

## บรรณานุกรม

- ศิวาภรณ์ สกกุลเที่ยงตรง, มลิสสา เวชยานนท์, พงศ์ศรี ไบอดุลย์ และพูลสุข หฤทัยธนาสวัสดิ์, "การปนเปื้อน วัตถุเคมีพิษในน้ำใต้ดิน," ในรายงานการประชุมวิชาการกองวัตถุเคมีพิษ การเกษตรครั้งที่ 4. กระทรวง เกษตรและสหกรณ์, กรุงเทพฯ, 2545, หน้า 64-73.
- สุพัตรา แสนพันธ์, "ผลของการใช้ที่ดินต่อปริมาณสารอาหารอินในน้ำท่าและตะกอนดินบริเวณลุ่มน้ำคลองอี เต่า อำเภอลำน้ำเคียวจังหวัดนครราชสีมา," วิทยานิพนธ์ปริญญาโท. มหาวิทยาลัยเกษตรศาสตร์, 2548, 90 น.
- โสพิศ สว่างจิตร์, ชนิกา สุขเรือง และสุदारัตน์ ศรีน้อยเมือง, "การคัดแยกแบคทีเรียที่ย่อยสลายสารอาหารอิน ในพื้นที่การเกษตร," รายงานการวิจัย สถาบันวิจัยและพัฒนา มหาวิทยาลัยราชภัฏสวนสุนันทา, 2553.
- โสพิศ สว่างจิตร์, วนัดดา กิตติทรัพย์เจริญ, ธันยมัย จิตติสมและสุพจน์ กาเซ็ม, "ความหลากหลายทางชีวภาพ ของเชื้อแบคทีเรียที่สามารถย่อยสลายสารกำจัดวัชพืชอาหารอินในดินเกษตรกรรมจากพื้นที่ต่างๆ ของประเทศไทย," รายงานการวิจัยสำนักคณะกรรมการการอุดมศึกษา, 2555ก.
- โสพิศ สว่างจิตร์, วรณทิพย์ ชนะ, พิชญ์สินีย์ สมบูรณ์พันธ์ และสุพจน์ กาเซ็ม, "การประเมินความสามารถใน การย่อยสลายสารอาหารอินของเชื้อแบคทีเรียสายพันธุ์ไทยในดินปนเปื้อนสารกำจัดวัชพืชในพื้นที่ ตำบลดอนชะเอม อำเภอนาทม จังหวัดกาญจนบุรี," รายงานการวิจัยสำนักงานคณะกรรมการวิจัย แห่งชาติ, 2555ข.
- สำนักงานคณะกรรมการพิเศษเพื่อประสานงานโครงการอันเนื่องมาจากพระราชดำริ, "หลักการทรงงานใน พระบาทสมเด็จพระเจ้าอยู่หัว ๖๐ ปี ครองราชย์ ประโยชน์สุข ประชาชนราษฎร์," กรุงเทพฯ, ๒๕๔๙.
- สำนักงานคณะกรรมการอ้อยและน้ำตาลทราย, "รายงานพื้นที่ปลูกอ้อยการผลิต 2556/57," 126 น.
- A.D. Crain, L.J. Guillette, A.A. Rooney, and D.B. Pickford, "Alterations in steroidogenesis in alligators (*Alligator mississippiensis*) exposed naturally and experimentally to environmental contaminants," *Environ Health Perspect*, Vol.105, 1997, pp.528-533.
- A.E. Pipe, "Pesticide effects on soil algae and cyanobacteria," *Rev Environ Contam*, Vol. 127, 1992, pp.95-171.
- B. Hai-tao, Z. Lan-ying, L. Na, and Z. Bo-lin, "Preparation of Bio-beads and Their Atrazine Degradation Characteristics," *CHEM. RES. CHINESE UNIVERSITIES*, Vol.27, No.3 2011, pp.407-412.
- B. Martinez, J. Tomkins, L.P. Wackett, R. Wing, and M.J. Sadowsky, "Complete nucleotide sequence and organization of the atrazine catabolic plasmid pADP-1 from *Pseudomonas* sp. strain ADP," *J Bacteriol*, Vol.183, 2001, pp.5684-5697.

