

CORRELATION RHYTHMS ON THE APPLICATION OF CHEMICAL FERTILIZERS/PESTICIDES AND THE EXPENDITURE ALLOCATION FOR POLLUTION PREVENTION AND CONTROL IN THE SOIL AND GROUND WATER OF ROMANIA

Raluca NECULA¹, Marian CONSTANTIN¹, Manea DRĂGHICI¹,
Mihai Daniel FRUMUȘELU¹

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Abstract. *The present work is the result of a pertinent analysis and highlights the results regarding both the first variational existing level of application of chemical fertilizers/pesticides, and the level of expenses made in order to prevent and fight soil and ground water pollution in Romania. The statistical results on variability were rendered by statistical indexes which were based on the data corresponding to the interval 2008-2015. The main values are the average, the standard deviation and the coefficient of variation. All this enabled us to calculate the annual growth rate. We monitored the variation results of the influence factors, which methodologically using forms of regression equations ($y = a \cdot x$) showed the influence of the use of fertilizers / pesticides (x) on the expenses made in order to combat pollution (y). The variations in amplification by means of $\pm 5\% \pm 50\% x$, variations enabled us to sequentially identify the presumptive levels of domestic investment expenses and current (y). The overall results were also founded upon knowing the percentage changes of the elasticity. We have found out that there is an inadequate level of expenditure allocation for fighting pollution in relation to the increased use of fertilizers/pesticides.*

Introduction

The use of chemical fertilizers and pesticides is regarded as a fundamental agrotechnical link, whose popularity suggests the necessity of knowing its implications in various areas of economy and society. A constant and important problem is the triple relationship between pollution, control expenses and human protection. The present paper analyses the necessity and rhythm of the expenses needed for controlling soil pollution by using chemical fertilizers and pesticides in agriculture.

¹University of Agricultural Sciences and Veterinary Medicine Bucharest, 59 Marasti, District 1, 11464, Bucharest, Romania, Phone: +40213182564, Fax: +40213182888, Mobile: +40744 6474 10, marianconstantin2014@yahoo.com; raluca_nec@yahoo.com.