

REFERENCES

- Abou El-Khair, I. (1986):** Effect of gamma-irradiation on growth and activity of some fungi. M. Sc. Thesis, Dept. of Botany, Faculty of Sci., Zagazig Univ., Egypt.
- Ainsworth, G.; Sparrow, F. and Sussman, A. (1973):** In the Fungi: An advanced treatise. Academic Press, New York.
- Alabostro, F.; Pineda, A.; Pangan, A. and Delvalle, M. (1978):** Irradiation of fresh Cavendish bananas (*Musa cavendish*) and *Mongoes mongifera*. Food Preservation by Irradiation. Vol.1, (IAEA, Veinna), pp. 282-303.
- An, G.; Jang, B.; Suh, O.; Kim, C. and Song, K. (2001):** Iron (III) decreases a staxanthin production in *Phaffia rhodozyma* (*Xanthopyllomyces dendrorhous*). Food Sci. Biotechnol. 10: 204-207.
- AOAC. (1999):** Official Methods of Analysis, 16th ed., Association of Official Analytical Chemists. Washington, DC, USA.
- APHA (1995):** Standard Methods for the Examination of Water and Wastewater, 19th ed., 5-Day BOD Test, method 5210 B. American Public Health Association, Washington DC, p. 5.3-5.6.
- ATCC (1987):** Catalogue of Fungi / Yeasts 17th ed., American Type Culture Collection, Maryland.

- ATCC (2002):** on Line Catalogue: Electronic Address, [www. Atcc.Org](http://www.Atcc.Org). accessed at 08/01/2002. American Type Culture Collection, Maryland.
- Aziz, N. (1982):** The microflora of poultry diets in relation to human and poultry diseases and control by gamma-radiation. M.Sc. Thesis, Dept. of Botany, Faculty of Sci., Ain Shams Univ., Cairo, Egypt.
- Bau, Y. and Wong, H. (1979):** Zinc effects on growth, pigmentation and antibacterial activity of *Monascus purpureus*. *Physiol. Plant.* 46: 63-67.
- Bilgrami, K., Sinha, S. and Jeswal, P. (1988):** Nephrotoxic and Hepatotoxic effects of citrinin in mice (*Mus musculus*). *Proc. Indian Nat. Sci. Acad.* 54: 35-37.
- Blanc, P.; Laussac, J.; Lebars, J.; LeBars, P.; Loret, M.; Pareilleux, A.; Prome, D.; Prome, J.; Sanerre, A. and Goma, G. (1995a):** Characterization of monascidin A from *Monascus* as citrinin. *Int. J. Food Microbiol.* 27: 201-213.
- Blanc, P.; Loret, M. and Goma, G. (1995b):** Production of citrinin by various species of *Monascus*. *Biotechnol. Lett.* 17: 291-294.
- Bridge, P. and Hawksworth, D. (1985):** Biochemical tests as an aid to the identification of *Monascus* species. *Lett. Appl. Microbiol.* 1: 25-29.
- Broder, C. and Koehler, P. (1980):** Pigments produced by *Monascus purpureus* with regard to quantity. *J. Food. Sci.* 45: 567-569.

- Carels, M. and Shepherd, D. (1977):** The effect of different nitrogen sources on pigment production and sporulation of *Monascus* species in submerged shaken culture. *Can. J. Microbiol.* 23: 1360-1372.
- Carvalho, J.; Pandey, A.; Babitha, S. and Soccol. C. (2003):** Production of *Monascus* biopigments: An over view. *Biotechnol.* November/December, 37-42.
- Chang, J-S.; Lee, J-T. and Chang, A-C. (2006):** Neural-network rate-function modeling of submerged cultivation of *Monascus anka*. *Biochem. Eng. J.* 32: 119-126.
- Chibata, I.; Tosa, T. and Sato, T. (1979):** Use of immobilized cell systems to prepare fine chemicals. In: Peppler, H.J. and Perlman, D. (eds.). *Microbial Technology, Fermentation Technology*. 2nd ed., Volume II, Academic Press, Inc. London, pp.433-461,
- Cho, Y.; Park, J.; Hwang, H.; Kim, S.; Choi, J. and Yun, J. (2002):** Production of red pigment by submerged culture of *Paecilomyces sinclairii*. *Lett. Appl. Microbiol.* 35: 195-202.
- Clarke, P. (1976):** Mutant isolation. In: Macdonald, K.D. (ed.). *Second International Symposium Genetics Industrial Microorganisms*. Academic Press, London, pp. 15-28.
- Cooper, W.; Curry, R. and Oshea, K. (1998):** *Environmental Applications of Ionizing Radiation*. John Wiley & Sons.

