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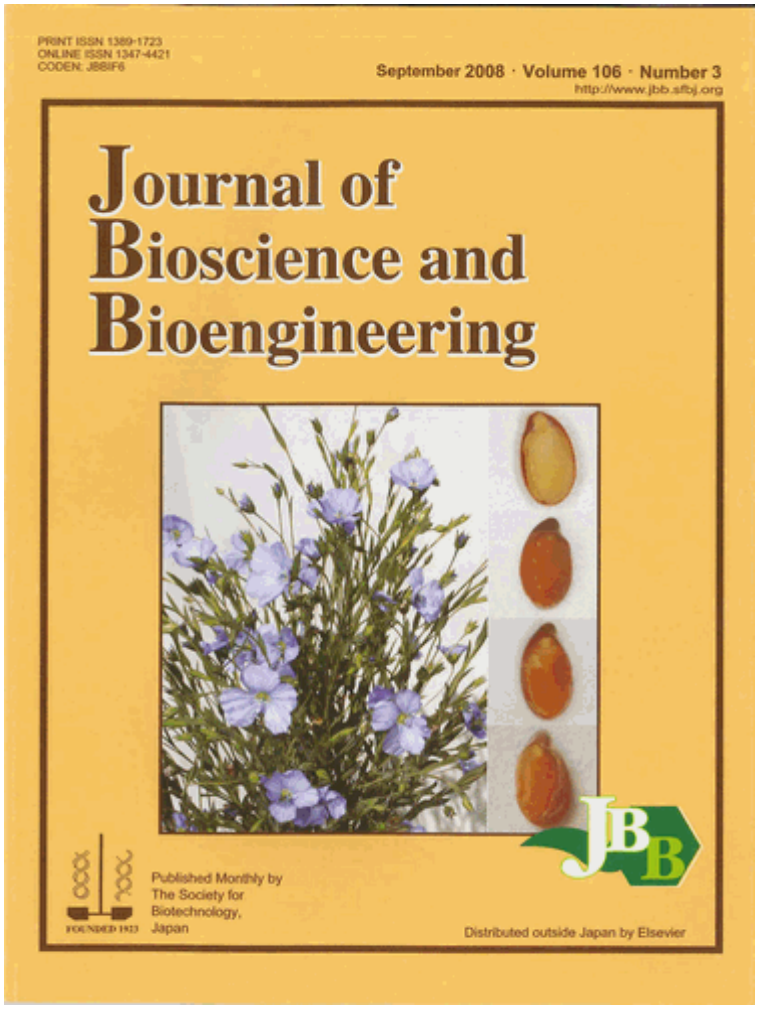

Enrichment of carotenoids in flaxseed.

Left: an untransformed flax plant (WARD cultivar). The transgenic flax plants were the same to untransformed control plants in their appearance except for seed color.

Right top: section of an untransformed flaxseed.

Right below three: sections of transgenic flaxseeds. These transgenic plants were generated by introduction of the phytoene synthase gene (*crtB*) derived from soil bacterium *Pantoea ananatis* (formerly called *Erwinia uredovora* 20D3).

The inner color of the transgenic flaxseeds was altered into orange due to the accumulation of β-carotene and α-carotene. Total carotenoid amounts in these seeds were 65.4-156.3 μg/g fresh weight, which corresponded to 7.8- to 18.6-fold increase, compared with those of untransformed controls.

Related article: Fujisawa, M., Watanabe, M., Choi, S.-K., Teramoto, M., Ohyama, K., and Misawa, N., "**Enrichment**

of carotenoids in flaxseed (*Linum usitatissimum*) by metabolic engineering with introduction of bacterial phytoene synthase gene *crtB*' J. Biosci. Bioeng., Volume 105, Issue 6, Pages, 636-641 (2008).

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