Curriculum Vitae

Ping HE

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EDUCATION & ADDITIONAL TRAINING

2001-2003	Post-Doctoral Fellow (STA, Science and Technology Agency, Japan) at the laboratory of plant nutrition, graduate school of agriculture, Hokkaido University, Sapporo, Japan, with Prof. M. Osaki. Subject: Carbon and nitrogen interaction related to yield and leaf senescence in maize with different senescent appearance.
1995-1998	Ph.D. in plant nutrition science, the Graduate School of Chinese Academy of Agricultural Sciences. Dissertation: "Effect of nitrogen and potassium on source-sink dynamic and leaf senescence in spring maize *(Zea mays L.)*", Advisors: Prof. Jiyun Jin and Prof. Bao Lin
1992-1995	M.Sc. in plant nutrition science, Department of Soil and Chemistry, Jilin Agricultural University
1988-1992	B.Sc. in soil science and plant nutrition, Department of Soil and Chemistry, Jilin Agricultural University

PROFESSIONAL EXPERIENCE

2013 –Present	Director of International Plant Nutrition Institute (IPNI) China Program
2007-Present	Deputy Director of North Central Region of China, IPNI
2004.10-2007	Deputy Director of North Central Region of China, PPI/PPIC
2006-present	Professor, Institute of Agricultural Resources and Regional planning (former Soil and Fertilizer Institute), Chinese Academy of Agricultural Sciences, Beijing, CHINA
2001-2006	Associate Professor, Soil and Fertilizer Institute, Chinese Academy of Agricultural Sciences, Beijing, CHINA
1998-2001	Assistant Professor, Soil and Fertilizer Institute, Chinese Academy of Agricultural Sciences, Beijing, CHINA

KEY SKILLS

Projects as the project leader:

- *National Key Research & Development Plan "Fertilizer Nutrient Recommendation Method and Nutrient-limit"* (2016-2020, *the Research Agreement Grant No. 2016YFD0200100)*
- *National Key Research & Development Plan "Fertilizer Nutrient Recommendation Method and Nutrient-limit for cereals"* (2016-2020, *the Research Agreement Grant No. 2016YFD0200101)*
- *National Basic Research Program (973) "Fertilizer saving and efficiency improvement on sustainable farmland" （2007-2011, the Research Agreement grant No. 2007CB109300，2007.7-2011.8）*
- *National Natural Science Foundation of China entitled "Mechanism of N application on leaf senescence related endogenous hormones, free radicals and gene expression in different senescent types of maize (2008-2010, the Research Agreement Grant No.30771256)*
- *National Natural Science Foundation of China entitled "Mechanism of sugar and phenol mediated by K nutrition and its relation to stalk rot resistance in maize (2006-2008, the Research Agreement Grant No. 30571081)*
- *Beijing Natural Science Foundation entitled "Mechanism of sugar and phenol mediated by K nutrition and its relation to stalk rot resistance in maize (2006-2008, the Research Agreement Grant No. 6062025)*
- *Beijing Nova Plan of Science and Technology (2005-2008)*
- *National Natural Science Foundation of China entitled "Difference of nitrogen metabolism of two contrasting maize hybrids with different senescent appearance and its mechanism" (2001-2003, the Research Agreement Grant No. 30000098)*
- *International Foundation for Science (IFS) entitled "Carbon-nitrogen interaction related to grain formation in two maize cultivars with different senescent appearance "(2000-2003, the Research Agreement Grant No. C/2965-1)"*
- *International Foundation for Science (IFS) entitled "Comparison of ^{15}N uptake and RuBP carboxylase activity between stay-green and earlier senescent genotype of maize" (2002-2004, the Research Agreement Grant No. C/2965-2)"*
- *National key 11-five year plan entitled "Technologies of achieving high yield of maize, wheat and rice, and improving chemical fertilizer use efficiency" (2006-2010, 2006BAD02A14-3)*
- *National key Ten-five year plan entitled "Mechanism on quality and yield formation in maize with high-quality and the corresponding technology of high-efficient fertilization" (2001-2005, 2001BA507A-03)*
- *National key Nine-five year plan entitled "Technologies of achieving high yield of maize and improving chemical fertilizer use efficiency" (1996-2000, 95-001-03-03)*
- *IPNI Deputy Director of North Central China in charge of Project Program Development for Hebei, Henan, Shandong, Shanxi, Tianjin and Beijing (2004-)*

