

小松崎典子,海老原久実,本多睦美,植木幸英,島 純. ふなずし由来乳酸菌のマウスにおける糞中へのコレステロール排泄効果. 日本食生活学会誌, in press.

Nakamura, T., M. Yamamoto, K. Saito, A. Ando, J. Shima. Identification of a gene, FMP21, whose expression levels are involved in thermotolerance in *Saccharomyces cerevisiae*. *AMB Express*, 4:67 (2014).

Okada, N., J. Ogawa, J. Shima. Comprehensive analysis of genes involved in the oxidative stress tolerance using yeast heterozygous deletion collection. *FEMS Yeast Res.*, 14 (3), 425-434 (2014).

Okuda, T., A. Ando, E. Sakuradani, H. Kikukawa, N. Kamada, M. Ochiai, J. Shima, J. Ogawa. Selection and characterization of promoters based on genomic approach for the molecular breeding of oleaginous fungus *Mortierella alpina* 1S-4. *Curr. Genet.*, 60 (3), 183-191 (2014).

Okuda, T., A. Ando, E. Sakuradani, H. Kikukawa, N. Kamada, M. Ochiai, J. Shima, J. Ogawa. Characterization of galactose-dependent promoters from an oleaginous fungus *Mortierella alpina* 1S-4. *Curr. Genet.*, 60 (3), 175-182 (2014).

島 純. パンと微生物機能. 温古知新, 51, 75-79 (2014).

島 純, 田中晃一, 中村敏英. 有機酸ストレス耐性酵母の探索・育種とバイオプロセスへの応用 未利用バイオマスの資源化に向けた酵母の機能開拓. 化学と生物, 52 (6), 351-353 (2014).

Tanimura, A., M. Takashima, T. Sugita, R. Endoh, M. Kikukawa, S. Yamaguchi, E. Sakuradani, J. Ogawa, J. Shima. Selection of oleaginous yeasts with high lipid productivity for practical biodiesel production. *Bioresour. Technol.*, 153, 230-235 (2014).

Tanimura, A., M. Takashima, T. Sugita, R. Endoh, M. Kikukawa, S. Yamaguchi, E. Sakuradani, J. Ogawa, M. Ohkuma, J. Shima. *Cryptococcus terricola* is a promising oleaginous yeast for biodiesel production from starch through consolidated bioprocessing. *Sci. Rep.*, 4:4776 (2014).

Yoshiyama, Y., K. Tanaka, K. Yoshiyama, M. Hibi, J. Ogawa, J. Shima. Trehalose accumulation enhances tolerance of *Saccharomyces cerevisiae* to acetic acid. *J. Biosci. Bioeng.*, in press.

Hagi, T., M. Kobayashi, S. Kawamoto, J. Shima, M. Nomura. Expression of novel carotenoid biosynthesis genes from *Enterococcus gilvus* improves the multi-stress tolerance of *Lactococcus*

lactis. J. Appl. Microbiol., 114 (6), 1763-1771 (2013).

Inaba, T., D. Watanabe, Y. Yoshiyama, K. Tanaka, J. Ogawa, H. Takagi, H. Shimoi, J. Shima. An organic acid-tolerant *HAA1*-overexpression mutant of an industrial bioethanol strain of *Saccharomyces cerevisiae* and its application to the production of bioethanol from sugarcane molasses. AMB Express 2013, 3:74 (2013).

Inai, T., D. Watanabe, Y. Zhou, R. Fukada, T. Akao, J. Shima, H. Takagi, H. Shimoi. Rim15p-mediated regulation of sucrose utilization during molasses fermentation using *Saccharomyces cerevisiae* strain PE-2. J. Biosci. Bioeng., 116 (5), 591-594 (2013).

Kikukawa, H., E. Sakuradani, S. Kishino, S.B. Park, A. Ando, J. Shima, M. Ochiai, S. Shimizu, J. Ogawa. Characterization of a trifunctional fatty acid desaturase from oleaginous filamentous fungus *Mortierella alpina* 1S-4 using a yeast expression system. J. Biosci. Bioeng., 116 (6), 672-676 (2013).

Kishino, S., M. Takeuchi, S.B. Park, A. Hirata, N. Kitamura, J. Kunisawa, H. Kiyono, R. Iwamoto, Y. Isobe, M. Arita, H. Arai, K. Ueda, J. Shima, S. Takahashi, K. Yokozeki, S. Shimizu, J. Ogawa. Polyunsaturated fatty acid saturation by gut lactic acid bacteria affecting host lipid composition. Proc. Natl. Acad. Sci. USA, 110 (44), 17808-17813 (2013).

