The progress of research on Chinese stabilized fertilizer

Yuanliang Shi*, Jie Li, Lingli Wang, Xiaoyu Shi, Xudong Zhang

Chinese Academy of Science, Shenyang Institute of Applied Ecology, CAS, 72 Wehnua Road, 110016 Shenyang, P.R. China, mail*:Shiyl@iae.ac.cn

Fertilizers are largely consumed resources in agricultural production contemporarily and China has become a leading country in fertilizer production and consumption on the global market. High fertilizer doses together with a low nutrient utilization rate and a high loss of nutrients already resulted in a series of negative environmental impacts such as eutrophication in surface and underground water bodies in China. In addition, the NO₃⁻ content in vegetables exceeds the safety limit on a regular base; greenhouse gas emissions such as N₂O, NO increase. For the purpose of avoiding and mitigating these environmental issues, China raised investments and efforts on research so that after years of continuous investigations and technical improvements, stabilized fertilizer products have been developed which are a leading force among new fertilizer types.