- Crueger, W. and Crueger, A. (1989):** Biotechnology: A Text Book of Industrial Microbiology. 2nd ed., Oldenbourg Verlag. GmbH, Munchen, Germany.
- Dahlan, K. (2001):** Radiation sciences In: Phillips, G.O. (ed.) The Scientific Basis of Tissue Transplantation. World Science Publ., pp. 309-341.
- deCarvalho, J.; Pandey, A.; Oishi, b.; Brand, D.; Rodriguez-Leon, J. and Soccol, C. (2006):** Relation between growth, respirometric analysis and biopigments production from *Monascus* by solid-state fermentation. Biochem. Eng. J. 29: 262-269.
- DeTilly, G.; Mou, D. and Gooney, C. (1983):** Optimization and Economics of Antibacterial production. In: Smith, J.E. Berry, D.R. and Kristiansen, B.K. (eds.). The Filamentous Fungi. Vol.4. Fungal Technology. Edward Arnold Publ.
- Dominguez-Espinosa, R. and Webb, C. (2003):** Submerged fermentation in wheat substrates for Production of *Monascus* pigments. World J. Microbiol. Biotechnol. 19: 329-336.
- Dziedzic-Goclawska, A. (2000):** The application of ionizing radiation to sterilize connective tissue all a grafts. In: Phillips, G.O. (ed.). Radiation and Tissue Banking. World Science Publ., pp. 57-99.

- Elander, R.; Chang, L. and Vanghan, R. (1977):** Genetics of industrial microorganisms. Ann. Rep. Ferment. Proc. 1: 1-40.
- El-Batal, A. and Abdel Kareem, H. (1996):** Production of lactic acid from whey by immobilized cells of gamma irradiated *Lactococcus lactis* subsp. *lactis*. Az. J. Microbiol. 34: 62-71.
- El-Batal, A. and Khalaf, M. (2003):** Wheat bran as a substrate for enhanced thermostable alpha-amylase production by gamma irradiated *Bacillus megaterium* in solid state Fermentation. Egypt. J. Rad. Sci. Applic. 16: 443-464.
- El-Batal, A. and Khalaf, S. (2004):** Xylitol production from corn cobs hemicellulosic hydrolysate by *Candida tropicalis* immobilized cells in hydrogel copolymer carrier. Int. J. Agric. Biol. 6: 1066-1073.
- El-Sherbeny, G. (1982):** Studies on the effect of gamma radiation on growth and metabolism of some fungi isolated from air. M.Sc. Thesis, Dept. of Botany, Faculty of Sci., Zagazig Univ., Egypt.
- Evans, P. and Wang, H. (1984):** Pigment production from immobilized *Monascus* sp. utilizing polymeric resin adsorption. Appl. Environ. Microbiol. 47: 1323-1326.
- Fabre, C.; Santerre, A.; Loret, M.; Baberian, R.; Pareilleux, A.; Goma, G. and Blanc, P. (1993):** Production and food applications of the red pigments of *Monascus ruber*. J. Food Sci. 58: 5-1099-1110.

