Factors Mitigating against the Use of Alternative to Antibiotics (Phytobiotics) In Poultry Production among Farming Households in Nigeria

Authors: Akinola Helen Olufunke, Soetan Olatunbosun Jonathan, Adeleye Oludamola

Abstract: Introduction: Antibiotic resistance has grown significantly, which is a major cause for concern. There have not been many significant developments in antibiotics over the past few decades, and practically all of the ones that are currently in use are losing effectiveness against pathogenic germs. Researchers are starting to focus more on the physiologically active compounds found in plants, particularly phytobiotics in poultry production. Consumption of chicken products is among the greatest in the country, but numerous nations, including Nigeria, use excessive amounts of necessary antibiotics in poultry farming, endangering the safety of such goods (through antimicrobial residues). Drug resistance has become a widespread issue as a result of the risky use of antibiotics in the chicken production industry. In order to replace antibiotics, biotic or natural products like phytobiotics (also known as botanicals or phytogenics) have drawn a lot of interest. Phytobiotics or their components are thought to be a relatively recent category of natural herbs that have acquired acceptance and favor among chicken farmers. The addition of several phytobiotic additions to poultry feed has demonstrated its capacity to improve both the broiler and layer populations' productivity. Design: Experimental research design and cross-sectional study was carried out at every 300 purposively selected farming household in the six-geopolitical zone in Nigeria. Data Analysis: A semi-structured questionnaire was administered to each farmer, and quantitative data were analyzed using Statistical Package for Social Science (SPSS) while the Chi-square test was used to analyze factors mitigating the use of Phytobiotics. Result: The result shows that the benefits associated with the use of phytobiotics are contributed to growth promotion in chickens and enhancement of productive performance of broiler and layer, which could be attributed to their antioxidant activity. The result further revealed that factors mitigating the use of phytobiotics were lack of knowledge in the use of phytobiotics, overdose or underdose usage, and seasonal availability of the phytobiotics. Others are the educational level of the farmers, intrinsic motivation, income poultry farming experience, price of phytobiotics based additives feeds, and intensity of extension agents in visiting them. Conclusion: The difficulties associated with using phytobiotics in chicken farms limit their willingness to boost productivity. The study found that most farmers were ignorant, which prevented them from handling this notion and turning their poultry into a viable enterprise while also allowing them to be creative. They believed that packing phytobiotics-based additive feed was expensive, and lastly, the seasonal availability of some phytobiotics. Recommendation: Further research in phytobiotics use in Nigeria should be carried out in order to establish its efficiency, safety, and awareness.

Keywords: mitigating, antibiotics, phytobiotics, poultry farming

Conference Title: ICPFC 2023: International Conference on Poultry Farming and Conservation

Conference Location: Toronto, Canada Conference Dates: September 18-19, 2023