

[Production of the bioactive plant-derived triterpenoid morolic acid in engineered *Saccharomyces cerevisiae* - Srisawat - 2020 - Biotechnology and Bioengineering - Wiley Online Library](https://onlinelibrary.wiley.com/doi/10.1002/bit.27357)

The screenshot shows a web browser window displaying the Wiley Online Library article page. The browser's address bar shows the URL: <https://onlinelibrary.wiley.com/doi/10.1002/bit.27357>. The page header includes the Wiley Online Library logo, a search bar, and a 'Login / Register' link. The article title is 'Production of the bioactive plant-derived triterpenoid morolic acid in engineered *Saccharomyces cerevisiae*'. The authors listed are Pisane Srisawat, Shuhei Yasumoto, Ery Q. Fukushima, Jelson Robertee, Hikaru Seki, and Toshiya Muranaka. The article was first published on 20 April 2020 and has 6 citations. The abstract states: 'Morolic acid is a plant-derived triterpenoid that possesses pharmacological properties such as cytotoxicity, as well as anti-HIV, anti-HSV, anti-inflammatory, and antidiabetic effects. The significant therapeutic properties of morolic acid are desirable in the context of pharmacological and drug development research, but the low accessibility of morolic acid from natural resources limits its applications. In the present study, we developed a microbial system for the production of morolic acid. Using a combinatorial biosynthesis approach, a novel production pathway was constructed in *Saccharomyces cerevisiae* by coexpressing *BOSC2* (germanol synthase) from *Bauhinia forficata* and CYP716A49 (triterpene C-28 oxidase) from *Beta vulgaris*. Moreover, we reconstructed the cellular galactose regulatory network by introducing a chimeric transcriptional activator (fusion of Gal4dbpLFR.VP16) to override the genes under the control of the *galactose* promoter.' The page also features a 'Read the full text' button, a 'Share' button, and a 'Recommended' section with a link to 'Engineering triterpene production in *Saccharomyces cerevisiae*-*Escherichia coli* hybrid system from *Artemisia annua*'. The browser's taskbar at the bottom shows the Windows logo, a search bar, and various application icons, with the system tray displaying the date and time as 04:19 p.m. on 03/04/2023.