- Federici, F.; Petruccioli, M.; Gallo, Federici, R. and Miller, M. (1991):** Scanning electron microscopy of Ca-alginate immobilized *Aureobasidium pullulans* grown under various culture conditions. *Mycologia*, 83: 595-600.
- Fenice, M.; Federici, F.; Selbmann, L. and Petruccioli, M. (2000):** Repeated-batch production of pigments by immobilized *Monascus purpureus*. *J. Biotechnol.* 80: 271-276.
- Fink-Gremmels, J.; Dresel, J. and Leistner, L. (1991):** Use of *Monascus* extracts as an alternative to nitrite in meat products. *Fleischwirtschaft*, 71: 1184-1186.
- Fogarty, R. and Tobin, J. (1996):** Fungal melanins and their interactions with metals. *Enz. Microb. Technol.* 19: 311-317.
- Francis, F. (1987):** Lesser-Known Food colorants. *Food Technol.* 41: 62-68.
- Francis, F. (1989):** Food Colourants: Anthocyanins. *Critical Review. Food Sci. Nutr.* 28: 273-314.
- Furnsaki, S. and Seki, M. (1992):** Use and engineering aspects of immobilized cells in biotechnology. *Adv. Biochem. Eng. Biotechnol.* 46: 161-185.
- Gilman, J. (1957):** A Manual of Soil Fungi, 2nd ed., The Iowa State Univ., Press Iowa, USA.
- Hajjaj, H.; Blanc, P.; Groussac, E.; Goma, G.; Uribelarrea, J. and Loubiere, P. (1999):** Improvement of red pigment/

citrinin production ratio as a function of environmental conditions by *Monascus rubber*. Biotechnol. Bioeng. 64: 497-501.

Hajjaj, H.; Blanc, P.; Groussac, E.; Uribelarrea, J.; Goma, G. and Loubiere, P. (2000): Kinetic analysis of red pigment and citrinin by *Monascus ruber* as a function of organic acid accumulation. Enz. Microb. Technol. 27: 619-625.

Hamdi, M.; Blanc, P.; Loret, M. and Goma, G. (1997): A new process for red pigment production by submerged culture of *Monascus purpureus*. Bioprocess Eng. 17: 75-79.

Han, O. (1990): Optimization of *Monascus* pigment production in solid-state fermentation. Ph.D. Thesis, Dept. of Food Science, Graduate School, Massachusetts Univ., Korea.

Hawksworth, D. and Pitt, J. (1983): A new taxonomy for *Monascus* species based on cultural and microscopical characters. Aust. J. Bot. 31: 51-61.

Hiroi, T.; Shima, T.; Suzuki, T.; Tsukioka, M. and Ogasawara, N. (1979): Hyperpigment-productive mutant of *Monascus anka* for solid culture. Agric. Biol. Chem. 43: 1975-1979.

Iizuka, H. and Lin, C. (1983): On the genus *Monascus* of Asia and its specific characteristics. Proceedings of the 6th International Fermentation Symposium. London, Canada, 2: 555-561.

- Iqbal, M. and Zafar, S. (1994):** Vegetable sponge as a matrix to immobilize microorganisms: a trial study for hyphal fungi, yeast and bacteria. *Lett. Appl. Microbiol.* 17: 289-291.
- Johns, M. and Stuart, D. (1991):** Production of pigments by *Monascus purpureus* in solid culture. *J. Ind. Microbiol.* 8: 23-38.
- Ju, J.Y.; Nam, H.W.; Yoon, J.C. and Shin, C.S. (1994):** Extractive fermentation of red pigment using *Monascus* sp. J101. *Korean J. Appl. Microbiol. Biotechnol.* 22:85-91.
- JunShe, S.; Xue, L.; Xiugin, D.; Sun, J.; Li, X and Dong, X. (2002):** Induced breeding and conditions of producing cellulase by *Trichoderma konigii*. *J. Beijing Forestry Univ.* 24: 83-85.
- Juzlova, P.; Martinkova, L. and Kren, V. (1996):** Secondary metabolites of the fungus *Monascus*: A review *J. Ind. Microbiol.* 16: 163-170.
- Khalaf, M. and Khalaf, S. (2005):** Pomegranate peels: A novel agro-residue for tannase production by gamma irradiated *Aspergillus versicolor* under solid state fermentation. *Isotope & Rad. Res.* 37: 1005-1022.
- Kim, C.; Jung, H.; Kim, J.H. and Shin, C.S. (2006):** Effect of *Monascus* pigment derivatives on the electrophoretic mobility of bacteria, and the cell adsorption and antibacterial activities of pigments. *Colloids & Surfaces B: Biointerfaces*, 47: 153-159.