Honors and awards:

2016 Vice President of the International Scientific Center for Fertilizers (CIEC) Asia

2016 National Ten Thousand Talent Plan

2015 Leading Talent of Science and Technology innovation award from the Ministry of Science and Technology

2015 Outstanding Talents in Agricultural Research from the Ministry of Agriculture

2015 Technical committee member of the Dupont Pioneer

2012 Council Member, and Chemical Fertilizer Committee Director, Chinese Society of Plant Nutrition and Fertilizer Sciences

2011 National March-eighth Red-Banner Pacesetter

2009 The graduate student advice committee member of Purdue University

2008 *"Top ten outstanding youth"* by State Organs Work Committee of the CPC

2007 Chief *Scientist on National Basic Research Program* (973) Project "Fertilizer saving and efficiency improvement on sustainable farmland" by Ministry of Science and Technology, China

2005 Honored by Beijing Science and Technology Committee as "*Beijing Science Nova*"

2000 The project "Potassium supplying ability and potash applying technology" that I served as the chief investigator was awarded as 'National Prize for Science & Technology Promotion"

2000 The project of the national key Nine-five year plan "*Technologies of achieving high yield of maize and improving chemical fertilizer use efficiency*" that I served as the chief investigator was awarded as"*the first-class performance*"for the five continuous years

1999 The project "*Potassium supplying ability and potassium fertilizer effect on high-yielding varieties in Jinlin Province*" was awarded as *'Provincial Prize for Science & Technology Promotion*"

Graduate Student Training

Serve as the major advisor for 25 graduate students (8 Ph.D. and 17 M.S.) and three post-doctorates from 2004 to present.

Professional Publications

Author or co-authored of over 100 papers in the areas of plant nutrition, plant quality, crop physiology, and nutrient management.

In English:

1. Ding WC, Xu XP, **He P***, Ullah S, Zhang JJ, CuiZL, Zhou W. Improving yield and nitrogen use efficiency through alternative fertilization options for rice in China: a meta-analysis. ***Field Crops Research***, 2018, 227:11-18. https://doi.org/10.1016/j.fcr.2018.08.001
2. Ma JC, Liu YX, He WT, Haygarth PH. Suridge BWJ, Lei QL, Zhou W. The long-term soil phosphorous

balance across Chinese arable land. ***Soil Use and Management.*** 2018, 34:306-315 Https://doi.org/10.1111/sum.12438

