

PERSONAL:

Name: **Hong YANG**
Department: Department of Chemistry, College of Sciences
Gender: Female
Degree: Ph.D.
Title: Professor
Major: Environmental and Biological-Related Organic Chemistry
Graduated Jilin University
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**RESEARCH INTERESTS:**

Analysis of pesticide residues;
Analysis of molecular ecotoxicology;
Environmental behaviors;
Degradation and mobility of pesticides.

PROFESSIONAL EXPERIENCE:

1998-now Full professor, College of Sciences, Nanjing Agricultural University

HONORS AND AWARDS:

2000 Honored as "Special government allowance of the State Council"
2006-now Honored as the "Key Scholar" of 133 Talents Program (NAU)
2006 Award for "outstanding Teaching of NAU"
2007 Honored as "Teaching quality pacemaker of NAU"
2009 Award for "outstanding Teaching of NAU"
2010 Honored as "Teaching quality pacemaker of NAU"
2011 Honored as "The most favorite teacher of college students" (NAU)
2015 Award for "outstanding Teaching of NAU"
2017 Award for "outstanding Teaching of NAU"

TEACHING:

- 《Organic Chemistry》
- 《Organic Analysis》
- 《Analysis of pesticide residues》
- 《Experimental Chemistry II》
- Take responsibility for several key courses of Nanjing Agricultural University, such as Organic Chemistry.
- Edited Books: 《Organic Chemistry》, 《Organic Analysis》

TEACHING AWARD:

- 2004 First prize for teaching achievements in Jiangsu Province (Ranking first)
- 2004 Excellent curriculum group in Jiangsu Province (Ranking first)

- 2006 Quality course of 《Organic Chemistry》 (Jiangsu Province) (Ranking first)
- 2006 Excellent teaching materials of national agricultural university (edited Books《Organic Chemistry》)
- 2008 Excellent teaching materials of national agricultural university (edited Books《Organic Chemistry》)
- 2014 Excellent teaching materials of national agricultural university (edited Books《Organic Chemistry》)
- 2016 Key teaching materials of THE 13TH FIVE-YEAR (Jiangsu Province) (edited Books 《Organic Chemistry》)
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RESEARCH PROJECTS:

1. Development and demonstration of high efficiency and low risk small molecule pesticides--- Research and evaluation of environmental and health risk for pesticides--- Research of small molecule pesticides residues in crop (person in charge of the duty) (National Key Research and Development Project, No.2018YFD0200108, 201807-202012, in process)
2. Fate and standard of chemical pesticides in different cropping systems in China---- Migration and transformation of pesticides in crops and soils--- Metabolic mechanism of crops to pesticides (person in charge of the duty) (National Key Research and Development Project, No.2016YFD0200201, 201601-202012, in process)
3. Enhanced degradation of pesticide residues in some crops by salicylic acid and regulatory mechanism. (person in charge of the project) (National Natural Science Foundation, No.21577064, 201601-201912, in process)
4. Detoxification and degradation of pesticide residues in rice and wheat by glycosyltransferases and regulatory mechanism. (person in charge of the project) (National Natural Science Foundation, No.21377058, 201401-201712, done)
5. Ecological toxicity of pesticide residues in soil on wheat and rice and characterization indicators (person in charge of the project) (National Natural Science Foundation, No.21077055, 201101-201312, done)
6. Activation and migration mechanism of persistent pesticide in farmland soil (person in charge of the project) (National Natural Science Foundation, No.20777037, 200801-201012, done)
7. Research and application technology of novel pesticides and new dosage forms for main diseases and insect pests of crop---Pesticide residues in agricultural products and their environmental behavior (person in charge of the sub-project) (Special Fund for Agro-scientific Research in the Public Interest, No.201203022, 201201-201612,done)
8. Preparation of highly selective imprinted polymer on surface of silica gel and its application in detection of organophosphorous and sulfonylurea pesticide residue (associate person in charge of the project) (National High Technology Research and Development Program of China, No. 2008AA10Z421, 200803-201010,done)
9. Design and synthesis of novel N-methyl acetamide derivatives including strobilurins and biological activity (person in charge of the project) (Jiangsu Natural Science Foundation, No.BK2007167, 200706-200912, done)
10. Research of rapid detection of pesticide residues in import and export agricultural products (person in charge of the project) (Jiangsu agricultural science and technology project, No.