- Kim, C.; Kim, S. and Hong, S. (1998):** Production of red pigment by *Serratia* sp. KH-95 and its cultural properties. Korean J. Biotechnol. Bioeng. 13: 431-437.
- Kim, J.; Park, S. and Lee, S. (1995):** Novel antimutagenic pigment produced by *Bacillus licheniformis* SSA3. J. Microbiol. Biotechnol. 5: 48-50.
- Kim, S.; Hwang, H.; Park, J.; Cho, Y.; Song, C. and Yun, J. (2002):** Mycelial growth and exobiopolymer production by submerged culture of various edible mushrooms under different media. Lett. Appl. Microbiol. 34: 56-61.
- Krairak, S.; Yamamura, K.; Irie, R.; Nakajima, M.; Shimizu, H.; Chim-Anage, P.; Yongsmith, B. and Shioya, S. (2000):** Maximizing yellow pigment production in fed-Batch culture of *Monascus* sp. J. Biosci. Bioeng. 90: 363-367.
- Kumakura, M. (1993):** Dose-dependency of radiation on enzyme production in *Trichoderma reesei*. Rad. Environ. Biophys. 32: 41-46.
- Lakrod, K.; Chaisrisook, C. and Skinner, D. (2003):** Expression of pigmentation genes following electroporation of albino *Monascus purpureus*. J. Ind. Microbiol. Biotechnol. 30: 369-374.
- Lauro, G. (1991):** A primer on natural colors. Cer. Food World, 36: 949-953.

- Lee, Y. and Chen, D. (1998):** Applications of *Monascus* pigment as food colourant. In: Blanc, P. (ed.). ADEBIO *Monascus* Culture and Applications: Proceedings of An International Symposium. Held at Toulouse, France, The Institute National Des Sciences Appliquées de Toulouse. ISBN: NA. pp.1-11.
- Lee, Y. and Chen, D. (2000):** Applications of *Monascus* pigments as food colourant In: www.allok.com/literature, accessed Oct.
- Lee, Y.; Chen, D. Chauvatcharin, S.; Scki, T. and Yoshida, T. (1995):** Production of *Monascus* pigments by a solid-liquid state culture method. J. Ferment. Bioeng. 79: 516-518.
- Lian, X.; Wang, C. and Guo, K. (2007):** Identification of new red pigments produced by *Monascus rubr.* Dyes & Pigments, 73: 121-125.
- Lin, C. (1973):** Isolation and culture conditions of *Monascus* sp. for the production of pigment in a submerged culture. J. Ferment. Technol. 51: 407-414.
- Lin, C. and Demain, A. (1991):** Effect of nutrition of *Monascus* sp. on formation of red pigments. Appl. Microbiol. Biotechol. 36: 70-75.
- Lin, C. and Demain, A. (1994):** Leucine interference in the production of water-soluble red *Monascus* pigments. Arch. Microbiol. 162: 114-119.