- C. Bouquard, J. Ouazzani, J.C. Prome, Y. Michel-Briand, and P. Plesiat, "Dechlorination of atrazine by a *Rhizobium* sp. isolate," *Appl Environ Microbiol*, Vol.63, 1997, pp. 862–866.
- C.J. Arntzen, K.E Steinback, W. Vermaas, I. Ohad, and K. Matsunaka, "Proceedings of the Fifth International Congress on Pesticide Chemistry," Vol. 3, 1982, Pergamon Press, in press.
- C. Mouginyet, C. Laugero, M. Asther, J. Dubroca, P. Frasse, and M. Asther, "Biotransformation of the herbicide atrazine by the white rot fungus *phanerochaete chrysosporium*," *Appl Environ Microbiol*, Vol.60, 1994, pp.705-708.
- C. Yang, Y. Li, K. Zhang, X. Wang, C. Ma, H. Tang, and P. Xu, "Atrazine degradation by a simple consortium of *Klebsiella* sp. A1 and *Comamonas* sp. A2 in nitrogen enriched medium," *Biodegradation*, Vol.97, 2010, pp.97–105.
- C. Yanze-Kontchou, and N. Gschwind, "Mineralization of the herbicide atrazine as a carbon source by a *Pseudomonas* strain," *Appl Environ Microbiol*, Vol.60, No.12 1994, pp.4297-302.
- D. Baitsch, C. Sandu, R. Brandsch, and G.L. Igloi, "Gene cluster on pAO1 of *Arthrobacter nicotinovorans* involved in degradation of the plant alkaloid nicotine: Cloning, purification, and characterization of 2, 6-dihydroxypyridine 3-hydroxylase," *J Bacteriol*, Vol.183, 2001, pp.5262–5267.
- D.J. Lane, "16S/23S rRNA sequencing. In *Nucleic Acid Techniques in Bacterial Systematics* ed. Stackebrandt, E. and Goodfellow, M. Chester," UK: John Wiley & Sons, 1991, pp.371–375.
- D. Jones, and R.M. Keddie, "The genus *Arthrobacter*. in M. Dworkin et al., eds. *The prokaryotes: an evolving electronic resource for the microbiological community*," 2nd edition, release 3.0, May 5 1999.
- E. Barriuso, and S. Houot, "Rapid mineralization of s-triazine ring of atrazine in soils in relation to soil management," *Soil Biol Biochem*, Vol.28, 1996, pp.1341–1348.
- E. Topp, D.W. Gutzman, B. Bourgojn, J. Millette, and D.S. Gamble, "Rapid mineralization of the herbicide atrazine in alluvial sediments and enrichment cultures," *Environ Toxicol Chem*, Vol.14, 1995, pp.743–747.
- E. Topp, H. Zhu, , S.M. Nour, S. Houot, M. Lewis and D. Cuppels, "Characterization of an atrazine-degrading *Pseudaminobacter* sp. isolated from Canadian and French agricultural soils," *Applied and Environmental Microbiology*, Vol.66, 2000, pp. 2773-2782.
- F.E. Pick, L.P. Van, and E. Botha, "Atrazine in ground and surface water in maize production areas of the Transvaal South Africa," *Chemosphere*, Vol.25, 1992, pp. 335–341.

- I. Fruchey, N. Shapir, M.J. Sadowsky, and L.P. Wackett, "On the origins of cyanuric acid hydrolase: purification, substrates, and prevalence of AtzD from *Pseudomonas* sp. strain ADP," *Appl Environ Microbiol*, Vol.69, 2003, pp.3653–3657.
- I. Mirgain, G.A. Green, and H. Monteil, "Degradation of atrazine in laboratory microcosms: isolation and identification of the biodegrading bacteria," *Environ Toxicol Chem*, Vol.12, 1993, pp.1627–1634.
- I. Nagy, F. Compennolle, K. Ghys, J. Vanderleyden, and R. de Mot, "A single cytochrome P-450 system is involved in degradation of the herbicides EPTC (s-ethyl dipropylthiocarbamate) and atrazine by *Rhodococcus* sp. strain NI86/21," *Appl Environ Microbiol*, Vol.61, 1995, pp.2056–2060.
- J.K. Struthers, K. Jauachandran, and T.B. Moorman, "Biodegradation of atrazine by *Agrobacterium radiobacter* J14a and use of this strain in bioremediation of contaminated soil," *Appl Environ Microbiol*, Vol.64, 1998, pp.3368–3375.
- J. Loveland, K. Gutshall, J. Kasmir, P. Prema, and J.E. Brenchley, "Characterization of psychrotrophic microorganisms producing  $\beta$ -galactosidase activities," *Appl Environ Microbiol*, Vol.60, 1994, pp.12–18.
- J.P. Tomkins, T.C. Wood, M.G. Stacey, J.T. Loh, A. Judd, J.L. Goicoechea, G. Stacey, M.J. Sadowsky, and R.A. Wing, "A Marker-Dense Physical Map of the *Bradyrhizobium japonicum* Genome," *Genome Research*, Vol.11, 2001, pp.1434–1440.
- J.R. Stein, "Handbook of phycolgicalbmethods: culture methods and growth measurements," Cambridge University Press, New York, 1973.
- K. Hayatsu, M. Tomita, and H. Fujihara, "The placement of the epidural catheter at the predicted site by electrical stimulation test," *Anesth Analg*, Vol.93, 2001, pp.1035–1039.
- K.L. Boundy-Mills, M.L. de Souza, R.T. Mandelbaum, L.P. Wackett, and M.J. Sadowsky, "The atzB gene of *Pseudomonas* sp. strain ADP encodes the second enzyme of a novel atrazine degradation pathway," *Appl Environ Microbiol*, Vol.63, 1997, pp. 916–923.
- K. Satsuma, "Characterisation of new strains of atrazine degrading *Nocardioides* sp. isolated from Japanese riverbed sediment using naturally derived river ecosystem," *Pest Manag Sci*, Vol.62, 2006, pp.340–349.
- K. Solomon, D. Baker, R. Richards, K. Dixon, and M. Williams, "Ecological solution to organic chemical contamination," *Ecol Eng*, Vol.18, 1996, pp.647–658.
- M.J. Sadowsky, Z. Tong, M. de Souza, and L.P. Wackett, "atzC is a new member of the amidohydrolase protein superfamily and is homologous to other atrazine-metabolizing enzymes," *J Bacteriol*, Vol.180, 1998, pp.152–158.