3. Zhang JJ, He P,* Xu XP, Ding WC, Ullah S, Wang YL, Jia LL, Cui RZ, Wang HT, and Zhou W*. Nutrient Expert Improves Nitrogen Efficiency and Environmental Benefits for Winter Wheat in China***.*** ***Agronomy Journal,*** 2018, 110, 696-706.
4. He WT., Yang JY, Drury CF, Smith WN, Grant BB, He P, Qian B, Zhou W, Hoogenboom G. 2018. Estimating the impacts of climate change on crop yields and N_2O emissions for conventional and no-tillage in Southwestern Ontario, Canada. ***Agricultural Systems***, 159: 187-198
5. Li ST, Liu XY, He P. Analyses on nutrient requirements in current agriculture production in China. ***Journal of Plant Nutrition and Fertilizer***. 2017, 23(6): 1416–1432 (In Chinese with English abstract)
6. Liu YX, Ma J, Ding W, He W, Lei Q, Gao Q, et al. (2017) Temporal and spatial variation of potassium balance in agricultural land at national and regional levels in China. ***PLoS ONE*** 12(9): e0184156. https://doi.org/10.1371/journal.pone.0184156
7. Yang, F.Q., Xu, X.P., Ma, J.C., He, P., Pampolino, M.F., and Zhou, W. (2017) Experimental validation of a new approach for rice fertilizer recommendations across smallholder farms in China. ***Soil Research***, 55, 579-589.
8. Yang, F.Q., Xu, X.P., Wang, W., Ma, J.C., Wei, D., He, P., et al. (2017) Estimating nutrient uptake requirements for soybean using QUEFTS model in China. ***PLoS ONE*** 12(5): e0177509. https://doi.org/10.1371/journal.pone.0177509
9. Zhang JJ., **P. He***, X. P. Xu, Y. L. Wang, L. L. Jia, R. Z. Cui, H. T. Wang, S. C. Zhao, S. Ullah. Nutrient Expert improves nitrogen efficiency and environmental benefits for summer maize in China. ***Agronomy Journal***, 2017, 109:1-9. doi:10.2134/agronj2016.08.0477
10. Liu YX, Yang JY, He WT, Ma JC, Gao Q, Lei QL, **He P***, Wu HY, Ullah S, Yang FQ. Provincial potassium balance of farmland in China between 1980 and 2010. ***Nutrient Cycling in Agroecosystems***, 2017, 107: 247-264. DOI: 10.1007/s10705-017-9833-2
11. Xu XP, **He P***, Yang FQ, Ma JC, Pampolino MF, Johnston AM, Zhou W. Methodology of fertilizer recommendation based on yield response and agronomic efficiency for rice in China. ***Field Crops Research***, 2017, 206: 33-42. http://dx.doi.org/10.1016/j.fcr.2017.02.011
12. Xu XP, **He P***, Zhang JJ, Pampolino MF, Johnston AM, Zhou W. Spatial variation of attainable yield and fertilizer requirements for maize at the regional scale in China. ***Field Crops Research***, 2017, 203: 8-15.
13. He WT., Yang JY., Zhou W., Drury CF., Yang XM, Reynolds WD, Wang H., He P., Li ZT. Experimental validation of a new approach for rice fertiliser recommendations across smallholder farms in China. ***Nutrient Cycling in Agroecosystems***, 2016, 106:201:215
14. Chuan L, **He P***, Zhao T, Zheng H, Xu X. Agronomic Characteristics Related to Grain Yield and Nutrient Use Efficiency for Wheat Production in China. ***PLoS ONE***, 2016, 11(9): e0162802. doi:10.1371/journal.pone.0162802
15. Qiu SJ, Gao HJ, Zhu P, Hou YP, Zhao SC, Rong XM, Zhang YP, **He P*,** Christie P, Zhou W. Changes

in soil carbon and nitrogen pools in a Mollisol after long-term fallow or application of chemical fertilizers, straw or manures. ***Soil & Tillage Research***, 2016, 163: 255-265

