

- nitrogen in water draining from under autumn sown crops established by direct drilling or mouldboard ploughing [J]. J Soil Sci ,1993 ,44 : 35 ~ 48
- [4] Follett R F , Keeney D R , Cruse R M. Managing nitrogen for groundwater quality and farm profitability [M]. Soil Science Society of America , Inc. Madison , Wisconsin , USA ,1991
- [5] Follett R F , Shaffer MJ , Brodahl M K , et al. NLEAP simulation of residual soil nitrate for irrigated and nonirrigated corn [J]. Journal of soil and water conservation , 1994 , 49 (4) : 375 ~ 382
- [6] Pang X P ,Gupta S C , Moncrief J F , et al. Evaluation of nitrate leaching potential in Minnesota Glacial Outwash Soils using the CERES - Maize model [J]. J , Environ Qual , 1998 , 27 :75 ~ 85
- [7] Pang X P ,Letey J , Wu L. Irrigation quantity and uniformity and nitrogen application effects on crop yield and nitrogen leaching [J]. Soil Sci Soc Am J ,1997 ,61 :257 ~ 261
- [8] Khakural B R , Robert P C. Soil nitrate leaching potential indices : using a simulation model as a screening system [J]. J Environ Qual , 1993 ,22 :839 ~ 845
- [9] Ramos C , Carboneel E A. Nitrate leaching and soil moisture prediction with the LEACHM model [J]. Fertilizer Research , 1991 ,27 :171 ~ 180
- [10] Wylie B K , Shaffer MJ , Brodahl M K et al. Predicting spatial distribution of nitrate leaching in northeastern Colorado [J]. J Soil Water Conserv , 1994 ,49 :288 ~ 293
- [11] Saporito L S , Lanyon L E. Evaluating management and soil and weather contribution to potential nitrate leaching from a Pennsylvania dairy farm using NLEAP [J]. J Environ Qual , 1998 ,27 : 1367 ~ 1375
- [12] Jury W A. A stochastic analysis of the influence of soil and climatic variability on the estimate of pesticide groundwater pollution potential [J]. Water Resources Research , 1989 ,25 (12) : 2465 ~ 2474
- [13] 黄元仿. 区域土壤氮素行为与土壤水、氮管理 [D]. 北京 :中国农业大学 ,1996
- [14] 王凤仙. 冬小麦-夏玉米种植制度下土壤水、氮资源利用效率的研究 [M]. 北京 :中国农业大学出版社 ,1996

## 中国农业大学 2002 年科技工作大事记

- “优质、高产玉米新品种农大 108 的选育与推广”获得国家科学技术进步一等奖。
- “猪优质高效饲料产业化关键技术研究与推广”和“旱地农业保护性耕作技术与机具研究”获得国家科学技术进步二等奖。
- 我国第一头克隆黄牛“波娃”在我校诞生。
- 科技部正式批准建设“植物生理学与生物化学国家重点实验室”。
- “农业部牧草及草坪草种子质量监督检验测试中心(北京)”和“农业部农产品质量监督检验测试中心(北京)”通过国家审查认可和计量认证。
- 我校 13 个实验室被命名为“农业部重点开放实验室”。
- 全校科研经费突破 1.5 亿元 ,比上年增长 50 %。
- 我校获准国家自然科学基金项目 68 项 ,经费达 1 800 万元。
- 我校申报专利 41 项 ,达历史最高水平。

(科技处供稿)