- M.L. de Souza, D. Newcombe, S. Alvey, D.E. Crowley, A. Hay, M.J. Sadowsky, and L.P. Wackett, "Molecular basis of a bacterial consortium: interspecies catabolism of atrazine," *Appl Environ Microbiol*, Vol.64, 1998a, pp.178–184.
- M.L. de Souza, M.J. Sadowsky, and L.P. Wackett, "Atrazine chlorohydrolase from *Pseudomonas* sp. strain ADP: gene sequence, enzyme purification, and protein characterization," *J Bacteriol*, Vol.178, 1996, pp.4894–4900.
- M.L. de Souza, J. Seffernick, B. Martinez, M.J. Sadowsky, and L.P. Wackett, "The atrazine catabolism genes *atzABC* are widespread and highly conserved," *J Bacteriol*, Vol.180, 1998b, pp.1951–1954.
- M.L. de Souza, L.P. Wackett, K.L. Boundy-Mills, R.T. Mandelbaum, and M.J. Sadowsky, "Cloning, characterization, and expression of a gene region from *Pseudomonas* sp. strain ADP involved in the dechlorination of atrazine," *Appl Environ Microbiol*, Vol.61, No.9 1995, pp.3373–3378.
- M.L. de Souza, L.P. Wackett, and M.J. Sadowski, "The *atzABC* genes encoding atrazine catabolism are located on a self-transmissible plasmid in *Pseudomonas* sp. strain ADP," *Applied and Environmental Microbiology*, Vol.64, 1998c, pp.2323–2326.
- M.L. Fabrice, B. Benoît, W. Isabelle, P. Séverine, D. Marion, S. Guy, and P. Laurent, "Impact of the maize rhizosphere on the genetic structure, the diversity and the atrazine-degrading gene composition of cultivable atrazine-degrading communities," *Plant and Soil*, Vol.282, 2006, pp.99–115.
- M. Radosevich, S.J. Traina, Y-L. Hao, and O.H. Tuovinen, "Degradation and mineralization of atrazine by a soil bacterial isolate," *Appl Environ Microbiol*, Vol.61, 1995, pp. 297–302.
- M.T. Giardi, M.C. Giardina, and G. Filacchioni, "Chemical and biological degradation of primary metabolism of atrazine by a *Nocardia* strain," *Agric Biol Chem*, Vol.49, 1985, pp.1551–1558.
- N. Shapir, J.P. Osborne, G. Johnson, M.J. Sadowsky, and L.P. Wackett, "Purification, substrate range, and metal center of *AtzC*: the N-isopropylammelide aminohydrolase involved in bacterial atrazine metabolism," *J Bacteriol*, Vol. 184, 2002, pp.5376–5384.
- N. Spliid, and B. Koppen. "Occurrence of pesticides in Danish shallow ground water," *Chemosphere*, Vol.37, 1998, pp.1307–1316.
- O. Hutzinger, and W. Veerkamp, "Xenobiotic chemicals with pollution potential, In Leisner, T., Cook, A.M. Hutter, R. and Nuesch, J., eds. *Microbial degradation of xenobiotics and recalcitrant compounds*," Academic Press, London, 1981, pp.3–45.
- P. DePrada, J. Loveland-Curtze, and J.E. Brenchley, "Production of two extracellular alkaline phosphatases by a psychrophilic *Arthrobacter* strain," *Appl Environ Microbiol*, Vol.62, 1996, pp.3732–3738.

