RELEVANCE OF ENZYMES USAGE IN DIFFERENT INDUSTRIES

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Nowadays, the topic of using enzymes in any spheres of human activity is quite relevant. Their use in the field of medicine and veterinary medicine has been particularly successful. Enzymes in medical practice are used as diagnostic and therapeutic agents. In addition, enzymes are used as specific reagents to determine a number of substances [1]. Enzymatic diagnostics can serve as the basis not only for making a correct and, most importantly, timely diagnosis of the disease, but also for checking the effectiveness of the used treatment method [2].

For the needs of agriculture, industry also produces enzyme preparations of fungal and bacterial origin. The first are obtained by the method of surface cultivation, the second -- by deep cultivation. Depending on the level of purification, enzyme preparations are divided into technical and purified. Native unrefined crops are technical. Purified drugs include drugs whose activity after purification is 10-20 times bigger than native ones. Depending on the effect on certain feed nutrients, enzymes exhibit amylolytic, proteolytic, pectinolytic and cellulolytic activity. Enzymes that belong to the class of hydrolases are mainly used in animal husbandry: amylolytic, proteolytic and pectolytic. Drugs are classified according to the activity of the main enzymes. In agriculture we use many drugs of similar nature and origin, which are sold under different brands [3].

In general, the usage of feed enzyme preparations gives the following advantages: - possibility of using cheaper feed without reducing productivity; - increasing of availability level for starch, protein and fats to affect on digestive tract's own enzymes, release and better assimilation of additional exchangeable energy, growth of feed value of rations; - elimination of the negative effect of anti-nutritional non-crumbly polysaccharides; - increase in digestibility of nutrients; - improvement of the intestinal microflora, reduction of intestinal diseases level, replenishment of animal's enzyme system.

References:

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