- Lin, C. and Iizuka, H. (1982):** Production of extracellular pigment by a mutant of *Monascus Kaoliang* sp. Appl. Environ. Micorbiol. 43: 671-676.
- Lin, C. and Suen, S. (1973):** Isolation of hyperpigment-productive mutant of *Monascus* sp. F-2. J. Ferment. Technol. 51: 757-759.
- Lin, T. (1991):** Studies on the formation of *Monascus* red pigments Ph.D. Thesis, Mit, Massachusetts.
- Lin, T.; Yakushijin, K.; Buchi, G. and Demain, A. (1992):** Formation of water-soluble *Monascus* red pigments by biological and semi-synthetic processes. J. Ind. Microbiol. 9: 173-179.
- Ma, J.; Li, Y.; Ye, Q.; Li, J.; Hua, Y.; Ju, D. and Zhang, D. (2000):** Constituents of red yeast rice, A traditional chinese food and medicine. J. Agric. Food Chem. 48: 5220-5225.
- Mak, N.; Fong, W. and Wong-Leung, Y. (1990):** Improved fermentative production of *Monascus* pigments in roller bottle culture. Enz. Microbiol. Technol. 12: 965-968.
- Malladi, B. and Ingham, S. (1993):** Thermophilic aerobic treatment of potato processing wastewater. World J. Microbiol. Biotechnol. 31: 426-428.
- Martinkova, L.; Juzlova, P. and Vesely, D. (1995):** Biological activity of polyketide pigments produced by the fungus *Monascus*. J. Appl. Bacteriol. 79: 609-616.

- Martinkova, L.; Patakova-Juzlova, P.; Kren, V.; Kuceroval, Z.; Havlicek, V.; Olsovsky, P.; Hovorka, O.; Rihova, B.; Vesely, D.; Vesela, D.; Ulvrachova, J. and Prikrylova, V. (1999):** Biological activities of oligoketide pigments of *Monascus purpureus*. Food Add. Contaminants, 16: 15-24.
- Mishra, B.; Arora, A. and Lata, M. (2004):** Optimization of a biological process for treating potato chips industry wastewater using mixed culture of *Aspergillus foetidus* and *Aspergillus niger*. Bioresource Technol. 94: 9-12.
- Nozaki, H.; Date, S.; Kondo, H.; Kiyohara, H.; Takadoda, D.; Tada, T. and Nakayama, M. (1991):** Ankalactone, a new α,β -unsaturated γ -lactone from *Monascus anka*. Agric. Biol. Chem. 55: 899-900.
- Ogihara, J.; Kato, J.; Oishi, K. and Fujimoto, Y. (2001):** PP-R, 7-(2-hydroxyethyl)- monascorubramine, a red pigment produced in the mycelia of *Penicillium* sp. Az. J. Biosci. Bioeng. 91: 44-47.
- Oshima, M.; Ishizaki, N. and Handa, A. (1981):** Neopurpuration is a purplish-red pigment containing ferrous ion, produced by *Streptomyces propurpuratus* ATCC 21630 in cooperation with *Bacillus* sp. under mixed culture J. Ferment. Technol. 59: 209-212.
- Oxoid (1981):** The Oxoid Manual of Cultural Media Ingredients and other Laboratory Services. 4th ed. Publ. Oxoid limited, Wade Road, Basingstoke, Hampshire RG24 PW.

- Panagou, E. Z.; Kodogiannis, V. and Nychas, G.J.-E. (2007):** Modelling fungal growth using radial basis function neural networks: The case of the ascomycetous fungus *Monascus ruber* van Tieghem. Int. J. Food Microbiol. 117: 276-286.
- Pandey, A.; Soccol, C.; Rodriguez-Leon, J. and Nigam, P. (2001):** Solid-state Fermentation in Biotechnology-Fundamentals and Applications. 1st ed., New Delhi, Asiatech Publ. Inc.
- Pastrana, L.; Blanc, P.; Santerre, L.; Loret, M. and Goma, G. (1995):** Production of red pigments by *Monascus ruber* in synthetic media with a strictly controlled nitrogen source. Process Biochem. 30: 333-341.
- Pereira, D. and Kilikian, B. (2001):** Effect of yeast extract on growth kinetics of *Monascus purpureus*. Appl. Biochem. Biotechnol. 91-93: 311-316.
- Pitt, J. and Hocking, A. (1997):** Fungi and Food spoilage. 2nd ed., London: Chapman and Hall.
- Pitt, J. and Hocking, C. (1985):** Fungi and Food Spoilage. Academic Press, Inc. Sydney, Australia.
- Ragab, M.; Kararah, M.; El-Fouly, M. and Shahin, A. (1986):** Control of bulb decay in garlic by using gamma irradiation. Egypt. Soc. Appl. Micro. Proc. VI. Conf. Microbiol. Cairo, Vol.II, 287-306, Pl. Pathol.
- Rajoka, M.; Bashir, A.; Hussain, S. and Malik, K. (1998):** γ -Ray induced mutagenesis of *Cellulomonas biazota* for improved production of cellulases Folia Microbiol. 43: 15-18.

