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# BOOK OF ABSTRACTS

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### 11 – SHORT LECTURE

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### Bioactive components from *Epicoccum sorghinum*

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Natural products are important sources for drug discovery and development throughout the last two centuries. They demonstrate tremendous chemical and structural diversity which are hard to be matched by synthetic libraries of small molecules, and continuously inspire novel findings in biology, chemistry, industry and medicine. Fungi produce numerous prominent bioactive secondary metabolites, which have been utilized in agriculture, food, or pharmaceutical industries such as cyclosporine, lovastatin, and penicillin. Therefore, the chemical and biological exploration of fungal natural products continued to be helpful for the discovery of bioactive components [1].

*Sorghum* (Kaoliang) species are important crops with high economic value and several applications [2]. In Taiwan, sorghum has been used in the wine industry, and “Kinmen Kaoliang Liquor” is a well-known Asian brand. Fungal contamination is one of the major threats affecting the production of sorghum grain resulting in economic losses, and causing human and animal health problems. Several fungal species can infect sorghum grain and generate some toxic secondary metabolites. *Epicoccum sorghinum* is one of the major fungal contaminants of sorghum grains and a potent producer of mycotoxins such as tenuazonic acid (TeA) [3]. However, except for TeA, few studies focused on chemical compounds produced by this fungus. To explore the potential biological and toxic effects of *E. sorghinum*, a chemical investigation was carried out on the ethyl acetate extract of the fungus because it showed cytotoxic activity against a triple-negative breast cancer cell line, MDA-MB-231 (54.82% inhibition at 20 µg/mL). The present lecture deals with the compounds isolated by our group from *E. sorghinum*.

#### References

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