16. Xu XP, **He P***, Pampolino MF, Li YY, Liu SQ, Xie JG, Hou YP, Zhou W. Narrowing yield gaps and increasing nutrient use efficiencies using the Nutrient Expert system for maize in Northeast China. ***Field Crops Research***, 2016, 194: 75-82, http://dx.doi.org/10.1016/j.fcr.2016.05.005
17. Zhao RR, **He P***, Xie JG, Johnston AM, Xu XP, Qiu SJ, Zhao SC. Ecological Intensification Management of Maize in Northeast China: Agronomic and Environmental response. ***Agriculture, Ecosystems and Environment***, 2016, 224: 123-130, http://10.1016/j.agee.2016.03.038
18. Ma JC, **He P***, Xu XP, He WJ, Liu YX, Yang FQ, Chen F, Li ST, Tu, SH, Jin JY, Johnston A, Zhou W. Temporal and spatial changes in soil available phosphorus in China (1990–2012). ***Field Crops Research***, 2016, http://dx.doi.org/10.1016/j.fcr.2016.04.006
19. Xu XP, He P*, Zhao SC, Qiu SJ, Johnston AM, Zhou W. Quantification of yield gap and nutrient use efficiency of irrigated rice in China. ***Field Crops Research***, 2016, 186:58-65, DOI: 10.1016/j.fcr.2015.11.011,
20. Zhao SC, Li KJ, Zhou W, Qiu SJ, Huang SW, **He P***. Changes in soil microbial community, enzyme activities and organic matter fractions under long-term straw return in north-central China. ***Agriculture, Ecosystems and Environment***, 2016, 216:82-88, DOI: 10.1016/j.agee.2015.09.028
21. Xu XP, Liu XY, **He P***, Johnston AM, Zhao SC, Qiu SJ, Zhou W. Yield gap, indigenous nutrient supply and nutrient use efficiency for maize in China. ***PLoS ONE***. 2015, 10(10):1-12. DOI: 10.1371/journal.pone.0140767
22. Xu XP, Xie JG, Hou YP, **He P***, Pampolino MF, Zhao SC, Qiu SJ, Johnston AM, Zhou W. Estimating nutrient uptake requirements for rice in China. ***Field Crops Research***, 2015, 180: 37-45
23. **He P***, Yang LP, Xu XP, Zhao SC, Chen F, Li ST, Tu, SH, Jin JY, Johnston A. Temporal and spatial variation of soil available potassium in China (1990–2012). ***Field Crops Research***, 2015, 173:49-56
24. Yi Q, **He P***, Zhang XZ, Yang L, Xiong GY. Optimizing fertilizer nitrogen for winter wheat production in Yangtze River region in China. ***Journal of Plant Nutrition***, 2015, 38: 1639-1655. http://dx.doi.org/10.1080/01904167.2015.1061547
25. Qian Zhang, Wei Zhou, Guoqing Liang, Jingwen Sun, Xiubin Wang, **Ping He**. 2015: Distribution of soil nutrients, extracellular enzyme activities and microbial communities across particle-size fractions in a long-term fertilizer experiment. ***Applied Soil Ecology***. 94: 59–71
26. Liu Z, Zhou W, Lv J, Li S, **He P**, Liang G, Jin H. 2015. Assessing soil quality of gleyed paddy soils with different productivities in subtropical China. ***PLoS ONE***. DOI:10.1371/journal.pone.0127690
27. Liu Z, Zhou W, Li S, **He P**, Liang G, Lv J, Jin H. 2015. Assessing soil quality of greyed paddy soils with different productivities in subtropical China. ***Catena***. 133: 293–302.
28. Chao Ai, Guoqing Liang, Jingwen Sun, **Ping He**, Shuanhu Tang, Shaohai Yang, Wei Zhou, Xiubin Wang. 2015. The alleviation of acid soil stress in rice by inorganic or organic ameliorants is associated with changes in soil enzyme activity and microbial community composition. ***Biology and Fertility of Soils***, 51:465–477