- P. Estrada-de los Santos, P. Vinuesa, L. Martínez-Aguilar, A.M. Hirsch, and J. Caballero-Mellado, "Phylogenetic Analysis of Burkholderia Species by Multilocus Sequence Analysis," *Current Microbiology*, Vol.67, Issue 1 2013, pp.51-60.
- R.K. Ralebitso, E. Senior, and H.W. van Verseveld, "Microbial aspects of atrazine degradation in natural environments," *Biodegradation*, Vol.13, 2002, pp.11–19.
- R.M. Atlas, and R. Bartha, "Microbial Ecology: Fundamentals and applications 4th Edition," Benjamin cummings publishing company Inc. Addison Wesley Longman Inc. 1998, pp.300-350.
- R.M. Behki, E. Topp, W. Dick, and P. Germon, "Metabolism of the herbicide atrazine by Rhodococcus strains," *Appl Environ Microbiol*, Vol.59, 1993, pp.1955–1959.
- R.T. Mandelbaum, D.L. Allan, and L.P. Wackett, "Isolation and characterization of a Pseudomonas sp. that mineralizes the s-triazine herbicide atrazine," *Appl Environ Microbiol*, Vol.61, 1995, pp.1451–1457.
- R.T. Mandelbaum, L.P. Wackett, and D.L. Allan, "Mineralization of the s-triazine ring of atrazine by stable bacterial mixed culture," *Appl Environ Microbiol*, Vol.59, 1993, pp.1695-1701.
- R.W. Eaton, and J.S. Karns, "Cloning and analysis of s-triazine catabolic genes from Pseudomonas sp. strain NRRLB-12227," *J Bacteriol*, Vol.173, 1991a, pp.1215–1222.
- R.W. Eaton, and J.S. Karns, "Cloning and comparison of the DNA encoding ammelide aminohydrolase and cyanuric acid aminohydrolase from three s-triazine-degrading bacterial strains," *J Bacteriol*, Vol.173, 1991b, pp.1363–1366.
- S. Piutti, E. Semon, D. Landry, A. Hartmann, S. Dousset, E. Lichtfouse, E. Topp, G. Soulas, and F. Martin-Laurent, "Isolation and characterization of Nocardioides sp. SP12, an atrazine-degrading bacterial strain possessing the gene trzN from bulk and Maize rhizosphere soil," *FEMS Microbiol Lett*, Vol.221, 2003, pp.111–117.
- T.B. Hayes, A. Collins, M. Lee, M. Mendoza, N. Noriega, A.A. Stuart, and A. Vonk, "Hermaphroditic, demasculinized frogs after exposure to the herbicide atrazine at low ecologically relevant doses," *Proc Natl Acad Sci, U S A*, Vol.99, 2002, pp. 5476–5480.
- T.B. Hayes, K. Haston, M. Tsui, A. Hoang, C. Haeffele, and A. Vonk, "Atrazine-Induced Hermaphroditism at 0.1 ppb in American Leopard Frogs (*Rana pipiens*): Laboratory and Field Evidence," *Environ Health Perspect*, Vol.111, 2003, pp.568-575.
- T. Vancov, K. Jury, and L. Van Zwieteren, "Atrazine degradation by encapsulated Rhodococcus erythropolis NI86/21," *Journal of Applied Microbiology*, Vol.99, 2005, pp.767–775.
- T. Vancov, K. Jury, N. Rice, L. Van Zwieteren, and S. Morris, "Enhancing cell survival of atrazine degrading Rhodococcus erythropolis NI86/21 cells encapsulated in alginate beads," *Journal of Applied Microbiology*, Vol.102, 2007, pp.212–220.

- V. Vanderheyden, P. Debongnie, and L. Puissemier, "Accelerated degradation and mineralization of atrazine in surface and subsurface soil materials," *Pest Sci*, Vol. 49, 1997, pp.237–242.
- W.J. Hayes, "Pesticides derived from plants and other organisms. Pesticides studies in man," Baltimore, London, 1982, pp.75-11.
- W.W. Mulbry, "Purification and characterization of an inducible striazine hydrolase from *Rhodococcus corallinus* NRRL B-15444R," *Appl Environ Microbiol*, Vol.60, 1994, pp.613–618.
- Y. Hase, M. Tatsuno, T. Nishi, K. Kataoka, Y. Kabe, Y. Yamaguchi, N. Ozawa, M. Natori, H. Handa, and H. Watanabe, "Atrazine binds to F1F0-ATP synthase and inhibits mitochondrial function in sperm," *J BBRC*, Vol.366, 2008, pp.66-72.
- Z.Q. Shao, W. Seffens, W. Mulbry, and R.M. Behki, "Cloning and expression of the s-triazine hydrolase gene (*trzA*) from *Rhodococcus corallinus* and development of *Rhodococcus* recombinant strains capable of dealkylating and dechlorinating the herbicide atrazine," *J Bacteriol*, Vol.177, 1995, pp.5748–5755.