- Rasheva, T.; Nedeva, T.; Hallet J. and Kujumdzieva, A. (2003):** Characterization of a non-pigment production *Monascus purpureus* mutant strain. *Antonie van Leeuw en hoek*, 83: 333-340.
- Robinson, P.; Mak, A. and Trevan, M. (1986):** Immobilized algae: a review. *Process Biochem.* August, pp.122-127.
- Rosevear, A. (1984):** Immobilized biocatalysts: a critical review. *J. Chem. Tech. Biotechnol.* 348: 127-150.
- Roukas, T. and Kotzekidou, P. (1991):** Production of lactic acid from deproteinized whey by coimmobilized *Lactobacillus casei* and *Lactococcus lactis* cells. *Enz. Microbiol. Technol.* 13: 33-38.
- Ryu, B.; Park, B.; Chi, Y. and Lee, J. (1989):** Production of purplish-red pigment in mixed culture of *Streptomyces propurpuratus* ATCC 21630 and *Bacillus* sp. R-89. *Korean J. Appl. Microbiol. Bioeng.* 17: 327-333.
- Sabater-Vilar, M.; Mass, R. and Fink-Germmels, J. (1999):** Mutagenicity of commercial *Monascus* fermentation products and the role of citrinin contamination. *Mut. Res.* 444: 7-16.
- Sadi, S. (1987):** Irradiation effects on the alcohol fermentation ability of *Saccharomyces cerevisiae*. *Majalah-Batkan* (in Indonesian), 20: 40.
- Sako, F.; Kobayashi, N.; Watabe, H.; Yokosaka, N. and Taniguchi, N. (1983):** Induction of γ -glutamyl transpeptidase and glutathione s-transferase in cultured fetal

- rat hepatocytes by laccaic acid and *Monascus* pigments. Chemico- Biological Interactions, 44: 17-26.
- Salama, A; Ali, M.; El-Kridassy, Z. and Ali, T. (1977):** A study on fungal radio-resistance and sensitivity. Zbl. Bakt. Abt. II. Bd. 132: 1-13.
- Shah, N.; Nehete, P.; Shah, V. and Kothari, R. (1989):** Isolation of a stable and high yielding α -amylase mutant of *Bacillus subtilis*. J. Biotechnol. 11: 67-74.
- Shortle, D.; Di Maio, D. and Nathans, D. (1981):** Directed mutagenesis. Ann. Rev. Genet. 15: 265-294.
- Shu, C. and Yang, S. (1990):** Effect of temperature on cell growth and xanthan production in batch culture of *Xanthomonas campestris*. Biotechnol. Bioeng. 35: 454-468.
- Soccol, C. and Van den berghe, L. (2003):** Overview of applied solid-state fermentation in Brazil. Biochem. Eng. J. 13: 205-218.
- Southgate, D. A. T. (1976):** Determination of Food Carbohydrates. Appl. Sci. Publ. LTD., London, pp. 99-144.
- Spatz, C. (1993):** Basic Statistics. 5th ed., Brooks / Cole Publ. Co., California, Inc. USA.
- St. Martin, E. J. (1990):** US Pat. 4, 927, 760.
- St. Martin, E. J. (1991):** US Pat. 5, 013, 565.
- Su, Y. and Huang, J. (1980):** Fermentative production of Anka-pigments. Proceedings of the National Science Council, 4: 201-215.