Sasano, Y.*, Y. Haitani*, K. Hashida, S. Oshiro, J. Shima, H. Takagi. Improvement of fermentation ability under baking-associated stress conditions by altering the *POG1* gene expression in baker's yeast. *These authors contributed equally to this work. Int. J. Food Microbiol., 165 (3), 241-245 (2013).

島 純, 小松崎典子, 吉田綾子, 安藤 聡, 中村敏英. 「特集: 美味しい健康生活は微生物が作る ~作物生産、食品素材開発、健康支援~」 パンづくりを支える微生物機能 -酵母と乳酸菌を中心にして-. 生物工学会誌, 91 (11), 618-620 (2013).

Yoshida, J., Y. Kobayashi, Y. Tanaka, Y. Koyama, J. Ogihara, J. Kato, J. Shima, T. Kasumi. Complementary function of mitogen-activated protein kinase Hog1 from *Trichosporonoides megachiliensis* in *Saccharomyces cerevisiae* under hyper-osmotic stress. J. Biosci. Bioeng., 115 (3), 127-132 (2013).

Haitani, Y.*, K. Tanaka*, M. Yamamoto, T. Nakamura, A. Ando, J. Ogawa, J. Shima. Identification of an acetate-tolerant strain of *Saccharomyces cerevisiae* and characterization by gene expression analysis. *These authors contributed equally to this work. J. Biosci. Bioeng., 114 (6), 648-651 (2012).

Hasegawa, S., T. Ogata, K. Tanaka, A. Ando, H. Takagi, J. Shima. Overexpression of vacuolar H⁺-ATPase-related genes in bottom-fermenting yeast enhances ethanol tolerance and fermentation rates during high-gravity fermentation. *J. Inst. Brew.*, 118 (2), 179-185 (2012).

Hibi, M., J. Mano, T. Hagishita, J. Shima, S. Shimizu, J. Ogawa. β -Aryl- β -amino acid aminotransferase from *Variovorax* sp. JH2 is useful for enantioselective β -phenylalanine production. *Biocat. Agri. Biotechnol.*, 1 (3), 253-258 (2012).

Horinouchi, N., T. Sakai, T. Kawano, S. Matsumoto, M. Sasaki, M. Hibi, J. Shima, S. Shimizu, J. Ogawa. Construction of microbial platform for an energy-requiring bioprocess: practical 2'-deoxyribonucleoside production involving a C-C coupling reaction with high energy substrates. *Microbial Cell Factories*, 11 (82), (2012).

Komatsuzaki, N., J. Shima. Effects of live *Lactobacillus paracasei* on plasma lipid concentration in rats fed an ethanol-containing diet. *Biosci. Biochem. Biotechnol.*, 76 (2), 232-237, (2012).

Sasano, Y.*, Y. Haitani*, K. Hashida, I. Ohtsu, J. Shima, H. Takagi. Enhancement of the proline and nitric oxide synthetic pathway improves fermentation ability under multiple baking-associated stress conditions in industrial baker's yeast. *These authors contributed equally to this work. *Microb. Cell Fact.*, 11 (40), (2012).

Sasano, Y.*, Y. Haitani*, K. Hashida, I. Ohtsu, J. Shima, H. Takagi. Simultaneous accumulation of proline and trehalose in industrial baker's yeast enhances fermentation ability in frozen dough. *These authors contributed equally to this work. *J. Biosci. Bioeng.*, 113 (5), 592-595 (2012).

Sasano, Y.*, Y. Haitani*, K. Hashida, I. Ohtsu, J. Shima, H. Takagi. Overexpression of the transcription activator Msn2 enhances the fermentation ability of industrial baker's yeast in frozen dough. *These authors contributed equally to this work. *Biosci. Biotechnol. Biochem.*, 76 (3), 624-627 (2012).

Tanaka, K., Y. Ishii, J. Ogawa, J. Shima. Enhancement of acetic acid tolerance in *Saccharomyces cerevisiae* by overexpression of the *HAA1* gene, encoding a transcriptional activator. *Appl. Environ. Microbiol.*, 78 (22), 8161-8163 (2012).

Tanimura, A.*, T. Nakamura*, I. Watanabe, J. Ogawa, J. Shima. Isolation of a novel strain of *Candida*

shehatae for ethanol production at elevated temperature. *These authors contributed equally to this work. SpringerPlus, 1 (27), (2012).