Review

Current trends in pig nutrition at intensive or organic-farm management*

E.R. Grela

Institute of Animal Nutrition, University of Life Sciences, 20-934 Lublin, Akademicka 13, Poland

Abstract

The paper presents some current problems related to pig nutrition at the intensive and organic rearing systems. Issues shared by both sectors of the pig management as well as specific organic feeding regimes are discussed. A growing concern in nutrient balance has been emphasized, especially protein digested in the caudal segment of the small intestine. Besides, the problems of animal welfare in both management systems were addressed along with the ban on growth promoter application (hormones and antibiotics) that appear to be redundant or even hazardous for human health.

Key words: pigs nutrition, feeding system, organic farming

In swine nutrition, regardless a rearing system, the optimal nutritional requirements for energy, protein, amino acids, minerals and vitamins are expected to be satisfied. This holds true for both, conventional (traditional) as well as organic rearing, yet the former one is aimed at the profit optimization (fast growth rate, low feed consumption, high meatiness), whereas the latter – good quality pork produced on organic natural feedingstuffs. So, goals of the options vary, yet some concepts and practices are common whereas the others fundamentally different, and the present paper aims to consider these problems (Gadd 2003).

According to various official documents (Council Regulation EEC No 2092/91; Act on organic agriculture: Journal of Law 2004 No 93 entry 898, Council Regulation EC No. 1804/99 834/2007 of 28 June 2007) organic farming means a specific form of production at farm level that involves the natural cultivation practices through unprocessed technologically means application that ensure sustainable soil fertility and animal health as well as high biological value of feedstuffs produced in this way. Pig nutrition is a land-related activity, animals receive organic feed from natural resources, like, cereals, fodder crops, legume seeds, green forage which is intended to ensure good quality pork for demanding customers. To achieve success, apart from a nutrition system, it is vital to select appropriate pig breeds and ensure animal integrity and welfare conditions. Pigs maintained at the organic farm should be characterized by high capacity to adapt to various management systems, good vitality and resistance to diseases as well as efficient use of feed not always well balanced with regard to pig nutritional requirements. The animals are supposed to be adapted to the extensive husbandry with the regional forage use. Therefore, the animals should be fed fodder produced in the organic farm with a limited proportion of the conventional feeds, yet