



Agricultural Journals

Czech Journal of

FOOD SCIENCE

[home](#) [page](#) [about us](#) [contact](#)

[us](#)

Table of Contents

IN PRESS

CJFS 2014

CJFS 2013

CJFS 2012

CJFS 2011

CJFS 2010

CJFS 2009

CJFS 2008

CJFS 2007

CJFS 2006

CJFS 2005

CJFS 2004

CJFS 2003

CJFS 2002

CJFS 2001

CJFS Home

Editorial Board

For Authors

- **Authors Declaration**
- **Instruction to Authors**
- **Guide for Authors**
- **Copyright Statement**
- **Submission**

For Reviewers

- **Guide for Reviewers**
- **Reviewers Login**

Subscription

Czech J. Food Sci.

**Panda B.P., Javed S.,
Ali M.:**

Engineering rice based medium for production of lovastatin with *Monascus* species

Czech J. Food Sci., 27 (2009): 352-360

Angkak (red mold rice, red yeast rice, Chinese red rice), a traditional Chinese functional food is produced by solid-state fermentation of cooked non-glutinous rice with *Monascus* species. The secondary metabolite of *Monascus* species, monacolin K (lovastatin), has been proved to lower blood lipid levels. In this study, the best *Monascus purpureus* strain was selected from MTCC 369, 410, 1090 based on lovastatin concentration. Four medium parameters (NH_4Cl , MgSO_4 , NaCl , CaCl_2) screened by Plackett-Burman design from total nine medium variables were optimised by Box Behnken design of response surface methodology. Maximum lovastatin production of 3.420 mg/g was predicted in the solid medium containing 20 g rice and 40 ml liquid nutrient (NH_4Cl 14.32