PUBLICATIONS:

2018

1. Zhang JJ, Wang YK, Zhou JH, Xie F, Guo QN, Lu FF, Jin SF, Zhu HM, **Yang H***. Reduced phytotoxicity of propazine on wheat, maize and rapeseed by salicylic acid. *Ecotoxicology and Environmental Safety*, 2018, 162, 42-50
2. Ma LY, Zhang SH, Zhang JJ, Zhang AP, Li N, Wang XQ, Yu QQ, **Yang H***. Jasmonic Acids Facilitate the Degradation and Detoxification of Herbicide Isoproturon Residues in Wheat Crops (*Triticum aestivum*). *Chemical Research in Toxicology*, 2018, DOI:10.1021/acs.chemrestox.8b00100,

2017

3. Zhang JJ, Xu JY, Lu FF, Jing SF, **Yang H***. Detoxification of Atrazine by Low Molecular Weight Thiols in Alfalfa (*Medicago sativa*). *Chemical Research in Toxicology (Chem. Res. Toxicol.)*, 2017, 30 (10), 1835–1846
4. Zhang JJ, Gao S, Xu JY, Lu YC, Lu FF, Ma LY, Su XN, **Yang H***. Degrading and Phytoextracting Atrazine Residues in Rice (*Oryza sativa*) and Growth Media Intensified by a Phase II Mechanism Modulator. *Environmental Science & Technology*, 2017, 51(19):11258-11268
5. Jiang C, Lu YC, Xu JY, Song Y, Song Y, Zhang SH, Ma LY, Lu FF, Wang YK, **Yang H***. Activity, biomass and composition of microbial communities and their degradation pathways in exposed propazine soil. *Ecotoxicology and Environmental Safety*, 2017, 145, 398-407
6. Jiang C, Li XJ, Wang YR, Ma LY, Wang YK, Lu YC, **Yang H***. Assessment of photodegradation of herbicide prometryn in soil. *Water, Air, & Soil Pollution*, 2017, 228, 135
7. Ma LY, Miao SS, Lu FF, Wu MS, Lu YC, **Yang H***. Selective electrochemical determination of salicylic acid in wheat using molecular imprinted polymers. *Analytical Letters*, 2017, 50(15), 2369–2385
8. Liu Y*, Ma LY*, Lu YC, Jiang SS, Wu HJ, **Yang H***. Comprehensive analysis of degradation and accumulation of ametryn in soils and in wheat, maize, ryegrass and alfalfa plants. *Ecotoxicology and Environmental Safety*, 2017, 140, 264-270

2016

9. Lu YC*, Luo F*, Pu ZJ, Zhang S, Huang MT, **Yang H***. Enhanced detoxification and degradation of herbicide atrazine by a group of *O*-methyltransferases in rice. *Chemosphere*, 2016, 165:487–496
10. Huang MT*, Lu YC*, Zhang S, Luo F, **Yang H***. Rice (*Oryza sativa*) laccases involved in modification and detoxification of herbicides atrazine and isoproturon residues in plants. *Journal of Agricultural and Food Chemistry*, 2016, 64, 6397–6406
11. Wu P, Wu WZ, Han ZH, **Yang H***. Desorption and mobilization of three strobilurin fungicides in three types of soil. *Environmental Monitoring and Assessment*, 2016, 188: 363

12. Miao SS*, Wu MS*, Ma LY, He XJ, **Yang H***. Electrochemiluminescence biosensor for determination of organophosphorous pesticides based on bimetallic Pt-Au/multi-walled carbon nanotubes modified electrode. *Talanta*, 2016, 158,142–151
13. Zhang JJ, Lu YC, Zhang SH, Lu FF, **Yang H***. Identification of transcriptome involved in atrazine detoxification and degradation in alfalfa (*Medicago sativa*) exposed to realistic environmental contamination. *Ecotoxicology and Environmental Safety*, 2016, 130:103-112
14. Lu YC, Zhang JJ, Luo F, Huang MT, **Yang H***. RNA-sequencing *Oryza sativa* transcriptome in response to herbicide isoproturon and characterization of genes involved in IPU detoxification. *RSC Advances*, 2016, 6, 18852–18867
15. Gao MX, Li YY, **Yang H***, Gu YC. Sorption and desorption of pymetrozine on six Chinese soils. *Frontiers of Environmental Science and Engineering*, 2016, 10(1):1–10

