Review paper
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USE OF *SILYBUM MARIANUM* PRODUCTS AS NUTRITIONAL SUPPLEMENT IN CATTLE REARING

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Abstract

In modern cattle rearing, alternative methods are actively sought to stimulate milk yield and growth and protect high-yielding cattle from metabolic disorders. The different parts of the milk thistle plant (*Silybum marianum*) can be successfully used to prevent both metabolic diseases in cows and aflatoxicosis in calves and to stimulate their productivity. The purpose of this publication is to analyze, systematize, and highlight the possibilities of using *Silybum marianum* products as a feed additive in cattle breeding.

To achieve this goal, we performed an electronic keyword search in PubMed, ResearchGate, and Elsevier of official documents and reports from the Food and Agriculture Organization - FAO, as well as over 85 scientific publications related to the active ingredients extracted from different parts of milk thistle and their positive effect on the body of cattle. This publication summarizes and highlights the hepatoprotective effect of silymarin in cows with postpartum metabolic diseases - fatty liver degeneration, mastitis, endometritis, disorders of phosphorus-calcium metabolism, hypocalcemia, and impaired fertility in high-yielding cows. The publication also summarizes and systematizes the use of *Silybum marianum* products for the prevention of aflatoxicosis in cattle due to the specific detoxifying and antihepatotoxic effect of milk thistle.

Based on the review, it can be concluded that *Silybum marianum* products can be successfully used for the prevention of postpartum metabolic diseases in cows and aflatoxicosis in cattle, and to stimulate milk yield and productivity due to their hepatoprotective, detoxifying, antioxidant, and anti-stress actions.

***Key words**: Silybum marianum, Silymarin, Prevention of metabolic diseases in cattle.*