

## PAGE PERSONNELLE



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### Activités scientifiques, compétences :

Projet de recherche GLYCEVAL (Bioconversion du glycérol en éthanol par ingénierie génétique de la levure *Saccharomyces cerevisiae*) soutenu par le Programme Energie du CNRS

Projet exploratoire « Etude des limitations de la séquestration du CO<sub>2</sub> par des microorganismes photosynthétiques »

Etude du métabolisme de production de pigments par *Monascus* dans le but d'optimiser et réguler le processus de production [collaboration ITB Bandung (Indonésie)]

### Principales publications :

1. BEN CHAABANE, F., ALDIGUIER, A.S., ALFENORE, S., CAMELEYRE, X., BLANC, P., BIDEAUX, C., GUILLOUET, S.E., ROUX, G., MOLINA-JOUVE, C. 2006. Very high ethanol productivity in an innovative continuous two-stage bioreactor with cell recycle. BIOPROCESS BIOSYST. ENG. 29(1):49-57.
2. BLANC P., GOMA G. 2006. Valorisations non alimentaires de productions agricoles par voie biologique. In Colonna, P. (Ed.), La chimie verte, Lavoisier, Paris, pp. 79-98.
3. Dufossé, L., GALAUP, P., Yaron A., Arad, S.M., Blanc, P.J., Ravishankar, G.A. 2005. Microorganisms and microalgae as sources of pigments for food use: a scientific curiosity or an industrial reality ? Trends in Food Science and Technology, 16, 389-406.
4. XU, G., CHEN, Y., YU, H., CAMELEYRE, X., BLANC, P.J. 2003. HPLC fluorescence method for determination of citrinin in *Monascus* cultures. ARCHIV FUR LEBENSMITTELHYGIENE. 54(4):82-84.
5. BLANC, P.J. 2002. Natural Food Colorants. In Doelle, H.W. and DaSilva, E.J. (Eds.), Encyclopedia of Life Support Systems, EOLSS Publishers, Oxford, (on line)
6. DUBOSC, A., ESCADEILLAS, G., BLANC, P.J. 2001. Characterization of biological stains on external concrete walls and influence of concrete as underlying material. CEMENT AND CONCRETE RESEARCH. 31, 1613-1617.
7. HAJJAJ, H., BLANC, P.J., GROUSSAC, E., URIBELARREA, J.L., GOMA, G., LOUBIERE, P. 2000. Kinetic analysis of red pigment and citrinin production by *Monascus ruber* as a function of organic acid accumulation. ENZYME AND MICROBIAL TECHNOLOGY. 27(8): 619-625.
8. BAATI, L., FABRE-GEA, C., BLANC, P.J. 2000. Study of the cryotolerance of *Lactobacillus acidophilus* : effect of culture and freezing conditions on the viability and cellular protein levels. INT. J. FOOD MICROBIOLOGY. 59(3): 241-247.
9. HAJJAJ, H., KLAEBE, A., GOMA, G., BLANC, P.J., BARBIER, E., FRANCOIS, J. 2000. Medium-chain fatty acids affect citrinin production in the filamentous fungus *Monascus ruber*. APPLIED AND ENVIRONMENTAL MICROBIOLOGY. 66(3): 1120-1125.
10. HAJJAJ, H., BLANC, P.J., GROUSSAC, E., GOMA, G., URIBELARREA, J.L., LOUBIERE, P. 1999. Improvement of the red pigment/citrinin production ratio as a function of environmental conditions by *Monascus ruber*. BIOTECH. BIOENG. 64(4): 497-501.
11. BLANC, P. 1999. Les pigments rouges de *Monascus*. BIOFUTUR. 185: 34-36.
12. HAJJAJ, H., KLAEBE, A., LORET, M.O., GOMA, G., BLANC, P.J., FRANCOIS, J. 1999. The biosynthetic pathway of citrinin in the filamentous fungi *Monascus ruber* as revealed by <sup>13</sup>C-NMR. APPLIED AND ENVIRONMENTAL MICROBIOLOGY. 65(1): 311-314.
13. KUSDIYANTINI E., GAUDIN P., GOMA, G., BLANC, P.J. 1998. Growth kinetics and astaxanthin production of *Phaffia rhodozyma* PR 190 on glycerol as a carbon source during batch fermentation. BIOTECH. LETTERS. 20(10): 929-934.
14. HAJJAJ, H., BLANC, P.J., GOMA, G., FRANCOIS, J. 1998. Sampling techniques and comparative extraction procedures for quantitative determination of intra and extracellular metabolites in filamentous fungi. FEMS MICROBIOLOGY LETTERS, 164: 195-200.
15. FABRE, C.E., BLANC, P.J., GOMA, G. 1998. An aroma profile : 2-phenylethyl alcohol. Perfumer and Flavorist, 23: 43-45.

