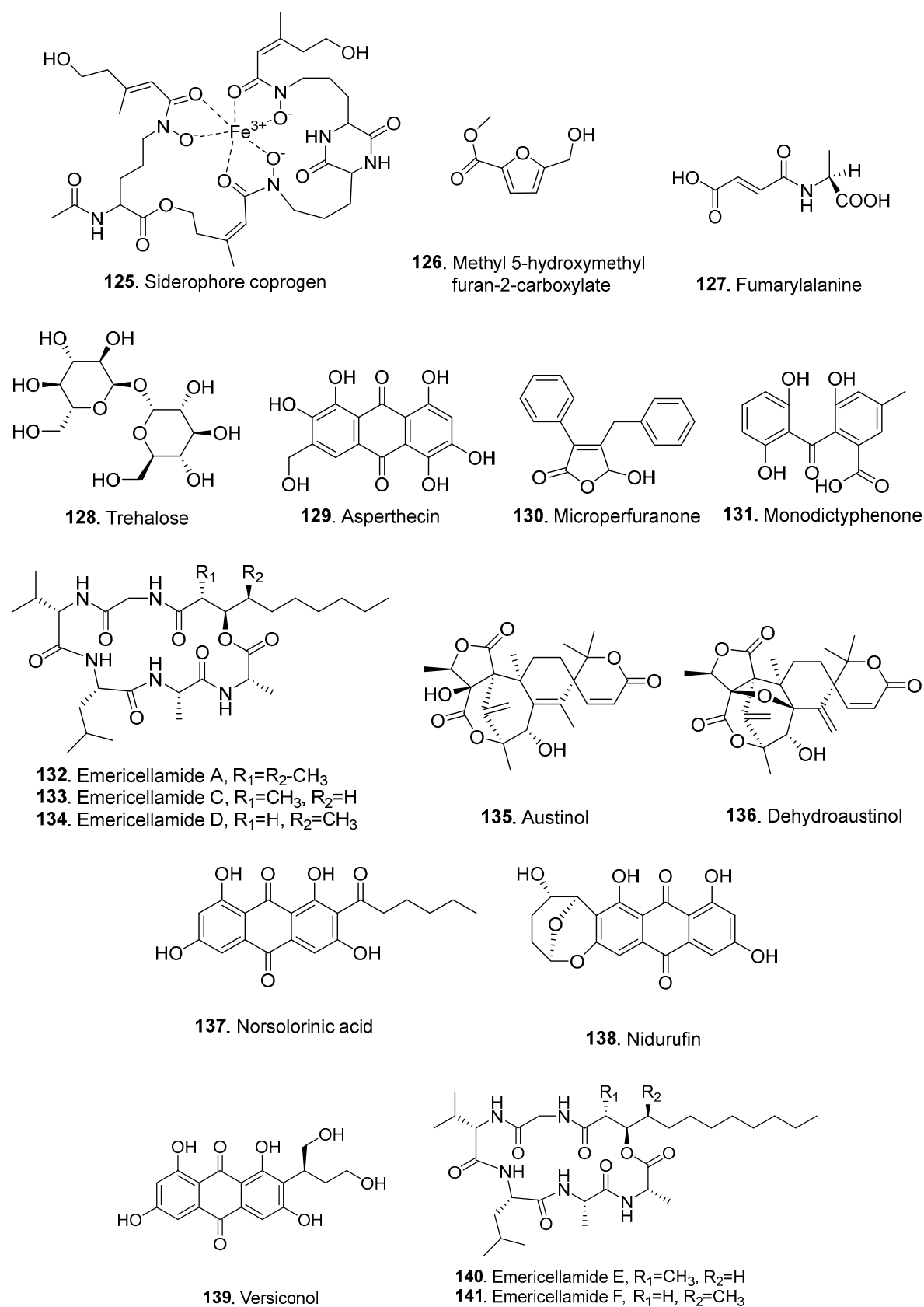


Figure S1. Structures of the metabolites **1–141** identified from fungi through regulation of LaeA and velvet proteins.