

Antibiotic Contamination: A Global Environment Issue

-LQFDL DQG *XDQJVX =KDL

&ROOHJH RI 1DWXUDO 5HVRXUFHV DQG (QYLURQPHQWDO 6FLHQFHV &KLODQ 8QLYHUVLW)

'HSDUWPHQW RI &LYLO DQG (QYLURQPHQWDO (QJLQHULQJ DQG ,,+5 +)GURVFLHQFHV DQG (QJLQHULQJ

&RUUHVSRLQLQJ DQJXU=KDL 'HSDUWPHQW RI &LYLO DQG (QYLURQPHQWDO (QJLQHULQJ DQG ,,+5 +)G

&LW\ ,\\$ 86\\$ 7HO (PDLO JKD L JXDQJVX#XLRZD HGX

5HF GDW\ \$FF GDW\ 3XE GDSX H

&RSULJKW =KDL * HW DO 7KLV LV DQ RSHQ DFFHVV DUWLFOH GLVWULEXWHG XQG HU WKH GLVWULEXWLRQ

GLVWULEXWLRQ DQG UHSURGXFWRQ LQ DQ PHGLXP SURYLGHG WKH RULJLQDO DXWKRUV

(GLWRULDO

This term antibiotic was used by Nobel laureate Selman Waksman to describe microbial substances antagonistic to the growth of other microbes. It is now well accepted that antibiotic denotes any organic chemical that inhibits or kills microbes by interactions with bacterial targets, regardless of the source of the particular compounds, i.e. antibiotics could be from either natural or anthropogenic sources. Since their introduction in clinical applications, antibiotics have saved countless lives, and made the majority of infectious diseases under control. However, the large scale production and use (especially overuse and misuse) of antibiotics in clinical and veterinary medicine, agriculture, aquaculture, and horticulture has released vast quantities of antibiotics into the environment, and antibiotic contamination has been recognized as a worldwide phenomenon [1]. Recent research has showed that antibiotic concentration in wastewater, soil, and sediment was in the range from µg/kg to mg/kg. More importantly, the antibiotics in the environment generally resist to biodegradation due to their antimicrobial nature so that antibiotics have been

eg. slow degradation performance. Further techniques and control antibiotic elimination own strength and draw one treatment process decontamination in the New analytical protocols determination and T tools for survey of an level construction of L G H Q W L of D H v H F W by H G

Evaluation of ecological and antibiotic resistance environment, L G H Q genes are also important the availability of omic next generation sequencing abundance and diversity resistance genes in the such bacteria and genes addition, with the aid achieve a better understanding antibiotic genes in the ecological point of view

5 H I H U H Q F

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