

NATURAL GROWTH PROMOTERS: THE ROLE OF PHYTOBIOTICS IN POULTRY PRODUCTION

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Abstract

Global demand for poultry is rising, necessitating efficient and sustainable production techniques. The intensive poultry industry used to rely heavily on antibiotic growth promoters (AGPs). When added to feed at subtherapeutic levels, these chemicals were effective in improving growth rate, feed conversion ratio (FCR), and overall flock health by reducing subclinical illnesses and altering gut microbiota. However, because of the widespread and often negligent use of AGPs in animal agriculture, there were raised significant public health concerns regarding the development of antimicrobial resistance (AMR) in bacteria interfering human health. The European Union spearheaded this trend by completely banning the use of AGPs in animal feed in 2006. This decision was followed by many other countries, including the United States. In Canada and other Asian nations, the use of AGP has been limited or phased out completely. This global ban has spurred a rush of research into safe, natural, and effective alternatives to protect poultry health and productivity without worsening the AMR pandemic. Phytobiotics have emerged as one of the most promising and thoroughly researched categories of possibilities. They are referred to as phyto-genics or herbal remedies, compounds derived from vegetal organisms that are incorporated into diets of animals in order to improve performance, health, and well-being. The diverse range of bioactive compounds in phytobiotics offers several benefits, from improving gastrointestinal functionality and nutrient utilization for boosting immune system performance and stress reduction, all of which ultimately contribute to the production of safe and superior poultry products.

Key words: phytobiotics, botanicals, antibiotic growth promoters, extracts, essential oils, herbs