29. Qian Zhang, Wei Zhou, Guoqing Liang*, Xiubin Wang, Jingwen Sun, **Ping He**, Lujiu Li. 2015: Effects of different organic manures on the biochemical and microbial characteristics of albic paddy soil in a short-term experiment. ***PLoS ONE***. DOI:10.1371/journal.pone.0124096
30. Chao Ai & Guoqing Liang & Jingwen Sun & **Ping He** & Shuanhu Tang & Shaohai Yang & Wei Zhou & Xiubin Wang. The alleviation of acid soil stress in rice by inorganic or organic ameliorants is associated with changes in soil enzyme activity and microbial community composition. ***Biology and Fertility of Soils***, 2015, DOI 10.1007/s00374-015-0994-3
31. Qiu SJ, **He P*,** Zhao SC, Li WJ, Xie JG, Hou YP, Grant CA, Zhou W, Jin JY. Nitrogen rate influences on nitrogen partitioning and efficiency parameters in Northeast China rain-fed maize production systems. ***Agronomy Journal***, 2015, 107:1-9
32. Zhao SC, **He P***, Qiu SJ, Jia LL, Liu MC, Jin JY, Johnston AM. Long-term effects of potassium fertilization and straw return on soil potassium levels and crop yields in north-central China. ***Field Crops Research***, 2014, 169: 116-122, DOI 10.1016/j.fcr.2014.09.017131212
33. Zhanjun Liu; Wei Zhou; Jianbo Shen; **Ping He**; Qiuliang Lei; Guoqing Liang.
    A simple assessment on spatial variability of rice yield and selected soil chemical properties of paddy f ields in Southern China. ***Geoderma***, 2014
34. Zhao SC, Qiu SJ, Cao CY, Zheng CL, Zhou W, **He P*.** Responses of soil properties, microbial community and crop yields to various rates of nitrogen fertilization in a wheat-maize cropping system in north-central China. ***Agriculture, Ecosystems and Environment***, 2014, 194: 29-37 10.1016/j.agee.2014.05.006
35. Liu ZJ, Zhou W, Shen JB, Li ST, **He P**, Liang GQ. Soil quality assessment of Albic soils with different productivities for eastern China. ***Soil and Tillage Research***, 2014, 140: 74-81
36. Xu XP, **He P***, Qiu SJ, Pampolino MF, Johnston AM, Zhao SC, Chuan LM, Zhou W. Estimating a new approach of fertilizer recommendation across small-holder farms in China. ***Field Crops Research***, 2014, 163:10-17, 10.1016/j.fcr.2014.04.014.
37. Qiu SJ, Xie JG, Zhao SC, Xu XP，Hou YP, Wang XF, Zhou W, **He P***, Johnston AM, Christie P, Jin JY. Long-term effects of potassium fertilization on yield, efficiency, and soil fertility status in a rain-fed maize system in northeast China. ***Field Crops Research***, 2014, 163:1-9, 10.1016/j.fcr.2014.04.016.
38. Xu XP, **He P***, Pampolino MF, Chuan lm, Johnston AM, Qiu SJ, Zhao SC, Zhou W. Fertilizer recommendation for maize in China based on yield response and agronomic efficiency. ***Field Crops Research***, 2014, 157: 27-34
39. Ai C, Liang GQ, Sun JW, Wang XB, **He P**, Zhou W. Different roles of rhizosphere effect and long-term fertilization in the activities and community structure of ammonia oxidizers in a calcareous fluvo-aquic soil. ***Soil Biology and Biochemistry***, 2013, 57: 30-42
40. Xu XP, **He P***, Pampolino MF, Chuan lm, Johnston AM, Qiu SJ, Zhao SC, Zhou W. Nutrient requirements for maize in China based on QUEFTS analysis. ***Field Crops Research***, 2013, 150: 115-125
41. Chuan LM, **He P***, Jin JY, Li ST, Grant C, Xu XP, Qiu SJ, Zhao SC, Zhou W. Estimating nutrient

uptake requirements for wheat in China. ***Field Crops Research***, 2013, 146: 96-104

