

— Book Review —

Title: *A practical guide to the feeding of organic farm animals: pigs, poultry, cattle, sheep and goats*

Author: Blair, R

Publisher: 5M Publishing, Sheffield, UK (2017), 266 pages

ISBN: 9781910455708, paperback

InKee Paik^{1,*}

* **Corresponding Author:** InKee Paik
E-mail: ikpaik@cau.ac.kr

¹ Department of Animal Science & Technology, Chung Ang University, Ansong 17546, Korea

Submitted Mar 5, 2018; Revised Mar 12, 2018;
Accepted Mar 26, 2018

This book outlines a practical approach to the feeding of organic poultry and livestock, based on applied methodology backed up by scientific research. There are sections covering poultry, pigs, cattle, sheep and goats. These set out the organic principles, nutritional requirements and feeding standards for each species based on pastured systems; identify suitable feed ingredients; provide an overview of husbandry techniques and system approaches; provide advice on selecting suitable breeds with an emphasis on traditional breeds and strains; and provide advice on nutrition and its relationship to health with a preventative approach. The final section provides advice on organic feeding programs under integrated farming operations, making the book an ideal resource for the smallholder farmer, as well as traditional and aspiring organic poultry and livestock farmers.

Although there is increasing demand by consumers for organic meat, eggs and milk, expansion of this sector is currently limited by an inadequate supply and the higher costs of organic feedstuffs worldwide. This shortage is attributed to the increasing percentage of GM crops worldwide. One effect of this situation is that the European Union has had to rescind a requirement that organic feed mixtures must be based 100% on organic feedstuffs from January 1, 2018. As a result, the sections of the book dealing with feedstuffs and supplements suitable for feeding to organic poultry and livestock are particularly valuable since they emphasize the use of crops that can be produced on-farm. Other suggestions to address the shortage include better utilization of forage, development of crops with improved nutrient content, use of earthworms and organically produced *Spirulina* algae as protein sources, processing plant feedstuffs such as sunflower seed to enrich the amino acid content, and use of novel feedstuffs such as insect larval meal and seafood by-products. In the case of poultry the author suggests that feeding programs be based mainly on free-choice, whole-grain feeding systems. This system approaches the natural feeding system more closely than other feeding systems and is therefore highly appropriate for organic production. In addition whole-grain feeding has been shown to result in improved profitability and bird health.

Data cited in the book show that the available database of organic feedstuffs composition needs strengthening. Published results on nutrient composition from Europe indicate that organic feedstuffs are slightly lower in nutrient content than conventional feedstuffs,

but results from North America suggest that both types of feedstuffs are more similar in nutrient content. A more extensive database would help to clarify this issue and would greatly assist organic poultry and livestock in formulating correct feed mixtures.

The book also shows that the effects of diet on the health of pastured poultry and livestock need to be investigated further in organic production. Multi-species grazing has been shown to improve utilization of forages by around 5%-20%, and improved health of organic stock, depending primarily on the type of vegetation, land type and the mix of animals used. Research cited in the book indicates that probiotics and prebiotics are not as effective as antibiotics in preventing diseases in poultry and livestock and more effective supplements need to be identified for use in organic production.

As consumer perceptions rather than nutritional science often influence “organic” principles, organic products likely differ in their standards across countries. Regulations on these

products thus pose challenges and problems for feed manufacturers due to difficulties in proper ingredient supplies and lack of details in standards. Overall, this book aptly provides a general overview on the concept of organic feeds and feeding practices accepted so far.

CONFLICT OF INTEREST

We certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

ABOUT THE AUTHOR

Blair, R., DSc, is Professor Emeritus in Faculty of Land and Food Systems, University of British Columbia, Vancouver, Canada.