A STUDY ON INCIDENCE OF SALMONELLA CONTAMINATION ON THE SURFACE OF FEED MILL EQUIPMENTS

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Abstract

In the production of compound feed, contamination with undesirable substances may occur, which may come from the environment and/or the production process; compound feed and raw materials may be contaminated with these substances. In the production of compound feed, each unit operation can contribute to the threat to their safety. The aim of the work is to determine the contamination with Salmonella spp. of the equipment on the flow of production in a feed mill from Romania. Sampling for the determination of contamination with Salmonella spp. was done from different points of the production flow, depending on the predisposition to a potential contamination, namely from mixers, granulators, sieves, mills, hoppers, coolers, as well as from the hoppers of the machines with which feed is transporting. During 2019 (in March, July, October, and December) and 2020 (in March, May, August and December) 22 samples respectively 20 samples were taken and analysed to determine the contamination with Salmonella spp. The results of microbiological analyzes performed in the feed mill studyed, showed that all 22 respectively 20 samples were negative. The introduction of an appropriate system for monitoring and analyzing microbiological contaminants in a feed mill can help to control and prevent contamination, with a direct impact on food safety, animal and human health.

Key words: feed safety, food safety, Salmonella