2015

16. Geng HR, Miao SS, Jin SF, **Yang H***. A newly developed molecularly imprinted polymer on the surface of TiO₂ for selective extraction of triazine herbicides residues in maize, water, and soil. *Analytical and Bioanalytical Chemistry*, 2015, 407:8803–8812
17. Zuo HG, Zhu JX, Zhan CR, Shi L, Xing M, Guo P, Ding Y, **Yang H***. Preparation of malathion MIP-SPE and its application in environmental analysis. *Environmental Monitoring and Assessment*, 2015, 187(7):394
18. Tan LR, Lu YC, Zhang JJ, Luo F, **Yang H***. A collection of cytochrome P450 monooxygenase genes involved in modification and detoxification of herbicide atrazine in rice (*Oryza sativa*) plants. *Ecotoxicology and Environmental Safety*, 2015, 119, 25–34
19. Wei LN, Wu P, Wang FR, **Yang H***. Dissipation and degradation dynamics of thifluzamide in rice field. *Water, Air, & Soil Pollution*, 2015, 226:130
20. Miao SS, Wu MS, Zuo HG, Jiang C, Jin SF, Lu YC, **Yang H***. Core-shell magnetic molecularly imprinted polymers as sorbent for sulfonylurea herbicides residues. *Journal of Agricultural and Food Chemistry*, 2015, 63(14), 3634–3645
21. Lu YC, Zhang S, Miao SS, Jiang C, Huang MT, Liu Y, **Yang H***. Enhanced degradation of herbicide isoproturon in wheat rhizosphere by salicylic acid. *Journal of Agricultural and Food Chemistry*, 2015, 63 (1), 92–103
22. Lu YC, Zhang S, **Yang H***. Acceleration of the herbicide isoproturon degradation in wheat by glycosyltransferases and salicylic acid. *Journal of Hazardous Materials*, 2015, 283, 806–814

2014

23. Zhang JJ, Lu YC, **Yang H***. Chemical modification and degradation of atrazine in *Medicago sativa* through multiple pathways. *Journal of Agricultural and Food Chemistry*, 2014, 62(40), 9657–9668
24. Miao SS, Wang HZ, Lu YC, Geng HR, **Yang H***. Preparation of Dufulin imprinted polymer on surface of silica gel and its application as solid-phase extraction sorbent. *Environmental Science: Processes & Impacts*, 2014, 16 (4), 932–941

25. Wang HZ, Zuo HG, Ding YJ, Miao SS, Jiang C, **Yang H***. Biotic and abiotic degradation of pesticide Dufulin in soils. *Environmental Science and Pollution Research*, 2014, 21(6), 4331–4342
26. Zuo HG, Zhu JX, Zhan CR, Tang GY, Guo P, Wei YL, Zeng HL, **Yang H***. A method developed for determination of heptachlor and its metabolites from pork. *Environmental Monitoring and Assessment*, 2014, 186(4), 2399–2412
27. Zhang JJ, Lu YC, Zhang JJ, Tan LR, **Yang H***. Accumulation and toxicological response of atrazine in rice crops. *Ecotoxicology and Environmental Safety*, 2014, 102, 105–112

2013

28. Guo LJ, Qu JR, Miao SS, Geng HR, **Yang H***. Development of a molecular imprinting polymer for prometryne clean-up in the environment. *Journal of Separation Science*, 2013, 36(24), 3911–3917
29. Sui Y, **Yang H***. Bioaccumulation and degradation of atrazine in several Chinese ryegrass genotypes. *Environmental Science: Processes & Impacts*, 2013, 15 (12), 2338–2344
30. Lu YC, Yang SN, Zhang JJ, Zhang JJ, Tan LR, **Yang H***. A collection of glycosyltransferases from rice (*Oryza sativa*) exposed to atrazine. *Gene*, 2013, 531, 243–252
31. Zhang C, Wu YJ, Jin SF, **Yang H***. Analysis of chlorpyrifos and chlorpyrifos-methyl residues in multi-environmental media by cloud-point extraction and HPLC. *Analytical Methods*, 2013, 5 (12), 3089–3095
32. Tan JH, Jin SF, **Yang H***. A cloud point extraction approach developed for analyzing pesticides prometryne and isoproturon from multi-media. *Clean–Soil, Air, Water*, 2013, 41(5), 510–516
33. Li YY, **Yang H***. Bioaccumulation and degradation of pentachloronitrobenzene in *Medicago sativa*. *Journal of Environmental Management*, 2013, 119, 143–150
34. Lu YL, Liang L, **Yang H***. Joint ecotoxicology of cadmium and metsulfuron-methyl in wheat (*Triticum aestivum*). *Environmental Monitoring and Assessment*, 2013, 185(4), 2939–2950
35. Gao YF, **Yang H***, Zhan XH, Zhou LX. Scavenging of HCHs and DDTs from soil by thermal desorption and solvent washing. *Environmental Science and Pollution Research*, 2013, 20, 1482–1492

***Corresponding author**

RESEARCH AWARD:

1. 1998 First prize in scientific and technological progress in Jiangsu (Ranking second)
2. 1998 Two prize for scientific and technological progress of the Ministry of Agriculture (Ranking second)
3. 1999 Three prize for scientific and technological progress of the Ministry of Education (Ranking third)
4. 1999 National invention of the three prize (Ranking second)
5. 2016 First prize in scientific and technological progress in Guizhou (Ranking third)