

**Grata, K. Assessing the Mycostatic Efficiency of Urea Phosphate and Urea Sulphate with Bentonite when Used for Disinfection of Poultry Manure. *Ochrona Środowiska* 2008, Vol. 30, No. 1, pp. 45–49.**

**Abstract:** Owing to the high content of plant-available macro- and microelements, poultry manure can be used in agriculture, but the agricultural uses where poultry manure is applicable are limited due to its microbiological contamination. In sanitary terms, the presence of fungi is a major contributing factor in the agricultural applicability of poultry manure, as these microorganisms are blamed for causing infections in humans and animals, enhancing the risk of allergic diseases and/or producing mycotoxins. Thus, a strict control of fungi counts in the manure has taken on a sense of importance from the viewpoint of environmental safety. The main objective of this study was to assess how the use of urea phosphate, urea phosphate with bentonite and urea sulphate with bentonite as disinfectants influences the concentrate index, as well as the percentage and frequency of occurrence of fungi species in the poultry manure. Each of the preparations examined was found to noticeably reduce the total number of fungi as compared to liquid manure without additives. The urea phosphate with bentonite displayed the best disinfecting properties, which accounted for a 94.37% reduction in the fungi count; all of the isolated fungi being classified as a fortuitous genus. The study has shown that poultry manure should be made subject to disinfection prior to agricultural applications in order to prevent environmental contamination.

**Keywords:** Poultry manure, fungi, disinfection, urea phosphate, urea sulphate, bentonite.