

## 国際学会

### **Chemoenzymatic synthesis of fluorinated dolabellane skeleton for expanding structural diversity**

○Hikaru Sekiya, Akihiro Sugawara, Yohei Morishita, Taro Ozaki, and Teigo Asai

令和 5 年度化学系学協会東北大会および日本化学会東北支部 80 周年記念国際会（化学系学協会東北大会、東北大学、ポスター発表、9月 8 日-10 日

### **Studies on the biosynthesis of hymeglusin, an HMG-CoA synthase inhibitor with a unique $\beta$ -lactone ring**

○Mizuki Hirokawa, Akihiro Sugawara, Yohei Morishita, Kento Tsukada Taro Ozaki, and Teigo Asai

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### **Isolation and structure elucidation of shunt products from vinigrol cyclization pathway for understanding its diterpene-skeleton formation**

○Fumito Sato, Yohei Morishita, Kento Tsukada, Syo Furumura, Akihiro Sugawara, Taro Ozaki, Teigo Asai  
8 th Taiwan-Japan Joint Symposium for Pharmaceutical Sciences, Taipei, Oral presentation, 1 September

### **Introduction of C-F bond into fungal diterpenes with chemoenzymatic synthesis for expanding structural diversity**

○Hikaru Sekiya, Akihiro Sugawara, Yohei Morishita, Taro Ozaki, and Teigo Asai

化学系サマースクール、東北大学、ポスター発表、8月 8 日

Biosynthetic study of an HMG-CoA synthase inhibitor hymeglusin using heterologous expression system

○廣川瑞樹、森下陽平、塚田健人、菅原章公、尾崎太郎、浅井禎吾

日本薬学会 第 143 年会、北海道 国際交流シンポジウム（次世代薬学アジアシンポジウム） 口頭発表、2023 年 3 月 28 日

Discovery of fungal depsipeptide based on a synthetic biology-based approach

○Yuto Homma, Akihiro Sugawara, Yohei Morishita, Kento Tsukada, Taro Ozaki, Teigo Asai

Directing Biosynthesis VI, United Kingdom, poster presentation (online), 27 - 29 June, 2022

### **First discovery of fungal polyene macrolide by genome mining and heterologous expression of a cryptic HR-PKS cluster**

○Yohei Morishita, Huiping Zhang, Daisuke Hagiwara, Teigo Asai.

3rd European Conference on Natural Products. 2018. 9/5. Frankfurt, German. (oral)

### **Production of diverse diterpenoid pyrones by re-construction and re-designing of fungal biosynthetic pathways in *Aspergillus oryzae***

○Kento Tsukada, Shono Shinki, Akiho Kaneko, Teigo Asai.

3rd European Conference on Natural Products. 2018. 9/5. Frankfurt, German. (poster)

**Development of Approaches for Activating Fungal Cryptic Secondary Metabolites Production Based on Random Mutation and Chemical Induction,**

○Y. Morishita, T. Amiya, T. Yamamoto, Y. Oshima, T. Asai,

International Symposium on Natural Product for the Future 2016, Tokushima, 9/2

**Manipulation of Fungal Epigenetics Using a HDAC Inhibitor Induced Structurally Diverse Polyketide Production in *Chaetomium indicum***

○Teigo Asai, Takashi Yamamoto, Naoki Shirata, Tohru Taniguchi, Kenji Monde, Yoshiteru Oshima.

International Symposium for the 70th Anniversary of the Tohoku Branch of the Chemical Society of Japan. 2013. (Sendai).

**Discovery of Structurally Diverse Novel Secondary Metabolites from Entomopathogenic Fungi by Using Chemical Epigenetic Method**

○Takashi Yamamoto, Teigo Asai, Yoshiteru Oshima.

International Symposium for the 70th Anniversary of the Tohoku Branch of the Chemical Society of Japan. 2013. (Sendai).

**Manipulation of Fungal Epigenetics Using a HDAC inhibitor Induced Structurally Diverse Polyketide Production in *Chaetomium indicum*.**

○Teigo Asai, Takashi Yamamoto, Naoki Shirata, Tohru Taniguchi, Kenji Monde, Yoshiteru Oshima.

The 23<sup>rd</sup> French-Japanese Symposium on Medicinal and Fine Chemistry, May. 12-15, 2013 (Nagasaki, Japan)

**Secondary Metabolites Exudated from Capitate Glandular Trichomes**

○Asai, T., Oshima, Y., Kohshima, S., Fujimoto, Y.

19th International Symposium on Plant Lipids. Cairns, 2010.

**Secondary Metabolites in Glandular Trichome Exudates of Plants**

○Asai, T. and Fujimoto, Y.

6<sup>th</sup> Workshop on Organic Chemistry for Junior Chemists, Tokyo, 2006.

**Structure of Pseudopterosin Related Diterpenes Isolated from the Gorgonian Octocoral *Pseudopterogorgia elisabethae* Collected in San Andres and Providencia Islands**

Duque, C.; Puyana, M.; Castellanos, L.; Arias, A.; Correa, H.; Osorno, O.; ○Asai, T.; Hara, N.; Fujimoto, Y. ICOB-5 & ISCNP-25 IUPAC International Conference, Kyoto, July 2006.

**Biomimetic Formation of A Rearranged Ecdysteroid: Acid Mediated Migration of the Methyl Group from C-13 to C-14**

○Asai, T. and Fujimoto, Y.

5<sup>th</sup> Workshop on Organic Chemistry for Junior Chemists, Taiwan, November **2005**.