- Tamada, M.; Kasai, N. and Kaelsu, I. (1987):** Effect of gamma ray irradiation on cellulase secretion of *Trichoderma reesei*. J. Ferment. Technol. 65: 703-707.
- Timotius, K. (2005):** The influence of Tapioca on the growth, the activity of glucoamylase and pigment production of *Monascus purpureus* UKSW 40 in soybean-soaking waste water. World J. Microbiol. Biotechnol. 21: 615-617.
- Turker, M. and Kennedy, J. (1992):** Immobilized whole cell systems: engineering considerations. Genet. Eng. Biotechnol. 12: 9-28.
- Turner, W. B. (1971):** In Fungal Metabolites. Academic Press, London & New York.
- Vesely, D. and Vesela, D. (1991):** The use of chick embryo for prediction of some embryotoxic effects of mycotoxins in mammals (in Czech). Veterinarni Medicina, 36: 175-181.
- Wang, R.; Dominguez-Espinosa, R.; Leonard, K.; Kotinas, A. and Webb, C. (2002):** The application of a generic feedstock from wheat for microbial fermentations. Biotechnol. progress, 18: 1033-1038.
- Watanabe, T.; Yamamoto, A.; Nagai, S. and Terabe, S. (1997):** Separation and determination of *Monascus* yellow pigments for food by micellar electrokinetic chromatography. Anal. Sci. 13: 571-575.
- Webb, C. and Dervakos, G. A. (1996):** Improved biological stability. In: Webb, C. and Dervakos, G. A. (eds.). Studies

in Viable Cell Immobilization. Academic Press, New York, pp. 103-118.

West, T. and Strohfus, B. (1996): Polysaccharide production by sponge-immobilized cells of the fungus *Aureobasidium pullulans*. Lett. Appl. Microbiol. 22: 162-164.

Wholesomeness of Irradiated Food (1981): Report of a joint FAO/IAEA/WHO, Expert Committee World. Health Organization, Geneva Technical Report, Series 659.

Wild, D.; Gabor, T. and Humpf, H. (2003): New *Monascus* metabolites with a pyridine structure in red fermented rice. J. Agric. Food Chem. 51: 5493-5496.

Wong, H. and Bau, Y. (1977): Pigmentation and antibacterial activity of fast neutron-and x-ray induced strains of *M. purpureus* Went. Plant Physiol. 60: 578-581.

Wong, H. and Koehler, P. (1981): Production and isolation of an antibiotic from *Monascus purpureus* and its relationship to pigment production. J. Food. Sci. 46: 589-592.

Wong, H.; Lin, Y. and Koehler, P. (1981): Regulation of growth and pigmentation of *Monascus purpureus* by carbon and nitrogen concentrations. Mycologia, 73: 649-654.

Yang, S.; Zhang, H.; Li, Y.; Qian, J. and Wang W. (2005): The ultrasonic effect on biological characteristics of *Monascus* sp. Enz. Microbiol. Technol. 37: 139-144.

Ye, G-S. and Fields, M. (1989): Cellulolytic enzyme production by three media. J. Food. Prot. 52: 248-251.

- Yongsmith, B.; Kitprechavanich, V.; Chitradon, L.; Chaisrisook, C. and Budda, N. (2000):** Color mutants of *Monascus* sp. KB9 and Their comparative glucoamylases on rice solid culture. J. Mol. Catal. B: Enzymatic, 10: 263-272.
- Yongsmith, B.; Tabloka, W.; Yongmanitchai, W. and Bavavoda, R. (1993):** Culture conditions for yellow pigment formation by *Monascus* sp. KB 10 grown on cassava medium. World J. Microbiol. Biotechnol. 9: 85-90.
- Yoshimura, M.; Yamanoka, S.; Mitzugi, K. and Hisose, Y. (1975):** Production of *Monascus* pigment in a submerged culture. Agric. Biol. Chem. 39: 1789-1795.
- Zhang, M.; Chang, H. and Lin, C. (1982):** Studies on the red pigment production of *Monascus*. I. Strain and fermentation. Shipin Yu Faxiao Gongye, China, 4: 1-7.