42. **Ping He**, Zhimin Sha, Dongwei Yao, Suli Xing. Effect of nitrogen management on productivity, nitrogen use efficiency and nitrogen balance for a wheat-maize system. ***Journal of Plant Nutrition***, 2013, 36(8): 1258-1274
43. Li ST, **He P**, Jin JY. Nitrogen use efficiency in grain production and the estimated nitrogen input/output balance in China agriculture. ***Journal of the Science of Food and Agriculture***, 2013, 93:1191-1197 (IF=1.436)
44. Chuan LM, **He P***. Pampolino MF, Johnston AM, Jin JY, Xu XP, Zhao SC, Qiu SJ, Zhou W. Establishing a scientific basis for fertilizer recommendations for wheat in China: Yield response and agronomic efficiency. ***Field Crops Research***. 2013, 140:1-8
45. Chao Ai, Guoqing Liang, Jingwen Sun, Xiubin Wang, **Ping He**, Wei Zhou. 2013: Different roles of rhizosphere effect and long-term fertilization in the activity and community structure of ammonia oxidizers in a calcareous fluvo-aquic soil. ***Soil Biology & Biochemistry***. 57: 30-42
46. Liu H.L., Yang J.Y., **He P***, Bai YL, Jin JY, Li WJ, Drury CF, Reynolds WD, Yang XM, Tan CS, Xie JG, Yang JM, Hoogenboom G. Optimizing parameters of CERES-Maize Model to improve simulation performance o maize growth and nitrogen uptake in Northeast China. J***ournal of Integrative Agriculture,*** 2012, 11(11): 1898-1913
47. Qiu SJ, Peng QP, Li L, **He P**, Liu Q, Wu JS, Christie P, Ju XT. Effects of applied urea and straw on various nitrogen fractions in two Chinese paddy soils with differing clay mineralogy. ***Biology and fertility of soils***, 2012, 48: 161-172
48. Li WJ, **He P***, Jin JY. Critical Nitrogen Curve and Nitrogen Nutrition Index for Spring Maize in North-East China. ***Journal of Plant Nutrition***, 2012, 35: 1747-1761
49. Zhao SC, **He P***. 2012. Evaluation of nitrogen in－season management for summer maize in North Central China. ***ISRN Agronomy***, Article ID 294514, 9 pagesdoi:10.5402/2012/294514
50. Liu XY, **He P***, Jin JY, Zhou W, Sulewski G, and Phillips S. Yield gaps, soil indigenous nutrient supply, and nutrient use efficiency of wheat in China. ***Agronomy Journal***, 2011, 103:1452–1463
51. Liu HL, Yang JY, Drury CF, Reynolds WD, Tan CS, Bai YL, **He P**, Jin J, Hoogenboom G. Simulating water content, crop yield and nitrate-N loss under free and controlled tile drainage with subsurface irrigation using the DSSAT model. ***Agricultural Water Management***, 2011,98(6): 1105-1111
52. Liu HL, Yang JY, Drury CF, Reynolds WD, Tan CS, Bai YL, **He P**, Jin J, Hoogenboom G. Using the DSSAT-CERES-Maize model to simulate crop yield and nitrogen cycling in fields under long-term continuous maize production. ***Nutrient Cycling in Agroecosystems***. 2011, 89(3): 313-328
53. LI WJ, **HE P***, JIN JY. Effect of Potassium on Ultrastructure of Maize Stalk Pith and Young Root and Their Relation to Resistance to Stalk Rot. ***Agricultural Sciences in China***, 2010, 9(10)：1467-1474
54. **He P***, Li ST, Jin JY. 2009. Nutrient uptake and utilization of nutrient management for wheat and maize rotation system in North Central China. UC Davis: The Proceedings of the International Plant Nutrition Colloquium XVI. Retrieved from: http://www.escholarship.org/uc/ item/7sx880mw
55. Li WJ, **He P**, Jin JY. 2009. Potassium influenced phenylalanine ammonia-lyase, peroxidases and

polyphenol oxidases in Fusarium graminearum infected maize (Zea mays L.). UC Davis: The Proceedings of the International Plant Nutrition Colloquium XVI. Retrieved from: http://www.escholarship.org/uc/item/3cf201nb

