THE EFFECT OF DIFFERENT YEAST (Saccharomyces cerevisia) PREPARATIONS IN CONTROLLING ODOR EMISSION AND FLIES IN ANIMAL MANURES

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ABSTRACT

The study was conducted to determine which of the yeast preparation could effectively control odor emission and fly infestation among swine, poultry, cattle, and goat manure. The treatments were laid out in a factorial randomized complete block design (RCBD) with three-replications. The experimentation was done in Central Philippine University College of Agriculture (CPUCA) Poultry Project, Jaro, Iloilo City from January 18 to 28, 2004. Results of the study revealed that swine and cattle manure odor could be controlled without using any of the yeast preparation. The addition of yeast culture may even aggravate the odor emitted on cattle manure. Sun-drving or air-drving of these manure was enough to reduce the odor. The use of yeast solutions, granules, and culture in the goat manure reduces the odor from recognizable to undistinguishable odor on the second and fourth days although recognizable odor was again detected on the sixth to the tenth day. None of the yeast preparation could perfectly eliminate odor in chicken dung. Moreover, it was observed that fly species present in cattle manure were different from those found in chicken and swine excreta. Houseflies were observed in swine and chicken manure while Drosophilla flies were observed in cattle excreta. The same fly species were observed in dry and moist manures having recognizable odor. Furthermore, the cattle manure added with yeast granules had the highest (P<0.01) moisture level of 14.40% with the swine manure added with same yeast preparation having the highest (P<0.05) percentage organic matter (14.62%). The different yeast preparations did not significantly (P>0.05) increase or decrease the mineral matter of animal manures.