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17. BLANC, P.J., LORET, M.O., GOMA, G. 1997. Pigments and citrinin production during cultures of *Monascus* in liquid and solid media. In Roussos, S., Lonsane, B.K., Raimbault, M. and Viniegraz-Gonzalez, G. (Eds.), Advances in solid state fermentation, Kluwer Acad. Publ., Dordrecht, pp. 393-406.
  18. HAMDY, M., BLANC, P.J., LORET, M.O., GOMA, G. 1997. A new process for red pigment production by submerged culture of *Monascus purpureus*. BIOPROCESS ENGINEERING. 17: 75-79.
  19. FABRE, C.E., BLANC, P.J., GOMA, G., 1997. Screening of yeasts producing 2-phenylethylalcohol from phenylalanine. Biotech. Techniques. 11(7): 523-525.
  20. HAJJAJ, H., KLAEBE, A., LORET, M.O., TZEDAKIS, T., GOMA, G., BLANC, P.J. 1997. Production and identification of N-glucosylrubropunctamine and N-glucosylmonascorubramine from *Monascus ruber*, and occurrence of electron donor-acceptor in the red pigments. APPLIED AND ENVIRONMENTAL MICROBIOLOGY. 63(7): 2671-2678.
  21. PASTRANA, L., LORET, M.O., BLANC, P.J., GOMA, G. 1996. Production of citrinin by *Monascus ruber* submerged culture in chemically defined media. Acta Biotechnologica. 16(4): 315-319.
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  24. HASSAN, M., BLANC, P.J., GRANGER, L.M., PAREILLEUX, A., GOMA, G. 1996. Influence of nitrogen and iron limitations on lipid production by *Cryptococcus curvatus* grown in batch and fedbatch culture. PROCESS BIOCHEMISTRY. 31(4): 355-361.
  25. BLANC, P.J. 1996. Characterization of the tea fungus metabolites. BIOTECH. LETTERS. 18(2): 139-142.
  26. FABRE, C.E., BLANC, P.J., GOMA, G. 1996. Production of benzaldehyde by several strains of *Ischnoderma benzoinum*. SCIENCES DES ALIMENTS. 16(1): 63-70.
  27. BLANC, P.J., LAUSSAC, J.P., LE BARS, J., LE BARS, P., LORET, M.O., PAREILLEUX, A., PROME, D., PROME, J.C., SANTERRE, A.L., GOMA, G. 1995. Characterization of monascidin A from *Monascus* as citrinin. INT. J. FOOD MICROBIOLOGY. 27: 201-213.
  28. FABRE, C.E., DUVIAU, V.J., BLANC, P.J., GOMA, G. 1995. Identification of volatile flavour compounds obtained in culture of *Kluyveromyces marxianus*. BIOTECH. LETTERS. 17(11): 1207-1212.
  29. SANTERRE, A.L., QUEINNEC, I., BLANC, P.J. 1995. A fedbatch strategy for optimal red pigments production by *Monascus ruber*. BioPROCESS ENGINEERING. 13: 245-250.
  30. HASSAN, M., BLANC, P.J., PAREILLEUX, A., GOMA, G. 1995. Production of cocoa butter equivalents from prickly-pear juice fermentation by an unsaturated fatty acid auxotroph of *Cryptococcus curvatus* grown in batch culture. PROCESS BIOCHEMISTRY. 30(7): 607-613.
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  43. BLANC, P., GOMA, G. 1987. Propionic acid fermentation : improvement of performances by coupling fermentation and ultrafiltration. BIOPROCESS ENGINEERING. 2(3): 187-189.
  44. BLANC, P., GOMA, G. 1987. Kinetics of inhibition in propionic acid fermentation. BIOPROCESS ENGINEERING. 2(4): 175-179.
  45. BLANC, P., FAUP, G.M., GOMA, G. 1987. Production of acetic and propionic acids from household refuse enzymatic hydrolysate by *Propionibacterium acidi-propionici*. BIOMASS. 12(1): 49-55.