56. JIN JY, **He P**, Zhang K, Wang XF, Xie JG. 2009. Potassium Fertilization Rates for Maximum Economic Return for Maize Production under Different Soil Available K Levels in Jilin Province of China. UC Davis: The Proceedings of the International Plant Nutrition Colloquium XVI. Retrieved from: http://escholarship.org/uc/item/9n842104
57. **He P***, Li ST, Jin JY, Wang HT, Li CJ, Wang YL, and Cui RZ. 2009: Performance of an Optimized Nutrient Management System for Double-Cropped Wheat-Maize Rotations in North-Central China. ***Agronomy Journal,*** 101:1489-1496
58. **He P**, Li Shutian, Jin Jiyun. 2008. Optimizing yield and benefit in double cropped wheat-maize rotations. ***Better crops*** 92 (4):29-31.
59. Liu XY, Jin JY, **He P***, Liu HL, Li WJ. Relationship between potassium chloride suppression of corn stalk rot and soil microorganism characteristics. ***Front. Agric. China.*** 2007, 2(1): 1-6
60. Zhou W, Li ST, **He P**, Lin B. 2006: Transformation of sulfate and organic S in rice straw paddy soils and its availability to plants using sulfur. ***Geoderma***, 132(1&2): 1-8
61. **He P**, Osaki M, Takebe M and Shinano T. 2005: Endogenous hormones and expression of senescence-related genes in different senescent types of maize. ***Journal of Experimental Botany***, 56(414): 1117-1128
62. **He P**, JIN Jiyun, LI Wenjun, LIU Hailong, HUANG Shaowen, WANG Xiufang, WANG Lichun, XIE Jiagui. Comparison of Phosphorous Absorption, Quality and Yield Between High Oil Corn and Common Corn as Influenced by Phosphorous Application. ***Agricultural Sciences in China***, 2005, 4(5): 101-105
63. Zhou W, **He P**, Li ST. Lin B. 2005: Mineralization of organic sulfur in paddy soils under flooded conditions and its availability to plants. ***Geoderma*** 125, 85-93
64. **He P**, Zhou W, Jin JY. 2004: Carbon and nitrogen metabolism related to grain formation in two different senescent types of maize. ***Journal of Plant Nutrition***, 27:295-311
65. **He P**, Osaki M, Takebe M and Shinano T. 2003: Comparison of whole system of carbon and nitrogen accumulation between two maize hybrids differing in leaf senescence. ***Photosynthetica***, 41:399-405
66. **He P**, Zhou W, Jin JY. 2002: Effect of N Application on Redistribution and Transformation of Photosynthesized 14C during Grain Formation in Two Maize Cultivars with Different Senescent Appearance. ***Journal of Plant Nutrition***, 25:2443-2456
67. **He P**, Osaki M, Takebe M and Shinano T. 2002: Changes of photosynthetic characteristics in relation to leaf senescence in two maize hybrids with different senescent appearance. ***Photosynthetica***, 40: 547-552
68. Zhou W, Wan M, **He P**, Li ST, Lin B. 2002: Oxidation of elemental sulfur in paddy soils as influenced by flooded condition and plant growth in pot experiment. ***Biol Fertil Soils***, 36: 384-389
69. **He P**, Osaki M, Takebe M and Shinano T. Shoot-root balance related to grain formation in two

different senescent types of maize. In: The second international conference on sustainable agriculture for food, energy and industry. 2002, 9, Vollume II: 1026-1032

70. **He P**, Jin JY, Zhou W. 2001: Effect of N application on accumulation and translocation of carbon and nitrogen compounds in two maize cultivars with different senescent appearance. ***Journal of Plant Nutrition***, 24 (4&5): 671-681
71. **He P**, Jin JY.1999: Relationships among hormone changes, transmembrane flux of ca2+ and lipid peroxidation during leaf senescing in spring maize. ***Acta Botanica Sinica***, 41(11): 1221-1225
72. Zhou W, Li ST, Wang H. **He P.** 1999: Mineralization of organic sulfur and its importance as a reservoir of plant-available sulfur in upland soils of North China. ***Biol. Fertil. Soils***, 30: 245- 250
73. **He P**, Jin JY., Lin B.1999: Effect of N application rates on leaf senescence and its mechanism in spring maize. ***Chinese Agricultural Sciences***, 89-95
74. Jin JY, **He P**.1999: Effect of nitrogen and potassium nutrition on post metabolism of carbon and nitrogen and grain weight formation in maize. ***Chinese Agricultural Sciences.*** 105-113
75. Zhou W, Li ST, Wang H, Lin B, **He P**. 1999: Composition of sulfur pool in selected upland soils in North China. ***Pedosphere***, 9(2): 123-130

In Chinese:

76. Chuan LM, **He P***, Zhao TK, Xu XP, Zhou W, Zheng HG. Nitrogen cycling anf balance for wheat in China. ***Chinese Journal of Applied Ecology***, 2015, 26(1):76-86
77. Zhao SC, Cao CY, Li KJ, Qiu SJ, Zhou W, **He P***. Effect of long-term straw return on sol fertility, nitrogen pool fractions and crop yield on a fluvo-aquic soil in North China. ***Journal of Plant Nutrition and Fertilizer***, 2014, 20(6):1441-1449
78. Miao JG, Jin JY, Qiu SJ, Xie JG, Hou YP, Xu XP, **He P***. Effect of ecological intensification nutrient management on grain yield and nitrogen use efficiency in spring maize. ***Journal of Plant Nutrition and Fertilizer***，2012, 18（3）：571－578
79. Yi Q, Zhao SC, Zhang XZ, Yang Li, Xiong GY, **He P***. Real time nitrogen management on grain yield and nitrogen uptake and utilization in rice. ***Journal of Plant Nutrition and Fertilizer***，2012, 18（4）：777－785
80. Qiu SJ, Zhao SC, Miao JG, Xu XP, Sun G, Yi Q, Wang C, Zhang WX, He P*. Nitrogen management on grain yield and its components in two late rice varieties. ***Journal of Plant Nutrition and Fertilizer*** 2012, 18（6）：1326-1335
81. Zheng W, **He P***, Sha ZM, Jin JY. Effect of N application on N uptake and utilization under different soil fertilities in maize. ***Journal of Plant Nutrition and Fertilize***, 2011, 17(2):301-309
82. Li WJ, **He P**, Jin JY. Effect of potassium on sugar metabolism in resistant response to stalk rot. ***Plant Nutrition and Fertilizer Science***, 2011, 17 (1): 55-61
83. Zhao SC, Sh ZM, **He P***. Response of winter wheat to different nitrogen managements in North Central China. ***Plant Nutrition and Fertilizer Science***, 2011, 17 (2): 517-524
84. Zhang XZ, Yi Q, Zhu P, **He P***, Yang L, Fan XP, Xiong GY. Agronomic responses to N application

and N utilization in rice. ***Plant Nutrition and Fertilizer Science***, 2011, 17 (4): 782-788

85. Xu XP, Zhao SC, Zhang YG, **He P***, Gao Q. Spacial variation of soil nutrients in maize production areas of Jilin Province. ***Plant Nutrition and Fertilizer Science,*** 2011,17(6):1342-1350
86. He P, Jin JY, Pampolino MF, Johnston AM. Fertilizer recommendation method based on yield response and agronomic efficiency. ***Plant Nutrition and Fertilizer Science,*** 2012, 18(2): 499-505
87. Li WJ, **He P***, Gao Q, Jin JY, Hou YP, Yin CX, Zhang GH. Dry matter formation and N uptake in two maize cultivars differing in N use efficiency. ***Plant Nutrition and Fertilizer Science,*** 2010 ,16 (1) : 51 - 57
88. Li WJ, **He P***, Jin JY. Effect of potassium on ultrastructure of maize stalk pith and young root and their relation to stalk rot resistance. ***Scientia Agricultura Sinica***, 2010，43（4）：729-736
89. Zhao SC, Pei XX, **He P***, Zhang XZ, Li KJ, Zhou W, Liang GQ, Jin JY. Effects on reducing and postponing nitrogen application on soil N supply, plant N uptake and utilization of summer maize. ***Plant Nutrition and Fertilizer Science,*** 2010 ,16 (2) : 492 - 497
90. Ye DJ, Gao Q, **He P***. Effect of N application on N utilization and N balance in spring maize. ***Plant Nutrition and Fertilizer Science,*** 2010，16 (3): 552-558
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